AN APPRAISAL OF PRE-SERVICE TEACHER EDUCATION CURRICULUM WITH REFERENCE TO SUSTAINABLE DEVELOPMENT GOALS

By

Nasreen Bano

NATIONAL UNIVERSITY OF MODERN LANGUAGES

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Nasreen Bano

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Submitted By: Nasreen Bano   **Registration No:** 651-PhD/Edu/F16
　　　　　　　　Name of Student

Doctor of Philosophy

Name of Degree

Education
Name of Discipline

Dr. KhushBakht Hina　　　　　　　 _____
　Name of Research Supervisor　　　　　　　　　 Signature of Research Supervisor

Prof. Dr. Mustafeez Ahmed Alvi　 _____
　　Name of Dean (FSS)　　　　　　　　　　　 Signature of Dean (FSS)

Prof. Dr Muhammad Safeer Awan　 _____
Name of Pro-Rector Academics　　　　　　　 Signature of Pro-Rector Academics

Maj Gen Muhammad Jaffar (Rtd) HI(M)　 _____
　Name of Rector　　　　　　　　　　　　　 Signature of Rector

_____

Date

AUTHOR'S DECLARATION

I Nasreen Bano

Daughter of   Yousuf Khan

Registration # 651-PhD/Edu/F16

Discipline Education

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ABSTRACT

Title: An Appraisal of Pre-Service Teacher Education Curriculum with Reference to Sustainable Development Goals

Sustainable development is a drone word in academia these days and attainment of these goals has become indispensable for every country of the United Nations. For this purpose (a) curriculum of B.Ed. (Honors) was examined in the light of global citizenship education (GCED) and education for sustainable development (ESD) themes of sustainable development goal 4, target 4.7 (b) Perspectives of curriculum experts regarding the inclusion of contents, gaps, and challenges in B.Ed. curriculum was investigated. (c) Course outline for the future curriculum of B.Ed. (Honors) in Pakistan was suggested. A convergent parallel mixed-method study was carried out. Simultaneous design with QUAL+quan notation was implemented. Purposive sampling technique was adopted and experts in the field of education curriculum were the participants of the study. Content analysis was carried out, searching for the a priori key themes of GCED and ESD and simultaneously a survey was administered with curriculum experts. A standardized instrument prepared by the International Bureau of Education (IBE) and UNESCO was used. The results of content analysis were interpreted through percentages and bar graphs along with descriptive explanations separately. The quantitative set of data was analyzed through SPSS 21 by expressing in means and standard deviation and shown in graphical form. The qualitative data set was analyzed using word trees and word clouds with software Nvivo10. The findings of qualitative and quantitative data were combined, integrated, and related during interpretation. The results complemented and supplemented the findings. The conclusions of content analysis disclosed that the "Teaching of Social Studies" subject had a greater number of GCED and ESD themes, whereas the "Health Education" theme was missing. Experts strongly favored the inclusion of the themes. Introducing these themes as a separate subject was suggested, but they preferred the integration of themes across existing subjects. Contextualization of the themes to our local needs was considered a major challenge. Revision of B.Ed. (Honors) Elementary curriculum was recommended. Finally, in light of findings, the course outline of GCED and ESD was developed for the future national curriculum of B.Ed. in Pakistan.

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LIST OF ABBREVIATIONS

SDG: Sustainable Development Goals

EFA: Education for All

GCED   Global Citizenship Education

ESD: Education for Sustainable Development

UNDP: United Nations Development Program

HR: Human Rights

UNFPA: United Nations

UNICEF: United Nations Children Education Fund

UNESCO: United Nations Education Scientific Cultural Organization

UNDESD: United Nations Decade of Education for Sustainability

MDG: Millennium Development Goals

B.Ed.:   Bachelor of Education

UN: United Nations

UNHCR: United Nations Humanitarian Commission for Refugees

HEC: Higher Education Commission

IBE: International Bureau of Education

WCED: World Commission of Environmental Development

UNFPA: United Nations Population Fund Activities

ICT: Information and Communication Technology

APCEIU: Asia Pacific Centre for Education and International Understanding

GCE: Global Citizenship Education

NGO: Non-Governmental Organization

NCRC: National Curriculum Review Committee

NACTE: National Accreditation Council for Teacher Education

HIV: Human Immunodeficiency Virus

AIDS: Acquired immunodeficiency Syndrome

CSE: Comprehensive Sex Education

IICBA: International Institute for Capacity Building in Africa

TVET: Technical and Vocational Educational Training

GPA: Global Action Program

GDP: Gross Development Product

GEF: General Education First Initiative

UK ESD: United Kingdom Educational Sustainable Development

USA: United States of America

CPD: Comprehensive Professional Development

ADE: Associate Degree in Education

USAID: United States Assistance for International Development

UPE: Universal Primary Education

QESD: Quality Education Sustainable Development

GEFI   Global Education First Initiative

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1. CHAPTER 1

INTRODUCTION

1.1 Context of the Study

Education develops a sense of duty towards the state and builds awareness for their rights, the rights of their family, fellow citizens, and the community at large. It empowers women and provides them a fair chance for development in society. All people are entitled to obtain a quality education. It is a basic human right and every state must ensure to provide its citizens the opportunity to be educated as it develops peace, tolerance, empathy, and nurtures the personality of an individual. (UNESCO, 2017).

Many children in the world are out of school due to poverty and conflicts. School dropout rate increases in the areas of conflict. Gender disparities are seen everywhere especially in underdeveloped and developing countries. Many adults do not have basic education and among them many are women. Classes are overburdened. There are countries where there are no textbooks and appropriately educated teachers. Many places around the globe are short of teachers resulting in poor quality education at basic levels. They are not sufficiently paid or appreciated. Teachers need proper education and training to empower learners and enable the building of peaceful societies. Technical and vocational skills provide social and economic opportunities to the poor and marginalized segments of their society besides

elevating them from poverty. Every stage of education has its importance. Children with early education will get prospects of economic prosperity in the coming days. Similarly, primary and secondary schooling enables more income opportunities. The elementary level holds a very important place as it is a link between primary and higher education. Besides this, it enables higher and tertiary education. Information and communication technologies allow people to have lifelong learning opportunities. These can especially be beneficial to female learners (UNESCO, 2011).

Moreover, it is debated that there is a great responsibility on learners today as compared to what they were required to be in the past times. Today they require to have the ability to question, ponder, and be able to vigorously involve in what they learn and spare time to think critically and replicate. Their learning must be practically applicable and allow them to solve the immediate issues and conflicts they face. Besides having acceptability to the solutions others provide to them, the learners must themselves be able to solve their issues. They must be able to express themselves and consider the opinion of others. They are required to cooperate and work with their friends and their contemporaries from local and other parts of the world. When it comes to practical application the learners must be able to apply what they conceive from the classrooms to the practical world. The students read different global topics, they memorize and hear the delivered lecture in class but real learning occurs when they act vigilantly and with the hands-on learning method. In future classrooms, the pedagogical environment must allow the learners to adopt collaborative and active learning, they must be more problem-focused, democratic, and learner-centered with encouragement towards investigation and probing skills (Colvin &Edwards, 2012).

Educating for citizenship is important as it inculcates knowledge, skills, and behaviors and plays a role in socializing unit that involves the broader community of

people.   Therefore educational institutions foster citizenship in the learners by inculcating in them the common concerns for their societal, ethnic, and civil atmospheres. And make them aware of the trials that are faced living in a community and provide solutions for clearly tackling and contributing evidently as the members of the common society. Learners are taught both in the formal and the non-formal setup regarding citizenship in various subjects like History, Geography, religious education, and some other subjects related to civic education.   Such type of education enables people to become responsible members who can act to make society a better place to live and play their role as and when required. Presently there is a change in the notions of citizenship, it was earlier taught as civic education, now it is taught as citizenship education and in the previous century, it was referred to as education about citizenship and now it is educating oneself for citizenship. Earlier it was more content and knowledge-based but now it is more process and principle-centered. There is an also intimate relationship between the type of government and the political system existing in the country. The decision regarding the curriculum for its citizens is taken by its national governments. When we look at the term 'Global Citizenship' there doesn't seem anything like legal binding at a global level, therefore this term seems more symbolic rather than practical.   In such a situation it is essential to impart global citizenship education, to give an individual his distinctiveness and mindfulness plus the obligation towards his locality, nation, and the universe. The themes to be covered in such education must be focused on the rights of people and their issues. The issues related to the environment, society and economic issues, and diverse cultural issues affect the peace and prosperity of the nation. Besides giving knowledge about the above themes the learners can be instructed with the values of care and compassion for their fellow beings, have an understanding of the role of being a member of their state, and

also have an ethical responsibility for the greater good of the global community. Respecting the religion, language, and opinions of the people of other cultures and appreciating their diversity, working for sustainable development towards the planet earth, and making efforts to maintain peace, and imparting justice without partiality is learned by the learners. In reality, the global citizenship education program is not more than a supplementation and revision of local and national citizenship education programs (Tawil, 2013).

Technological innovations and communication tools have made the world more interlinked and interconnected today compared to the past. There is the migration for sake of jobs, studies, and settlement. People are moving from rural to urban areas and from one part of the world to another in search of employment and better living. With this mass movement exchange of culture, language, and issues of religious harmony arises. There are also several other global subjects like climate change, ecological dilapidation, fast technological development, and the growing pace of globalization which prompt the attention of the global community for collective actions. Therefore global citizenship education is needed. Such education will prepare the learners for understanding themselves about their humanistic and ethical roles in this interlinked and interconnected world (Guo, 2014).

Besides global citizenship education (GCED), education for sustainable development (ESD) enables the learners to take mature decisions and make accountable actions for conservational dependability, monetary sustainability, and unbiased society. Education for sustainable development has made big achievements in a decade that were devoted to promoting sustainability, with time there came a realization that it must be made an integral part of quality education. Several international agreements were made since 1987. Initially, they were more focused on

the environment later the social and economic factors were also included in the coming agreements. The main areas where education for sustainable development is assimilated are climate change, biodiversity, disaster risk reduction, and sustainable consumption and production. Education for sustainable development is a complete and reformation education that has its focus on all educational components like learning contents, learning outcomes, teaching styles, and the learning atmosphere (UNESCO, 2014).

In May 2015 a forum was organized which was attended by 160 countries and more than 1600 participants which included the heads of the World Education Forum and its convening agencies like UNESCO, UNICEF, UNDP, UN Women, and UNHCR, heads and members of delegations, ministers, heads of agencies, officials of multilateral and bilateral agencies, civilians, members belonging to the teaching profession, youth and members from the private sector. They all unanimously adopted a vision for education for the coming 15 years (2015-2030) which was meant to offer quality education with all-inclusive, equitable, and lifelong learning to all citizens of the world. Later in November 2015, the same vision was scrutinized and approved by184 counties of the world in Paris. The drafting of the Education 2030 framework for action was assisted by the steering committee of 'Education for all' (UNESCO, UNPFA, UNICEF & UN., 2016, p. 5-16).

The convening agencies in their recommendations adopted 17 sustainable development goals and several indicators. Education was set as goal 4 with its 7 outcome targets and 3 implementation means. Education was made a stand-alone goal as well as the means to attain all other goals. The main aim of target 4.7 is to give learners all capabilities to become responsible local and global citizens so they make

good decisions and be informed about their role for their fellow human beings, for the society, and the environment they live in. This can be possible only when these capabilities are mainstreamed in education policies, curricula, teacher education, and students' assessment. There is always a need to support education's role for the attainment of human rights, peace, gender equality, sustainable development, health, and responsible citizenship at all levels from local, regional to international levels. The content of such education must be pertinent with a focus on both the cognitive and non-cognitive aspects of learning. Therefore, such knowledge, skills, values, and attitudes may be imparted to citizens which make their lives fruitful and such citizens make appropriate decisions and play active roles both in their country as well as at the national, regional, and the global level and be able to solve the universal problems which are possible only through education for sustainable development (ESD) and global citizenship education(GECD) which comprise of peace and human rights education as well as knowledge of different cultures and education for global understanding (UNESCO, 2017 p. 14).

The goal of SDG 4 and the other remaining goals can be attained only when people are educated and when education ensures that by 2030 all learners attain the knowledge and skills which are required for the promotion of sustainable development, therefore, it is essential that our curriculum and the text-books at all levels especially the sustainability themes may be incorporated in the education curriculum (UNESCO, 2017).

Learning of the students must be effective and according to the needs of changing times. Every individual has to acquire knowledge and competencies so that it enables the person to work and adjust in the interdependent and interconnected world. Education must enable people to respect the rights of other people. It must enable them

to adopt responsible consuming and producing habits and develop in them the sense of understanding and acceptance for other people, their living habits, and the beliefs and customs they follow. Besides this the learners must be provided a conducive learning environment, gain support from the donor countries to get scholarships in diverse fields, and also increase the number of qualified teachers as without a competent teacher a competent learner cannot be imagined (UNESCO (2016b).

Furthermore, it is essential to possess competencies and skills. Transferable skills are named vital skills, essential skills, common skills, soft skills, lifetime learning skills, and employability skills. An individual must be able to make use of the skills learned while educating himself in the workplace. Moreover, many organization prefers employees who are supple, adjustable, and multi-talented. The employees who possess interpersonal and intrapersonal, plus the skill to convince other people through effective negotiation and people possessing interpersonal skills are the most suitable candidates for jobs. The changing economic and social needs require people who are versatile to face the challenges and stand up to the expectations of the employer. Therefore transferable skills play a great role in the lives of people to make them effective both at the place of work and in the community (Muhammad, 2012).

Pakistan is a thriving and responsible democratic country. It has 60 percent of the population younger than 30 years. It stands in 6th position in the ranking of the world population and it is expected to reach 230 million by 2030. It is also faced with the challenges of natural disasters, a huge youth population, deep-rooted poverty, and disparity which is adding pressure on its society, economy, and environment. Therefore Pakistan must increase its growth to 6-10 percent annually so that it becomes economically robust. For this purpose, there is a need to have good governance and

answerable organizations. Pakistan also requires a cultured, well-informed, properly nurtured, and educated society that can take Pakistan towards prosperity. This can be achieved only when we collectively work and strive to attain sustainable social development (UNESCO, 2019).

The national education policy of Pakistan though claims to develop citizens capable of competing in the global knowledge-based economy, does not shed much light on how our present will be shaped to design a better future world. Moreover, there is no description given about who the global citizens are and what are their roles and responsibilities in the global world. National citizenship is adequately focused in the policy document but there is little communicated about the values required in the interconnected and inter-related world (Pasha, 2015).

Mainstreaming of the topics related to human rights, global citizenship education, sustainable development, and inclusive sexuality education in the curricula can help the student teachers attain the required expertise. Training and refresher courses for the in-service teacher are also very important. The concept of global citizenship was least included and similarly, gender equality had very little coverage. It was also witnessed that sustainable development was not included as significantly as was required. The above-reported facts give us the challenge to dwell more into the issue asking countries to further investigate these issues in their local scenarios so they can be updated on the global level. Besides including above referred themes in the curricula and the content on the subjects in the textbooks it is essential to equip the teachers both in-service and pre-service with relevant knowledge, skills, and values regarding human rights, global citizenship, sustainable lifestyles, inclusive sexuality education, and the diversity in cultures (UNESCO, 2016b).

Regarding the concept of education for sustainable development, there is an insufficient linkage between the three essential components of the economy, environment, and society/culture in the pre-service teacher education curriculum of Pakistan. Sustainability education can be smoothly transferred to society through teachers as a teacher play an important role in altering the attitudes of the learners for an optimistic change. There is a need to bring reforms in the curriculum for peaceful cultures as extremism can negatively affect society (Durrani, Malik & Jumani, 2019).

The teacher education programs in Pakistan are not preparing the prospective teachers with the knowledge and skills required for sustainability education. There is also not much research done in the area of education for sustainable development. The need for developing policy, curricula, pedagogy, assessment practices, and extensive research in the area of education for sustainable development is required in Pakistan (Kalsoom, Khanam & Qureshi, 2018). Teacher professional development program documents lack the concepts of education for sustainability and very little sustainability concept is included in the key documents which groom the prospective teachers (Kalsoom, Khanam & Qureshi, 2019).

Sustainable development goal 4 stresses ensuring comprehensive and impartial quality education, and encouraging lifelong learning opportunities for all. It gives immense importance to target 4.7 and mentions global citizenship education as one of the goals of education for all. UNESCO carries out periodic discussions with the United Nations member states to seek reports about the inclusion of peace and non-violence, human rights and basic freedom, cultural diversity, and environmental sustainability, especially in teacher education programs. It was found that only 19% of the countries have thoroughly integrated the above concepts in their teacher education programs while 93% reported that they are included to some extent (Reimers, 2020).

Every member state of the United Nations including Pakistan needs to work for the attainment of the global education agenda (2015-2030). The agenda for education is an action plan which is for the people, the planet, and their privileges. The main emphasis of this agenda is to impart quality education, on an equal basis without any discrimination and to reassure life-long learning prospects for all. Sustainable development goal 4 has great significance in the attainment of other sixteen SD goals and target 4.7 of these goals put special emphasis on adopting sustainable lifestyles, by respecting the rights of fellow human beings, caring for the planet, working for peace, being positive for diversified cultures and assuming the responsibilities of a global citizen. For this purpose, individuals are required to attain knowledge, skills, and values for universal understanding. The curriculum is the only means through which both intellectual and intuitive characteristics of learning can be ensured. Teacher education curricula have a great role to play as it is the teacher who ultimately shapes the future of the learners (UNESCO, 2017).

In some of the developed countries, studies related to sustainability are encouraged and gaps are identified regarding sustainable development education. There it is stressed to shift the focus of education from post-industrialism and post innovativeness to new types of knowing and consolidating information which is related to economic, social, cultural, environmental, and personal fields. The pedagogical practices are carried on such a professional model, that the teachers can think regarding sustainability issues especially regarding the change occurring in the climatic conditions. So there is a need to identify the gaps related to teacher education curricula for the missing sustainability concepts and review and incorporate the same (Ken, Summers & Harriet, 2007).

Moreover, there is an international consensus on the inclusion of sustainability and now GCED and ESD have become the basic regulatory standard for educational change. It is seen that mainstreaming is the universal gauge for measuring sustainability. Embedding is a procedure of adding the concept of ESD in the various facets of education structure. Sometimes the word embedding is also used as a synonym for mainstreaming. The main areas of sustainable development are the society, economy, and the environment where culture is included in the society. Biological compatibility is added in the environment and equitable economic development is attached to the economic aspect and social justice to society and good governance is added as a fourth component with its political dimension (Mochizuki, 2017).

However, the curriculum in Pakistan is mostly content-centered and the learners are the knowledge recipients. The standards set for the curriculum are not properly met and the focus of teaching is to transfer subject knowledge. Neither concepts of the learners are cleared nor do the teachers adopt a constructivist approach in teaching the subject. Therefore, there is a need to review the curriculum for making it socially relevant (Rind & Mughal, 2020).

Elementary education holds immense importance. The purpose for evaluating the 'Elementary Teacher Education' curriculum is to ensure that the student teachers who will be the instructors at primary and lower secondary levels have knowledge, skills, values, and behaviors related to GCED and ESD. So that they inculcate the same in the future learners. The elementary level is the basic pillar of education in Pakistan. Developed countries of the world could achieve their successful status only with the universalization of primary and elementary education. Also for quality secondary and tertiary education, it is necessary to focus upon the elementary level. It contributes a

lot to the economic development and prosperity of the country. Without emphasizing elementary education it is not possible to achieve progressive registration in the higher and tertiary levels of education. Unfortunately in the past due to political instability, lack of infrastructure, funds, and vision the plans, policies, and targets set for elementary education in Pakistan could not be achieved (Shakoor, Azeem, Dogar &Khatoon, 2011).

Therefore selecting the 'Elementary Education Curriculum' for the present study holds enormous significance as the learners of this stage, when equipped with the knowledge, skills, competencies, and values of GCED and ESD can become responsible youth with sustainable consuming and producing lifestyles. Hence the curriculum of Pakistan and the textbooks at all levels must incorporate sustainability education. Pre-service teacher education, B.Ed. (Honors) is a level where the teachers are groomed for training future generations. Incorporating sustainability at this level will be beneficial for the present times as well as the future. In this study to find out the contents related to the themes of global citizenship education (GCED) and education for sustainability (ESD) the document of B.Ed., the curriculum is aimed to be thoroughly analyzed, and certain keywords are to be searched. Very few studies on Global Citizenship Education, and similarly limited studies in Education for Sustainable Development have been carried out in Pakistan. There was no study witnessed which covered both GCED and ESD on target 4.7 of the Sustainable Development Goal 4. Hence this study is being carried out. The present study is unique and the first of its kind that intends to identify the gaps related to global citizenship education and education for sustainable development in the pre-service teacher education curriculum. Moreover, the global education monitoring report desires the

member states to carry out "further research into subject curricula to aid in understanding progress on target 4.7" (UNESCO, 2016b p. 293).

1.2 Statement of Problem

Global Education Monitoring Report (2016b) asks the member states of United Nations to see if sustainable development goals agenda 2030, the target 4.7 and its topics are included in the curricula and if so to what extent and at which levels of education and the subjects in which the topics of peace and non-violence, appreciation for the cultural diversity, human rights, wellbeing of the people, tolerance are included (UNESCO, 2016a p. 16). Sustainable Development Goal 4, target 4.7 emphasizes the key role of Global citizenship education (GCED) and Education for sustainable development (ESD) in reaching sustainable development. Therefore, it is required that by 2030 all learners acquire the knowledge and skills to promote sustainable development. Pakistan being a member of the United Nations it is imperative that we also work for attaining the education agenda 2030. Previous studies in Pakistan have not investigated GCED and ESD themes, as it is a new topic and was introduced in 2015. Only a few studies either investigated ESD or only GCED. This study is unique and is focusing on both themes. In light of the above aim, the researcher in this study intends to analyze the contents of B.Ed., curriculum for knowledge, skills, and competencies concerning GCED and ESD of sustainable goals agenda 2030, Goal 4, Target 4.7.1, as per framework given by (IBE- UNESCO, 2016). Therefore the purpose of the study is to investigate the gaps related to GCED and ESD in pre-service teacher education curriculum document, the opinion of the curriculum experts will enable the researcher to know what gaps are there in the curriculum, and what challenges the experts find in the inclusion of these topics, and how essential it is to include the contents of GCED and ESD in B.Ed. curriculum, so that the student teachers prepare

themselves to attain the education agenda by 2030. Finally, in light of the study findings, a course outline for GCED and ESD intends to be proposed.

1.3   The Rationale of the Study

The education agenda (2015-2030) is a part of 17 sustainable development goals (SDGs) with 169 targets. SDG 4 is specially related to 'Quality Education'. To attain these seventeen SDGs emphases of the learners must be on target 4.7 of SDG 4., which emphasize learners to attain knowledge, skills, and values related to the topic of peace and non-violence, appreciation of cultural diversity, human rights, the well-being of people, international understanding, tolerance, etc. Global Education Monitoring Report asks UN member states like Pakistan to incorporate the above topics in the textbooks, curricula of teacher education, and the assessments. It also insists on incorporating the contents, skills, competencies, and pedagogies required for global citizenship education (GCED) and education for sustainable development (ESD). Earlier no such studies on this topic were carried out.

Therefore the present study is being carried out to find the themes and subthemes related to GCED and ESD. For this purpose "mixed-method research approach" is adopted, with convergent parallel design with more emphasis on the qualitative component using the notation of Morse (1991) for Qual+quan simultaneous design. The researcher used the qualitative component of content analysis for examining the curriculum of B.Ed. (Honors) and simultaneously used a survey questionnaire which had both closed and open-ended questions for taking the opinion of curriculum experts. The open-ended questions were to be analyzed qualitatively while the closed-ended questions were supposed to be analyzed quantitatively with descriptive statistics. The qualitative design dominated the study. Rigorous comparison of results was not the purpose. The results of qualitative and quantitative findings ultimately intend to be combined merged

and then interpreted. Both the document analysis and the opinions of curriculum experts aimed to supplement and compliment and authenticate the findings allowing in-depth analysis of the problem under study. Finally, the suggested 'Course outline of GCED and ESD' is proposed to be developed in the light of findings of the study for the upcoming B.Ed. national curriculum in Pakistan.

1.4 Significance of the Study

Sustainable Development Goals (2015-2030) is a global agenda and needs its implementation at the national level by every country. Education is the only means to attain this goal. Hence the findings of the study will be highly significant for the policymakers to devise plans and policies as per current global trends for developing in learners international understanding, climate change effects, environmental degradation impact, cultivating respect for rights of fellow human beings, and developing an appreciation for cultural diversity. The finding of the study will be helpful for the curriculum developers to include the contents, skills, competencies, attitudes, and values as well as pedagogies required for sustainable development in the light of identified gaps regarding GCED and ESD and its practical implementation at all levels especially at the level of pre-service teacher education. The study will be helpful to the managers of teaching and learning, to ensure that global citizenship education and education for sustainable development is being carried out in their institutions. It will also be helpful to teacher educators as they are the coaches of future teachers. This study will be supportive to the prospective teacher who could further impart knowledge and skills on sustainability in the institutions they get employed. This study will be of aid to learners/students as they are the main implementers of the knowledge and skills, they have attained to maintain a sustainable environment. Knowledge of sustainability is ultimately practiced by society and it can also be helpful

to the community at large. The study can be helpful to the annual Global Education Monitoring Report Committee as they, through this study will be getting the facts and figures required to monitor the progress on GCED and ESD in the curriculum of Pre-service teachers for the attainment of the SDG goals especially Goal 4 and target 4.7 in Pakistan. The suggestions given as a 'Course outline for GCED and ESD' will serve as a guideline for the future curriculum developers of B.Ed. and will benefit all relevant stakeholders.in Pakistan.

1.5 Objectives of the Study

1. To examine the curriculum of B.Ed. Honors. (Elementary) for knowledge, skills, and competencies regarding global citizenship education (GCED) education for sustainable development (ESD) themes of Sustainable Development Goal 4 in target 4.7.1 of education agenda 2030.

2. To investigate the perspectives of curriculum experts regarding gaps and challenges in the inclusion of themes, of global citizenship education (GCED) and education for sustainable development (ESD) in B.Ed. Honors. (Elementary) curriculum as per Sustainable Development Goal 4 in Target 4.7.1 of education agenda 2030.

3. To suggest a 'Course outline of GCED and ESD' in the light of the findings along with the teaching-learning resources for the upcoming curriculum of B.Ed. in Pakistan to attain education agenda 2030.

1.6 Research Questions

1. Which themes and subthemes exist in the courses outline of pre-service teacher education (B. Ed Honors, Elementary) related to Global Citizenship Education (GCED) & Education for Sustainable Development (ESD) of Sustainable

Development Goal 4, target 4.7 of Education Agenda 2030, and to what extent it is available?

2. Specify the objective opinion regarding the inclusion of GCED & ESD themes and subthemes related to Human Rights, Education for sustainable development, Peace and Non Violence, Gender Equality, Health, and Well-Being, and Global Citizenship in B.Ed. (Honors) Elementary curriculum?

3. Illustrate the gaps related to Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) in the B.Ed. (Honors) Elementary curriculum?

4. Briefly elucidate the views regarding the inclusion of themes related to GCED and ESD and in which subjects of the curriculum of B.Ed. (Honors) Elementary curriculum?

5. List the challenges as per our cultural background in the inclusion of the themes of GCED and ESD in the curriculum of B.Ed. (Honors) Elementary?

6. What course objectives and topics can be suggested for 'Course outline of GCED and ESD' for the upcoming B.Ed. curriculum in Pakistan to attain education agenda 2030?

1.7 Delimitation of the Study

The study was delimited to:

a. Sustainable Development Goals (SDGs) are seventeen (17) in number but only Sustainable Development Goal 4 was studied. It is related to 'Quality Education'.

b. Only target 4.7 of SDG 4 was studied.

c. Only target 4.7.1 was studied, which is a universal indicator to examine how far (i) Education for sustainable development (ii) Global citizenship education including gender equality and human rights are exists in the policies, curricula, and teacher education and student assessment. The present study was delimited to "curricula of

teacher education" where content knowledge, skills, and competencies, and pedagogies are only explored. "Assessment" is not included.

d. Only B.Ed. Honors. (Elementary), course outlines were analyzed for the presence of GCED and ESD content in document analysis.

e. Only topics (i). Human Rights (ii) Education for Sustainable Development (iii) Peace and Non-Violence (iv) Gender Equality (v) Global Citizenship Education (vi) Health and Well of the UNESCO framework given by (IBE, 2016) of Sustainable Development Goal 4, and target 4.7, agenda 2030 were selected for expert opinions of the study. And for content analysis, two more topics like competencies and pedagogies were also included.

f. Only the course outlines 39 subjects as prescribed by the Higher Education Commission, the curriculum of B.Ed. (Elementary) were studied.

g. All subjects offered by HEC for Pre-Service Teacher Education curricula were studied and content courses offered by individual universities were not part of the study.

h. The results apply to the B.Ed. (Honors) the elementary program only and these results however do not mean that all degree programs lack the themes. Every degree program must separately be evaluated to find out the presence of the themes.

i. The word search and word phrases for the inclusion of the themes searched for the topics and subtopics, the course descriptions as well as the statements of intended learning outcomes of each subject in the B.Ed. Program.

1.8 Limitations of the study

The limitation of the researcher was that expert opinion was initially planned to be taken by conducting semi-structured interviews of National Curriculum Review

Committee (NCRC) members. But as the curriculum experts were employed in different provinces and districts of Pakistan and holding key posts like Chancellors, Deans, Department Heads, and Professors with their busy working schedule, it was decided by the supervisor and the validators to collect data through a survey questionnaire with closed and open-ended questions.

1.9   Methodology/Procedure of the Study

1.9.1 Design of the study

The design of the research is a plan of action which the researcher intends to take in the process of study. Hence the design is selected based upon the nature and type of study. The study under discussion adopted a 'Mixed Method Approach' where both the qualitative and the quantitative data are collected simultaneously. A convergent parallel mixed design as suggested by (Creswell, 2014. & Teddlie & Tashakkori, 2009) was adopted. The two parallel stages are unrestricted by each other. Stage one includes QUAL (Qualitative) data collection and its independent analysis and the other stage involves Quan (quantitative) data collection and its separate analysis. Both are designed to answer the different aspects of the same phenomena under study. The study adopts Morse's (1991) notation of QUAL+quan simultaneous design where a qualitative component dominates or is prioritized. Therefore content analysis of B.Ed. curriculum document was examined, while the survey was conducted to get the objective as well as the subjective views of the respondents.   The data had two qualitative components. One was content analysis and the other of open-ended questions and the quantitative part was a closed-ended questionnaire.   Hence QUAL+quan is the appropriate notation suitable to the study. In convergent parallel design both the data are collected and analyzed independently and the evidence of the

phenomena is provided by connecting, combining, or integrating findings from both the qualitative and the quantitative analysis (Graff, 2016).

1.9.2 Instrument of the study

The research instrument was taken from (IBE, 2016) and (IBE-UNESCO, 2016) with their formal permission and was validated by experts. The study is divided into two parts:

i.   Part-I of the study is related to 'Content Analysis' and the instrument used for analyzing the contents of the curriculum was taken as per the themes and subthemes mentioned in the (IBE, 2016) study. There are six themes and two other themes along with the sub-themes. The main six themes are (a) Human Rights (b) Education for Sustainable Development (c) Peace and Non-violence (d) Gender Equality (e) Global Citizenship Education (f) Health and Well-Being. The competencies and the pedagogies were also considered as additional two themes, taking the total themes to eight (8) only for content analysis. Every main theme has several subthemes. The above themes are the a priori themes (Appendix-A).

ii.   Part-II (A&B) of the study was to explore the perceptions of the curriculum experts. The opinions of these experts were taken through a survey questionnaire that had two parts, a closed-ended Likert scale which has a five-point scale ranging from strongly agree to strongly disagree with six themes and their subthemes and three open-ended questions were posed for the unbiased opinions of the respondents i.e. the curriculum experts. The questions asked were regarding the inclusion of GCED and ESD (Appendix-B).

1.9.3 The Sampling Frame:

(i)   In Part-II the 'Curriculum Experts' who were involved in making curriculum at B.Ed. (Honors) Elementary level from all over Pakistan was taken for the study. The list of the participants was taken from the higher education commission Pakistan website (see table 3.1) source. They were all 29 NCRC (National Curriculum Review Committee) members and additionally co-opted members of NCRC involved in preparing syllabi and course guides for B.Ed. The list of 29 NCRC members and 78 co-opted members total reached 107. They represented all the provinces of Pakistan. It was a representative sample with at least one member from every province including Gilgit Baltistan. The questionnaire complete in all respects was filled by 70 participants was considered as the final sample.

1.9.4 Sampling Technique

A purposive sampling technique was adopted for the study. This technique allows the selection of respondents who are best suitable for the study under investigation. Hence the researcher picked the respondents who qualify, have experience and expertise as per the study requirements. The experts like NCRC (National Curriculum Review Committee) members as well as their co-opted members who were involved in the designing of B.Ed. Elementary and ADE curricula were included in the study.

1.9.5 Data Collection Techniques

Part-I: For content analysis, the researcher visited HEC and obtained the curriculum of B.Ed. (Honors) Elementary. Content analysis was done to find the themes and subthemes of GCED and ESD according to target 4.7 of education agenda 2030 (Appendix-C).

Part-II: In the next stage, the data was collected from the respondents who were the curriculum experts through a survey questionnaire with both open-ended and

closed-ended questions. The closed-ended part had six main themes and subthemes of GCED and ESD. The questionnaire was sent by different means, sending e-mail, through surface mail, by special messenger, and personal visits to the experts.

1.9.6 Qualitative Analysis & quantitative analysis

1.9.6.1 Curriculum Content Analysis

Part-I: The content outlines 39 subjects, of the curriculum of B.Ed. (Honors). Elementary was studied. Manual searches for the word and phrases related to the themes and sub-themes and codes were searched in the curriculum. Word search using the computer was also done and it was ensured that all themes are properly investigated. Thematic analysis was done. For the "presence" of themes and the subthemes in the content analysis, it was graded as (one) "1" and for the "absence" of the theme/subthemes it was graded as (zero) "0" and it was counted only once for its existence and then total sub-themes were counted. There was a total of 8 main themes which were examined. If the subject had all 8 (eight) sub-themes it means it had 100 percent of the sub-themes present and accordingly all were calculated. Only once the subtheme was counted despite it being repeatedly seen in the text, and the number of sub-themes that existed was counted and put on the excel sheet. Then all eight themes were combined and collectively assessed. Individually all subjects were initially assessed and then they were collectively seen for every single theme. Then the results were expressed with descriptive statistics through percentages in graphical form and with an explanatory descriptive analysis.

1.9.6.2 Data analysis of Survey Questionnaire

Part-II: For analyzing the opinions of the experts, two steps were followed. For closed-ended questions data were analyzed through SPSS 21 and the results were presented with descriptive statistics means and standard deviation and in the form of

percentages and bar graphs and with an explanatory description. Similarly, for the open-ended questions, the data was analyzed through NVIVO 10 and the results were again expressed descriptively in the form of word trees and word clouds and again the explanatory description was given.

1.9.6.3 Topics as per GCED and ESD themes as per Target 4.7.1

Part-III: To suggest a 'Course outline with GCED and ESD themes' along with resources for the future national curriculum of B.Ed. (Honors) Elementary in Pakistan (Appendices D, E& F).

1.10 Operational Definitions

(i) **Sustainable Development Goal 4:** *"Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".* In the context of Pakistan, we all need to work towards the attainment of the education agenda 2030. For this purpose we need to cater to the needs of all people like poor, disabled, displaced, migrated, indigenous, and culturally diverse and all segments of society. Pakistan has to provide equal opportunities of education for all irrespective of their caste, creed, race, religion, language, and ethnicity and allow adult education and the education which make our children, youth, and adults keep learning all along with their lives. Such type of education may be provided by formal, informal, and non-formal means *(UNESCO, 2016a p 6).*

(ii) **Target 4.7:** Target 4.7 of the SDG 4 highlights the key role of GCED and ESD in attaining sustainable development (UNESCO, 2016a).

"By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and

appreciation of cultural diversity and culture's contribution to sustainable development." In the context of Pakistan, our citizens need to get aware of the rights of their own and their fellow beings rights, adopt sustainable living and eating habits, work for establishing peace in Pakistan, give due rights and regard to the female gender, and think globally and act locally. For this purpose global citizenship and education for sustainable development is necessary (UNESCO, 2016a p 13).

(iii) **Agenda 2030:** The 2030 Agenda for Sustainable Development is an inter-governmental commitment and "a plan of action for people, planet and prosperity". It comprises 17 Sustainable Development Goals (SDGs) that are "integrated and indivisible" and balance the three dimensions of sustainable development: the economic, social, and environmental, demonstrating the scale and ambition of the new Universal Agenda. To explore how far Pakistan has become successful in implementing the agenda of 2030 in its policies, curriculum, and other documents (UNESCO, 2016b).

(iv) **Pre-Service Teacher Education:** In the current context they are the student teachers who are enrolled after completion of their higher secondary school education for bachelor of teacher education in Elementary for four years as Honors students and they are accredited from the universities of Pakistan (hec.gov.pk)

(v) **Accreditation:** It is the process of recognizing any person for status or being qualified to perform an activity. NACTE in Pakistan does the job of accreditation for B.Ed., curriculum in Pakistan. Here in this context, it is recognizing the qualifications of B.Ed. Honors. (Elementary) teachers (NACTE, 2009).

(vi) **Curriculum:** "The planned and guided learning experiences and intended learning outcomes, formulated through the systematic reconstruction of knowledge

and experience under the auspices of the school, for the learner' continuous and willful growth in personal and social competence". Here in this context, it is the curriculum of B.Ed. (Honors) Pre-service Elementary Education (Tanner & Tanner, 1995).

(vii)　**Citizenship:** It is a condition where a person feels to be the owner of his rights, responsibilities, and duties towards a nation or a state.　And the education for citizenship tackles the kind of people a state endeavors to develop at the local, national and international level (Hina, Ajmal, Rahman & Jumani, 2011).

(viii)　**GCED:** Global Citizenship Education (GCED) is an umbrella term that covers the themes of peace, conflict resolution, education to build tolerance, appreciating cultural diversity, developing an international understanding for imparting global citizenship education to learners.　Here in this context, it is to find the themes of GCED according to IBE (2016) like Human Rights, Peace and Non-violence, Gender Equality, Health and Well Being, and Global Citizenship., in the curriculum of Pre-Service B.Ed. Honors of Pakistan (IBE, 2016).

(ix)　**Education for Sustainable Development (ESD):** Giving knowledge, skills, and competencies for the learners regarding making responsible use of national resources so that the coming generations do not find its shortage.　In our context, it is to make aware the learners of Pakistan to gain knowledge about taking care of nature and giving those competencies and values for protecting all living creatures (Nolan, 2012). The term sustainability means to fulfill the requirement of the people of Pakistan living in the present situation and also to plan and consume the resources in such a way that they are sufficient for the coming generations as well. In our context, we shall see how far our learners are taking care of their own needs and preserving the resources to fulfill the needs of others. And to see if such

education exists and such topics are covered in the teacher education curriculum of Pakistan. And to examine if the curriculum has the knowledge content for teaching sustainability to learners and the skills, values, and competencies to keep stability between social, economic, and environmental aspects in the context of Pakistan and to see if these themes are present in the curriculum of B.Ed. (World Commission on Environment and Development, 1987).

(x)   **GCED & ESD:** Here in the study GCED includes five themes, human rights, peace, gender equality, and global citizenship. The theme of health and wellbeing was later added in the study, which collectively is called GCED and is an umbrella term.   ESD is a separate theme focusing more on the environment. Collectively they are focused on target 4.7 (IBE, 2016).

(xi)   **Human Rights:** They are the basic rights of the people declared by the United Nations for all people irrespective of all ages, color, sex, religion, gender, origin, ethnicity, and nationality. We are referring to the human rights situation in the context of Pakistan, educating the student teachers regarding human rights and seeing if these are included in our curriculum or not. They were initially adopted in the United Nations General Assembly in 1948 (UNDESD, 2005-2014). Here in the context of Pakistan giving awareness to learners about their basic rights and the rights of others. To see if the curriculum includes the below-mentioned subthemes. Regarding democracy and how a person can be a responsible citizen in a democratic society and know the importance of giving a vote and his opinion in running the business of the state. Work with fellow citizens to ensure social justice for all and have the freedom to follow his culture and religion. For this purpose, the citizens of Pakistan have to gain knowledge, skills, and values regarding their basic rights (Tomasevski, 2004).

(xii)   **Peace and Non-violence:** Human beings are in equilibrium when they are in peace. Peace can be attained when people get fulfilled their necessities like food, water, shelter, and clothing. Peace in the context of Pakistan is very important as only educated individuals can prosper and bring peace to Pakistan (Tandon, 2014).To have knowledge, values, and attitudes for negating violence and avoiding conflicts by tackling the main reason which causes the conflict between society and individuals and to establish peace. Here it will be examined that if we are teaching such conflict resolution topics and if such a theme exists in the curriculum or not and what are the opinions of the experts in this regard (IBE-UNESCO, 2016). To see if the curriculum mentions this subtheme peace is the only means to attain prosperity. Abuse, bullying, and harassment both on campus and outside Pakistani schools need to be avoided. Learners may be given the knowledge and skills to adopt peaceful behaviors as these individuals form the units of society (Tandon, 2014).

(xiii) **Gender Equality:** Every individual is entitled to basic fundamental rights. Women must be given equal rights as are given to men, and women get those rights irrespective of their religion, race, color, ethnicity, migrant, disability, marital status, or health. Women of Pakistan have to be empowered if we intend to make Pakistan a prosperous state (International Women's Rights Action Watch, 2004). According to this theme in any society both male and female, boys and girls have an equal role. Both require equal treatment in terms of education, jobs, respect, and liberty. To explore if this theme is covered in the curriculum (UNESCO, 2018).

(xiv)   **Health and Well Being:** The health of a person is very essential to keep oneself fit for education, work, and daily routines. Health education of youth and

adults is more important. The consciousness of keeping oneself healthy allows people to do daily exercise, eat healthy food and maintain proper body weight by doing regular physical exercise. In Pakistan, people mostly are unaware of the ways to keep healthy. Therefore health education is very important (Nazeer, Ilyas, Gill, Shoaib, Rabia, Fayyaz &Jabbar, 2016).

(xv) **Competencies:** Besides content knowledge, it is necessary to impart skills and competencies to the individuals so that they get enabled to think independently, work collaboratively, make their own decisions, develop inter and intrapersonal skills, critical thinking skills, creativity, and problem-solving skills, possessing digital and technological skills. Education in Pakistan must enable its citizens to acquire such competencies (Wintersteiner, Grobbauer, Diendorfer, Reitmair-Juarez, 2015).

(xvi) **Pedagogies and Methods and Approaches:** In the present world teacher cannot perform the role of knowledge transmitter, rather has to facilitate the learner in acquiring knowledge. Must encourage the learner in getting hands-on learning, making the learner think and come out with solutions, searching for the information through digital sources. Learner-centered teaching allows the student to keep interested in what is taught and retain information. Our student teachers in Pakistan may get enabled to adopt child-centered pedagogical approaches and methods (Olufemi, 2008).

1.11 The framework of International Bureau of Education (IBE)-UNESCO, 2016 adopted for the study
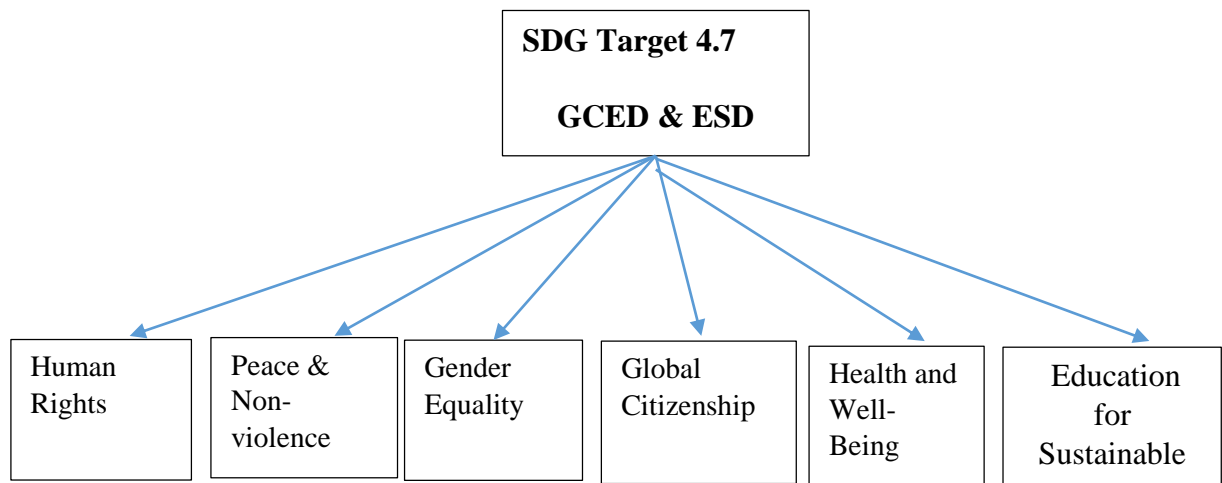
Figure-1.1 Framework adopted for the Study

Source*: (International Bureau of Education-UNESCO, 2016)*

1.12 Theories of the study and Target 4.7 (Global Citizenship Education (GCED) &Education for Sustainable Development (ESD)

1.12.1 SDG 4

"Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (UNESCO, 2016a p 6).

Global Citizenship Education is the dream of UNESCO especially related to education in the 21st century and it is the backbone of Sustainable Development Goals and the 'Agenda of Education 2030'.

1.12.2 Target 4.7

Target 4.7 of the SDG 4 highlights the key role of Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) for attaining sustainable development (UNESCO, 2016a).

"By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development" (UNESCO, 2016a P 13).

1.12.3 Common Good

The principle of the common good has been in practice for over two millenniums and different theorists, theologians, lawyers, administrative workers, and the public has been using this concept for the greater good. The Greek and Roman philosophers including Plato and Aristotle stressed the public good in contrast to the private or individual good. They were of the view that a state exists for the benefit of

people where the citizens find themselves peaceful and virtuous. They resolve to be united to cooperate and respect justice. While Christians interpret public good as having love for God and the modern Christians have incorporated the language of individual rights into their definition of the common good. It demands humanity to be respected and this respect can come from the organizations ethically, lawfully, and economically. Adam Smith emphasized the individual interest and the individual wellbeing which according to him will lead to the maximum common good. According to economists, the government is responsible for public goods like defense, basic exploration, and community health. As per the legal provisions, it is emphasized that the individuals may be given the right to speak, to press, to a peaceful gathering, and to address their grievances when required. Some countries show the balance between the individual good and the common good. Academicians argue that whatever is planned for the decency of the society must be based on the public formulation of good. Open-minded people claim that the community itself is the main cause of the common good (Gibbons, 2015).

1.12.4 Promotion of Peace and Common Good

A conversation between Bosio &Torres (2019) on the theoretical background of global citizenship education follows saying the word 'Globalization' or 'Internationalization' which was coined in the last decade of the twentieth century gave various meanings. Education from primary to tertiary level in today's world is divided into two categories. The first type is value-based and the other one is based on pragmatism. When we talk about pragmatism it means the education which is being imparted to the student needs to enable the person to attain the skills and potentials required for the globalized world. This mostly revolves around the concept of universal effectiveness and striving to outstand in the world placing. When it comes

to values, it is necessary to look at social justice, fostering human rights, feeling responsible to fellow beings, and rendering social justice, having a desire to eliminate poverty from the world and working for sustainable futures. The other name to this value-based education is ethical-critical universal teaching which emphasizes the skills but more stresses upon the values and practices which foster world peace. The purpose of global citizenship is to promote peace and strive for the common good of all living creatures. Global citizenship and the future knowledge domain must focus on three domains. Our planet 'Earth' is home to all living beings, embracing different cultures to live in peace and showing unity in this diversity (Bosio &Torres, 2019).

1.12.5 Global Citizenship Education (GCED)

This new term provides a mental framework to understand the varying terms like intercultural learning, global education, cosmopolitan education, peace education, or civic education but they do not completely convey the meaning as does 'Global citizenship Education' (GCED). This concept is essential in the internationalized society. It is a paradigm change where the individuals are supposed to work for a principled goal of a peaceful society. It provides opportunities to the learners who aspire to be united in a diversified world. Such learners endeavor to attain knowledge, skills, values, and attitudes for a more unbiased globe. This word was first coined by the then Secretary-General Ban Ki-moon as Global Education First Initiative (GEFI) in 2012, who emphasized education as a global concern. UNESCO has been working to promote global citizenship education with a network of Associated School Project, International Bureau of Education (IBE), and in 1974 delivered a recommendation on 'Education for International Understanding'. It urges the world community to make policies that address the issues of peace, human rights, environmental and cultural education. Education is seen as the principal means for promoting peace, where

human rights education, intercultural consideration is of specific importance. GCED spread over a multidimensional approach, using notions, and procedures, already implemented in different fields and subjects, including human rights education, peace education, and education for sustainable development and education for international understanding. The purpose of all is to promote an impartial, nonviolent, and sustainable world (Wintersteiner, Grobbauer, Diendorfer, & Reitmair-Juárez, 2015 pp.3-11).

1.12.6 Education for sustainable development (ESD)

In the report of the United Nations "Our Common Future," the commission put trust in the people that they can build a future that is more impartial, affluent, and protected. The future economic activities are to be based on extending the ecological resource base. This development will remove the widespread poverty in this emerging world. The commission urged the nations for utilizing the resources in a way that served the purpose of both the present and the coming generations. Various issues are facing the globe, the rising population, the need for education, the widening gap between the rich and the poor, water shortage and the degradation of land, poisonous gases, the climatic changes, and global warming, all these are the challenges which require the political will to bring change for better future. There is an urgency for intergovernmental collaboration to accomplish environmental and economic interlinkages (WECD, 1987).

Education for sustainable development since its emergence in the 1980s was initially intended to protect the environmental practices and ecosystem by utilizing natural resources sustainably. It was also intended to minimize poverty as the rich nations were prospering economically at the cost of poor countries by excessively exploiting natural resources. In the coming days, this strategy of sustainable use of

natural resources was made mandatory for all countries to be mainstreamed in the policies, curricula, and plans in the name of environment and development. This word took different forms like 'education for sustainable living in the 1990s and later as 'education for sustainability and since 1996 it was used as 'education for sustainable development' and then in 1997 as education for 'sustainable futures'. From (2005-2014) UNESCO as a leading agency of the UN coined the word 'Education for Sustainable Development' (ESD). ESD aimed to enable every human being to attain the knowledge, skills, attitudes, and behaviors required for a sustainable future. It is further intended to aid in stimulating competencies like critical thinking, problem-solving, and working in teams (Michelsen & Wells, 2017 p. 59).

2   **CHAPTER 2**

REVIEW OF RELATED LITERATURE

2.1 Introduction of the Chapter

This chapter deals with the literature related to "Sustainable development goals" (Goal 4) which relates to "Quality Education" with special reference to target 4.7 which deals with "Global Citizenship Education (GCED) and Education for Sustainable Development (ESD)". The literature of various scholars will be covered on the subject stated above.

2.2 Concept of Sustainable Development

United Nations Brundtland Report (1987) defines:

"Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987).

In 2005 the United Nations world summit stated:

"Educating learners for sustainable development requires them to put into the process where they are given knowledge, skills, and understanding regarding the way they require to live and work safeguarding the society, economy and the environment both for the people living now and for the coming generations" (UNESCO, 2005).

2.3 Need for Sustainable Development

The new (2015-2030) agenda for sustainable development reflects the vision of the importance of an appropriate educational response. In sustainable development goal 4, "Education" is explicitly formulated as a stand-alone goal. Numerous education-related targets and indicators are also contained within other sustainable development goals (SDGs). Education is both a goal and a means for attaining all the other SDGs. It is not only an integral part of sustainable development but also a key enabler for it. That is why education represents an essential strategy in the pursuit of the SDGs. It was felt that the globe required an immediate shift in our lifestyles and transformation in the way we think and act. To achieve this change we need new skills, values, and attitudes that lead to more sustainable societies (UNESCO, 2015).

We consume resources from our planet earth for the fulfillment of our basic needs. With the growing needs of the population, this usage has become excessive. Resultantly we are facing various issues like climate change with extreme weather, degradation of soil, lack of fresh water due to the presence of harmful particles in them and the air. Animal and plant life is in danger due to the contamination of water and land. Merciless cutting of trees and not growing them in enough quantity, lack of rainfall due to global warming leading to the drought situation, the abundant presence of unproductive land are all matters of serious concern. The other issues people are facing are different streams of education systems continuing in the world with the lack of access to quality education. Many people in the world live under the poverty line with few people having lots and lots of wealth accumulated in their hands. Most of the people do not have potable water to drink and fresh air to breathe. Some nations are facing internal conflicts and conflicts from outside leading to migration and displacement. Under such circumstances, it seems extremely necessary to plan a

strategy that minimizes the trouble of upcoming generations and enables the present generation to fulfill their needs (UNESCO, 2016b).

2.4 Contextualization of SDGs at the national level

The states which are members of the United Nations have committed to providing quality and lifelong education to the learners without any discrimination. It also means that they have promised to give access to pre-primary, primary, secondary, tertiary, and technical and vocational education to all its citizens. The specific matter of apprehension is if the targets will reach effectively to all the concerned, how relevant they may feel. The targets from 4.1, 4.2, 4.5, and 4.6 are the remains of the 'Education for All' agenda. Though the cultural and economic conditions of all the countries are not the same still all must follow this guideline. Similarly, the remaining targets are also required to be translated into the policy documents and curricula. These targets are 4.3, 4.4, 4.7, 4. a, and 4. c. These are the international targets and the national governments are required to immediately translate them into their education systems (UNESCO, 2017).

2.5 Need for Pakistan to Integrate SDG Target 4.7 in Teacher Education Curriculum

Sustainable Development Goals (2015-2030) is the universal agenda (Inter-governmental commitment) on which all nations of the world are working. Pakistan is also a signatory of these sustainable development goals. Attainment of these goals is possible only when the society is made aware and the teachers who are the future nation builders are given knowledge, skills, and values related to global citizenship education (GCED) and education for sustainable development (ESD) (UNESCO, 2016b).

Supporting sustainable development goals asks the member states to see if target 4.7 and its topics are included in the curricula and if so to what extent and at which levels of education and the subjects in which the topics of peace and non-violence, appreciation for the cultural diversity, human rights, wellbeing of the people, tolerance, etc. are included. It further emphasizes to see for the inclusion of the above topics in textbooks, the teacher education curricula, and in the students' assessments and their inclusion in the programs of non-formal, informal, and adult education (UNESCO, 2016b p. 289).

2.6 Teacher Education Curriculum of Pakistan and Sustainability

Teacher education and their educators have an important role to play in teaching prospective teachers regarding sustainability. It is not possible to presume that their previous knowledge and the experience they have will enable them to impart sustainability education unless the same is planned and incorporated in the guidelines, strategies, and practice of the teacher education program. A study was carried out to find if the teacher education program has sustainability incorporated at the B.Ed. four years level found that the concept of sustainability was not focused even in the curricular documents and the trainee teachers even though had a liking for the subject, could not comprehend the concept of sustainability. Moreover, they could not even appreciate the concept properly because their educators lacked the knowledge of sustainability. Even the objectives of the teacher education program didn't incorporate sustainability nor did the teaching methodologies have this focus. The authors, therefore, felt a dire need for the incorporation of the sustainability concept in the teacher education program (Jumani & Abbasi, 2015).

In Islamabad, in September 2005, a decade of education for sustainability (DSED) was launched with the partnership of government, civil society,

donors from both bilateral and multilateral agencies and academia attended. They agreed for a need to immediately work for providing quality education in Pakistan, and focus on sustainable practices, foster innovative learning and teaching attitudes and develop a productive partnership to encourage ESD but unfortunately even after the completion of the decade of sustainability in 2014, there was no change seen in the education system of Pakistan. Acts of terrorism in educational institutions and the massacre of hundreds of children by the extremists were witnessed. Need for policy, curricular documents, teaching, and learning that foster sustainability was stressed. Change in the administrative structures of universities and more cooperation between the faculty and students of various disciplines for sustainable utilization of resources was felt. The promotion of sustainable attitudes, behaviors, and values besides content knowledge was supposed to play a vital role in the attainment of ESD (Syed & Akhter, 2018).

It is a certainty that the purpose of education must be to make individuals develop a sense of determination, inculcate intellectual independence and make them emotionally mature but unfortunately, many of the schools are not working to achieve this crucial goal of education. Though the desire to educate children for global citizenship is not novel, yet many of the schools in the world are not educating students for preparing them as global citizens (Reimers, 2020).

The present research is undertaken as teachers play a great role in preparing future leaders, the inclusion of sustainability in teacher education curricula is the need of the hour. Therefore, the curriculum of prospective teachers must have the content and the competencies related to 'global citizenship and education for sustainable development'. Keeping the growing global demand for the inclusion of GCED and ESD in the curriculum of teacher education, the researcher in the present study

attempts to assess the inclusion of knowledge, skills, and competencies required for sustainable development. Previous studies reveal that there is no such study conducted to see the inclusion of GCED and ESD in B.Ed. Honors (Elementary) curriculum as yet. However, some studies have evaluated the curriculum for the presence of ESD or GCED only. Therefore this study endeavors to find the key themes of GCED and ESD for their presence in the curriculum. And the perception of the curriculum experts regarding the issues related to the inclusion of these themes. Both the qualitative and the quantitative aspects of the study can aid in investigating the problem under study, comprehensively and suggesting a future curriculum.

2.7 Journey of Sustainability Concept

The concept of sustainability is not new as it is being pursued since the mid of the 20th century. In 1972 a conference was organized by the United Nations for providing people the basic needs like their accommodation and sustenance. This term however gained popularity after the Bruntland report.

2.7.1 The Brundtland report 1987 and Sustainability Concept:

The purpose of the world commission, Bruntland report was to get wider cooperation of different countries to attain the common goals related to social and economic development and have an understanding of the link between the individuals, resources, and progress. Moreover, it felt the need for greater cooperation for dealing with the environmental issues which the international community was facing. Many meetings were organized to discuss the issues related to controlling the population, drinking water, food, and shelter. It was felt necessary to call the experts and highly qualified scientific team and influential political leaders who could contribute and work on the multidimensional issues which are a matter of concern globally. Also, the people who make policies, decisions, and financial organizers were brought together

along with the heads of the states, and the proactive social and non-governmental people were also called so that they all could collectively work for the universe at large. Different issues of the world especially in the poor African states and the issues like nuclear and other armaments were brought under consideration. Besides this the other issues like the circular debt of poor countries, low income of the masses, rising commodity prices, aid to the poor countries were all issues that were discussed. All these issues emphasized the states to develop knowledge, skills, and attitudes and a realization to collectively think for their nations, regions, and the world. It was believed that besides protecting the environment the basic needs of the people like food, shelter, employment, and clothing were also necessary to establish peaceful societies. Later a report was published. This report focused on the apprehensions of the scientists who drew attention to the threats posed to social life throughout the world. The deteriorating state of the Ozone layer, the presence of deserted and non-fertile agricultural land, global warming, and many other such issues. It was noted with great concern that some of the industrialized nations are prospering at the cost of poor countries and their production was being carried out by polluting the neighboring countries. In this way, the poor countries are neither prospering nor rich countries having any sympathies for them. Therefore in the Bruntland report, the United Nations urged member states to focus on the environment as they felt this issue can't be dealt with in remoteness. Moreover, the issues of poverty and the growing population were also highlighted. It was felt necessary to see that the rich nations do not prosper at the cost of poor nations and there must be peace and prosperity in both the rich and poor countries. The Brundtland report, therefore, highlighted mainly scarcity, disparity, and environmental degradation so that the nations grow sustainably, economically, and ecologically. Hence the report of the World Commission covered all the above-said

issues. Besides protecting the environment the basic needs of the people like food, shelter, employment, and clothing also were supposed necessary to establish peaceful societies. Hence the report of the World Commission covered all the above-said issues (WECD, 1987).

2.7.2 Agenda 21:

In June 1992 another interstate conference was held in Brazil which intended to seek universal cooperation to work on sustainable development in the developing countries. Its program was to remove poverty, hunger, improve literacy, and dilapidation of the planet. It was of the view that when the issues of environment are addressed it can become easy to fulfill other basic needs and improve living standards of people all over the world and make it harmless and fruitful for the future inhabitants. The agenda intended people to adopt an interconnected approach between development and the environment. It was felt that national plans and policies can be helpful for the attainment of this agenda. Primarily, United Nations and secondly all international organizations, regional and local organizations were to play their role. The allocation of more funds and capacity building was stressed for its success. More attention was required to be paid to the developing countries and economies striving for change. This agenda was thought to bring many nations together for universal partnership towards sustainable development (Agenda 21, 1992, p. 3).

2.7.3 Millennium development goals and EFA objectives (2000-2015):

The main objective of the Millennium Development goals was to achieve Universal Education for all by 2015.

(i)   To provide early childhood care and literacy for every child irrespective of his status or capability.

(ii)   Focusing on the female and girls' foundational education and extending education compulsorily to all by 2015.

(iii)   Giving attention to the learning requirements of all youth and adults by providing them entry to appropriate learning and natural skills.

(iv)   Focusing at least 50% of attention on educating the adults so that they learn all through their lives.

(v)   Eradicating gender inequalities from both basic and secondary level education by 2005 so that every gender gets access to schooling at least up to matriculation.

(vi)   To ensure excellence and achieve measurable learning outcomes in literacy, numeracy, and life skills by giving quality education to all.

The member states after designing these objectives showed their determination to allocate finances to developing and underdeveloped states to achieve the above-stated goals. Periodically they followed up an implementation plan. It was noted with great admiration in the Global Education Monitoring Report 2015 that there was much progress seen in the enhancement of enrollments and funds allocation by many states. When MDGs were coming to a close the member states of the United Nations moved towards another global education agenda 2030 (UNESCO, 2015).

In the meantime in 2005, a decade of sustainable development was planned to be observed from 2005 to 2014 along with the Millennium Development Goals.

2.7.4 The decade of Education for Sustainable Development (2005-2014)

From 2005-2014 a decade of education for sustainable development stressed promoting peace, reducing global warming, decreasing the inequalities and endeavoring against poverty, striving against giving rights to girls and women,

promoting to see the world from different angles. It also wanted the global citizens to attain the skills of communicating, thinking critically and creatively, and getting problem-solving skills. For the sake of improving quality education, it was decided to encourage and support the sustainable lives of people. Develop knowledge, skills, and attitudes from primary to university level for adopting practices of sustainability. It was deeply felt that only awareness regarding education in the community and practical training can provide quality education to the citizens of the world. It was realized that "Education for Sustainable Development" is everybody's concern (DESD, 2005).

2.7.5 The SDG4 and MDGs and EFA:

The new world development agenda for sustainable development "Sustainable Development Goals (2015-2030)" was different from the Millennium Development Goals both in scope and geographical management. Goal 4 which was dedicated completely to education not only stressed the basic education of the children but it extended its scope to the higher and the tertiary as well as vocational education. It is also intended to educate the adults and stress upon educating all individuals throughout their lives. There were so many incomplete programs that were to be covered in the sustainable development goals. Providing quality education throughout their lives was its utmost priority. The MDGs focused mostly on the developing and the underdeveloped nations but the SDGs covered the complete universe. It was a global agenda meant for all nations to follow in all directions of the world. It focused its attention both at the north and the south on the out-of-school children to the children who are in the non-formal and also the informal learning mode. At all levels from primary to tertiary levels to provide equitable education and training for the youth and the adults so that all the people of the world become good members of their societies as

well as informed global citizens in this interrelated and interlinked information era (Tang, 2015).

2.7.6 Agenda for Sustainable Development &Education Agenda 2030

Sustainable development revolves around the people, planet, and prosperity. The seventeen SD goals are integrated and combined around three dimensions of society, economy, and the environment. The society also includes culture. While developing these goals people from all walks of life participated. Besides the heads and state representatives of every UN member state, the experts of all these three fields, non-governmental organizations, business people, civil society, and the people from all walks of life attended the meeting (UNESCO, 2016a). Goal 4 is related to "Quality Education" This goal has immense importance as its attainment will enable the achievement of other goals easier. This goal is also assimilated with other goals like Equality of Gender, Health and Well-Being, Economic Growth, Responsible Consumption and Production, and Climate Change. These above-mentioned goals can only be attained if the learners develop in them the knowledge, skills, behaviors, and attitudes required to live sustainable lives:

(i)   People around the world have the basic right to be educated: People around the globe have an inalienable right to be educated and all must have access to quality education without any discrimination based on physical or financial disability. No individual must be exempted or left uneducated. Education must make an individual tolerant, patient, harmonious bearing a balanced personality.

(ii)   Imparting quality education is the duty of the state: Every state must make a policy and implementation strategy to educate its citizens and also ensure that they learn throughout their lives. All members of society like the teachers, civic society members, private organizations, parents, public members, and religious

organizations all must ensure to impart education to children. The state has to make rules and norms to make things feasible.

(iii)   Education must be for all: Both men and women, boys and girls, and every member of the society must attain education. It must be inclusive. This must also include adults who are uneducated, disabled, vulnerable, and special people and all of them must keep learning all through their lives (UNESCO, 2017).

2.8 What is Global Citizenship Education?

For the accomplishment of sustainable development goals, all stakeholders are required to think that in the present century what type of education do we need to impart our learners so that they attain a broader perspective instead of adopting narrowed thinking.   Presently there are many issues like access, quality, and relevance of education to the existing needs. Development of attitudes, values, respect, and skills to be in peace with each other.   Issues related to nature like using available resources prudently responsible consumption and production etc. Under the present scenario, the imparting of global citizenship is gaining more importance as it intends to build peaceful, tolerant, and just societies where people with different religions, cultures, opinions, castes, and creeds live in peace and harmony with each other and have equal opportunities.   The concept of global thinking was first introduced by the then Secretary-General of the UN in GEFI (Global Education First Initiative) in 2012. All members agreed to this and it impelled UNESCO to include this as an educational objective. But the main drawback of this concept was that there was not much clarity about this concept. But later with the in-depth discussion on this topic in Seoul and then in Bangkok, global citizenship education was presented. The role of the Asia Pacific Center for Education and International Understanding (APCEIU) was highly significant in bringing forward this concept (UNESCO, 2013).

2.9 Concept of Global Citizen in 21st Century

A global citizen is a person who develops a sense of feeling appropriate to collective humanity beyond national borders, feeling connected on national, regional, and international fronts. Global citizens endeavor to establish a peaceful, just, and sustainable environment. The education for Global Citizenship enables learners to acquire both the cognitive and non-cognitive knowledge, skills, and behaviors to accept diverse cultures, be just with all, create a peaceful atmosphere, be mindful of the environment, and be responsible consumer and producer. The learners of global citizenship are required to develop cognitive skills, analytical thinking for the universal issues, and ponder about how people are connected and dependent on one another. They must acquire the skills of feeling about the problems of others, enable themselves to resolve conflicts, collaborate with others to work in teams, develop empathy for others and act properly for keeping balance in consumption and production and enable a conducive environment of peace (UNESCO, 2015).

Moreover, education must serve the purpose of developing unity among people from diverse cultures and societies. While educating for global citizenships the children become humble for the differences they find and instead of getting into a conflict they develop respect for the opinion of others. They become more prepared to know the events related to politics, economics, or the environment and understand their role in contributing, locally, regionally, and at the international fronts. Global education allows individuals to participate in common decisions and feel empowered. Moreover, education besides preparing the individual for work allows maintaining justice and good life in addition to economic growth. Poverty eradication and peace are the ultimate targets all strive for their achievement in the present world (Caruana, 2015).

Nonetheless, there is a need to develop a resilient state identity in the students so that they portray the positive image of their country as global citizens. If the learners lack the thoughtfulness of citizenship then they will not be able to understand what global citizenship is. Policymakers can play their role in making policies that do not contradict national and global citizenship. Also, the educationists have their role to play in making the students understand the concept of global citizenship in a more practical way, instead of just presenting it theoretically. Keeping the local context of Pakistan is necessary before designing the global citizenship programs to allow learners to appreciate the differences and similarities besides critically evaluating the values and institutional structures both at the local and the universal level. Our future generations have to develop an understanding of past occurrences, logically appreciate the unified present, and be able to plan for the future. The Pakistani learners require knowledge and approval regarding global citizenship to become successful members of local, regional, and global society (Pasha, 2015).

2.10 Education for Sustainable Development

There are different challenges faced by the world like water shortage, hunger, poverty, and extreme climatic conditions. Besides this attaining quality education has become more difficult as it is a multifaceted issue and includes the teaching strategies as well the learning material. With the threats to the planet in various forms, it now has become essential to include sustainable development and global citizenship education as an integral part of the education system and there is an agreement regarding it at the global level by all stakeholders. Integration of SDG target 4.7 is a universal indicator in every school system. When we integrate ESD in the whole of the curriculum instead of only in separate subjects the results are amazing and there is wide-scale acceptance regarding this technique of integration. The basic reason for integrating the concept

across the curriculum is the multifaceted nature of ESD. The purpose of acquiring the competencies is to fill the gap which a person acquires only through knowledge. When the acquired knowledge is applied appropriately for the solution of issues the real ability comes up. Capacities are the intellectual aptitudes and the skills a person possesses for the resolution of issues. All these capabilities are required to be acquired by the individual. It was suggested to be integrated into the curriculum some two decades ago but there is still no progress (Mochizuki, 2017).

2.11 Role of Education to attain Sustainable future:

There is a close relationship between future endeavors and education and whatever instruction is given, it is imparted keeping the impending perspective in mind. The instructional activities and the material are designed keeping in view the demands or requirements for which the world is moving ahead. The forward-looking planning is necessary which is done today for sake of tomorrow. If it is intended to make plans for sustainable futures it is necessary to focus on the democratic attitudes of the learners and give autonomy to them to make their decisions. There are influences and external pressures on education and nothing can be taken as a perfect situation. As an educational planner, it is required to decide what instruction we are going to impart to the learners so that it bears the desired fruit in the coming days. We must not assume that unpredictable futures cannot be foreseen and therefore planning is not required. It is necessary that through education we meet the needs of tomorrow as resolves can only be achieved through education. If the educationists fail to predict the future and do not carry education in that perspective the loss can be irreparable. Sustainable education assumes that the actions of people today can result in better futures but this should not lead the society to put our individuals for experimentation. Instead of focusing

theoretically, we must practically make the learner effective and the competencies we expect from the learners must be applicative (Elder, 2019).

The background of GCED and ESD goes back to the recommendations made by UNESCO to implement the 1974 endorsements regarding education for global understanding, collaboration, and peace education relating to human rights and essential freedoms (Mc Envoy, 2017).

The abbreviation GCED was initially coined by the then UN Secretary-General Ban Ki-moon, which he uttered as Global Education First Initiative (GEFI) in 2012, where he declared education as a global concern. Despite discussions on GCED and ESD, there is still a lack of clarity and understanding between the two terms, sometimes both terms seem overlapping and confusing (Chung & Park, 2016). Inclusion of these themes in the curriculum holds immense importance as it is only through curriculum the aims of education are met. The curriculum not only allows the individuals to improve their academic knowledge but also provides answers to the issues confronting society. An appropriate curriculum only can provide progress, development, and advancement for the learners (Kapur, 2018).

2.12 Definitions of Curriculum

Tanner and Tanner (1980) defined curriculum as "the planned and guided learning experiences and intended outcomes, formulated through systematic reconstruction of knowledge and experiences under the auspices of the school, for the learners' continuous and willful growth in personal social competence" (Tanner &Tanner 1995 n. p).

Hass (1987) defines curriculum as "all of the experiences that individual learners have in a program of education whose purpose is to achieve broad goals and

related specific objectives, which is planned in terms of a framework of theory and research or past and present professional practice"

Gagne, R. W. (1967 p.23) "curriculum is a sequence of content units arranged in such a way that the learning of each unit may be accomplished as a single act, provided the capabilities described by specified prior units (in the sequence) have already been mastered by the learner" (Aliyeva, 2016).

2.13 What is a Curriculum?

The curriculum is the document that ensures the provision of impartial and all-embracing education for all. It also comes to aid when the teacher is not well qualified or possesses less experience and when the physical infrastructure is not as much of and when the learners are not well equipped with prior knowledge. The curriculum is the only source that provides the skills and capabilities necessary for learning all through their life and for the complete development of a person. Any curriculum designed to attain SDG 4 must focus on the provision of lifelong education to all, it must not be for a fixed segment of people rather impartial to include all segments of the society being equally addressed and must be of good quality and ensure universal growth. The curriculum acts as a link between instruction and growth (Stabback, 2016).

The curriculum is what, why, and how of education, related to the contents to be included and the reason for their inclusion, the level of students, and the ways the content needs to be imparted (Haider, 2016).

2.14 Developing a Quality Curriculum

Whenever a curriculum is planned to be designed, first of all, the needs of the individual are assessed, then the local, national, regional, and finally the international needs are taken care of. The curricula always have to have their aims and goals.

Besides developing the balanced personality of the child the curricula must focus on peaceful co-existence, appreciation of cultural diversity, and development of different capabilities of a learner. It is always led by experts and professional of relevant field and who possesses the information, progression-oriented skills, and information skills and have knowledge about the national and international inclinations in mind. A curriculum always has to be flexible and must have room for improvement as per the developments and changes taking place at the national and global levels. The contemporary changes and the sustainability aspect must be kept in mind and it must be an updated version. Regarding how a curriculum itself must be, it is said that the curriculum to ensure its quality must have its focus towards the child, and the contents may be updated as per the current needs, properly arranged, progressive both horizontally and vertically, structured sufficiently, and interconnected with a logical base for the learners. It must consider every learner as unique and uphold the diverse learning style of the individual. The varied geographic location, social and cultural norms, the disability aspects and the ethnicity of a learner need consideration. A fair chance for balanced personality development may be ensured. The teachers may be trained to encourage the diversity of the learner and do not expect every child to learn and understand the content in the same way (Stabback, 2016).

2.14.1 Quality Curriculum expectations

Quality curriculum expects the teacher to be a facilitator and a guide. The teacher must allow the child to work individually and also be part of the team. Instead of encouraging the parroting style of the learner, the teacher must give space for a child to explore the information himself. In the present information age, developments are fast-paced and contents keep changing. To make the curriculum relevant to the current needs it must be regularly supervised, assessed, and reorganized. As was done in the

previous times it is not simply sufficient to learn, repeat and reproduce rather the learner needs to develop the skills of expressing, partnership, thinking critically, generating new ideas, identifying different ways of thinking, and being aware of how to learn. Different basic, essential, and transferable capabilities in the child need enhancement. The learners must be enabled to develop questioning skills, find solutions to the issues faced by them, and be able to analyze and synthesize and come up with the solution for the problem at hand. Instead of wholly depending upon the textbooks, the teachers may use this as only a source to transfer knowledge and keep their dependence more on the project work to be assigned to the learners so that they explore and come up with different information and therefore develop exploring and research skills in themselves. The students must be more inquisitive to learn and develop complex thinking skills. All subjects may be given due weightage and integration of subjects can be the best way to keep the learner informed. The learner must be given the utmost importance while designing the curriculum. His physical, social, intellectual, and emotional needs may be kept in mind. While developing the curriculum the learner must be seen as a citizen who has to compete not only locally but globally therefore his capacity for work, private enterprise, and management qualities may be enhanced (Stabback, 2016).

2.14.2 The focus of Quality Curriculum

A balanced curriculum must focus on a wide range of subjects, like languages, arts, Earth, and natural Sciences, life and individual skills, procedural and functional studies. The alignment of different subjects in the curriculum must be ordered and planned. They may be supplemented with textbooks, guides, and other provisional teaching-learning materials. While implementing the curriculum it is essential to keep the various stakeholders like students, teachers, the teaching-learning material, and the physical environment as well as the school authorities in mind. The client-centered

approach is very essential as the students in the present era are active constructivists of knowledge, they do not receive the knowledge as delivered to them. Therefore, the curriculum must encourage students to know the purpose of their being in school and why and how they need to learn, how to question and learn new ideas, work in groups, develop their selves and encourage their fellow beings, respect, and take along the marginalized peers. More facilities may be provided to disadvantaged groups. The teachers must keep in mind the diversified students and their learning styles and adopt methodologies that cater to different types of learners. They can be assisted with the teacher guides and other source materials for professional development. The teachers must assess the learning of their students and give them regular feedback without giving them an impression of their inability to comprehend. The learning environment plays a great role in the implementation of the curriculum and care must be taken in selecting both the physical and the emotional learning environment as both play a role in the learning of a child. The school leadership and the authorities may assist the teachers and the students in developing innovative teaching-learning practices. The leadership must ensure to provide both financial and non-financial incentives to the teachers so that they remain motivated. The curriculum can be tested as formatively and summative and revisions can be accordingly done. Flexibility in the timings as per the requirements of the curriculum also may be identified. The ultimate purpose of time allocation for a subject may be the achievement of meaningful educational outcomes (Stabback, 2016).

2.14.3 Assessment of curriculum

Evaluation is an important stage of curriculum making and is a continuous process that is usually underrated. There is no possibility of improvement unless the curriculum is evaluated, and consists of various procedures. It is not a one-time task

rather a series and the sum of the results obtained from the gathering and analysis of information regarding the curriculum in use. The foremost assignment must be, to ensure the purpose and the possibility of the evaluation. Clarity of purpose can help in evaluating objectively the specified part of the curriculum. Evaluation can be of the contents, the teaching strategies, and the competencies as a result of any curriculum. Therefore, one must focus on the inputs, processes, and outcomes of the curriculum. For the inputs one must see if the curriculum aims are clear, is meant for all types of learners, its relevance, whether it is allied internally and comprehensible, and has the potential to attain the larger general goals. When evaluation of outputs is done it is seen if on testing the learning outcomes are satisfactory both subject-wise and on the overall curriculum level. Output evaluation assists in finding out if the curriculum is assisting the teachers in their teaching or if the problem lies with the learners or the learning environment. It also helps determine if the purpose for which the curriculum was designed is being achieved and if the learners have acquired the knowledge, skills, values, and competencies for becoming active global citizens and are ready for life-long learning. Various consultations, surveys, assessments, inputs from the stakeholders can help evaluate the purpose and scope of the curriculum. The evaluation must be steady and requires funding and is properly managed. It must be carried out by experts, experienced, and well-qualified personnel. The results of the evaluation may be presented in a proficient, effective, and explicit way (Stabback, 2016).

2.15 UNESCO's Suggestion for Analysis of Curriculum

a. Understanding of the concepts of Sustainability and ESD by an expert, educators, and educational administrators.

b. Searching for sustainability in the curricula

c. After gap analysis, including the information, skills, and values related to sustainability in the curriculum

d. Assimilate the previous and new themes to make an inclusive sustainability program that can be taught in a cross-curricular manner throughout the schooling time for the learners.

e. Arrange training programs for the teachers regarding ESD programs

f. Check for the pedagogical approaches which can be applied to the teaching of ESD programs. Experts can guide for the integration of topics cross-curricular

g. For the sustainability themes to be taught for all groups, a pool of educators and administrators who are skillful to teach sustainability must formally teach in the teacher education institutions for the pre-service and the in-service teachers (UNESCO, 2012).

2.16 Content Analysis of Curriculum and Qualitative Research Method

In the process of content analysis, the qualitative aspect needs to be credible. Planning is the base of the qualitative study and there also comes the need to identify external and internal resources. The investigator also must ensure the non-interference of his or her personal bias. The main intention of content analysis is to draw meaning from the data collected. The deep or surfaced analysis also must be kept in mind. The important phases of content analysis like the de-contextualization, the re-contextualization, the categorization, and the compilation also need consideration. The researcher when intends to carry on a study has several considerations like what methods to be adopted for data collection and data analysis, how much time to be invested, and cost analysis also be kept in mind. The charting of external resources like economics, time, and potential informants must also be done. The charting of internal resources like information and capability of the study team needs to be checked. The

self-image of the investigator also plays a role to reduce the chances of bias. It is essential to comprehend both the background and the situations to avoid misinterpretation of data. Keeping of high excellence throughout the study is also required. There are various methods of analysis in qualitative research like phenomenology, hermeneutics, grounded theory, ethnography, and content analysis. Qualitative research has fewer rules to adopt and hence the philosophical concepts and discussion is fewer. The main purpose of this type of study is to attain consistency and reliability. The researcher can use the same insights as in the quantitative studies which do not seem possible with other qualitative studies. Remaining true throughout the study is essential for the achievement of authentic results. Different educational experts have defined content analysis in different ways. Bengtsson in his study states an overview of the research process which begins with the planning and continues with data collection, different stages of data analysis leading to the presentation of data. At the planning stage, there is an aim that shows the intention of the investigator as to what is the purpose for which the content is picked and what will be subjected to analysis. In the next step, the sample is taken which can be a unit, text, pictures, etc. which is to be analyzed and can fulfill the aim of the research study. Later comes the methodology of collecting data which tells how the information must be collected from the available data. In the next stage, the collected data is seen and scrutinized for its analysis and then the practical implications or approval will be sought if required. After planning the data collection can be done through written or verbal questions. Observation also can be done and then the collected data can be converted into written text. At the data analysis stage, the investigator needs to see if the analysis is manifest or latent. The manifest is a surface analysis whereby it is seen what has been said while the latent analysis has in-depth structure and the investigator here checks what is intended to be

said. It is sometimes possible that two researchers can draw two different meanings hence the researcher must maintain validity throughout the process of study. The triangulation of data can also be an appropriate method for valid results. Stage one of the data analysis does the de-contextualization whereby the meaning of the units is identified. In the next stage, re-contextualization is done. After that categorization comes and then the compilation. And after passing through all these stages the data is presented in the form of a report (Bengtsson, 2016).

2.17 Sustainable Development Goal, Target 4.7, and Teacher Preparation

The effective policies, the enriching curriculum, and the best textbooks all become futile if the teacher is not educated or trained. The global education monitoring report, and target 4.7 of SDG 4 view that curricula can be the best means to include knowledge and skills for the attainment of sustainable development. The next thing is the textbooks. Contents related to global citizenship and education for sustainable development can aid in the realization of education agenda 2030. Only textbooks cannot serve the purpose as the teachers are the people to teach the text in the class hence their training in teaching sustainable development and global citizenship is essential. Therefore, the inclusion of these topics in the curriculum of teacher education is very important as without the knowledge and skills about sustainable development the teacher cannot teach or impart the same to the learners. Once something is taught it is necessary to see how far the understanding of the concepts is gained so assessment strategies must be aligned to check for the comprehension of the topics. The main challenge for the monitoring of this target is to achieve the objective aligning the same with the local and national aspirations (UNESCO, 2016b).

On the other hand, it is argued that the role of the teacher is highly important for the attainment of SD goals. Investing in human resources brings multiple returns therefore training teachers can aid in making them updated and informed. Training for both in-service and pre-service is necessary for making them competent in their professional fields. To make a competent teaching environment it is also necessary to improve the intake capacity of teachers. Only students with competence and aptitude must be brought towards the teaching profession. Giving them incentives like an increase in salaries, boosting their morale, extending bonuses, providing them better infrastructure facilities, raising their self-image, and promoting information and communication technology and entrepreneur skills improve their performance. If teachers are posted in far-flung areas hard area funds and bonuses can compensate for their hardship. For the attainment of sustainable development goals within the stipulated period, it is necessary to induct well-qualified teachers and reorganize the existing institutions by providing them pre-service and in-service teacher training. African countries like Nigeria face several challenges in the pursuit of quality education though it is the fundamental right of every individual to attain good quality education. The donors who come forward to contribute funds for education bring with them lots of conditions. Besides this, the other challenges in the pursuit of quality education for them are the lack of knowledge, skills, and attitudes in teachers to transform society into a knowledgeable society that can shape the leaders and economy of the country. For the progress of any nation, it is necessary to have a competent teacher who possesses critical thinking, analytical thinking, and entrepreneur skills. Besides this, for the attainment of sustainable development goals, the stakeholders feel the necessity of having proper data and records so that duplication of funds for any project can be avoided. (Nnokami &Suleii, 2017).

2.18 Need for Global education in Pre-Service Teacher Education Curriculum

Global education is necessary for a person to become competent in the global economy. The inclusion of the content regarding global education in the textbooks is not enough unless the same is incorporated in the courses of pre-service teacher education. As the knowledge gained by the student teachers help them impart the same to their students in the classroom. Global education enables learners to know about cultural diversity and its appreciation, the interdependence of people and their solidarity, honoring human rights, social justice, making an environment for peace, and adopting a supportive environment. It also inculcates the sense of good neighbor relations and being ready for the dynamic environment. The authors contend that there are two views regarding global education. On the one side, it allows learners to teach subjects like math, science, technology, languages, and communication to become competitive in the global economy, and on the other side there comes a negative perception which gives an impression of the dominance of developed countries over the third world countries. Hence there is a need to change this perception and it can be done by the teacher with their analytical, professional knowledge, and personality traits. Like the school curricula, the teacher education curricula are also loaded with content courses, compulsory subjects, pedagogical subjects, technological, classroom management, and other theoretical subjects leaving little space for the subjects of global education. As per the authors, it is essential to include global education in the curricula with its subtitles as 'Civic and Citizenship Education', 'Asian studies', 'Environmental Education', 'Language Education', and 'Values Education' (Ferguson, Macqueen & Reynolds, 2012). The integration of the concepts of GCED and ESD in the curriculum is not an easy task and it can be challenging to the educationists and the curriculum

developers and hence need careful consideration. They may also require different teaching styles and the training of teachers. There are a few countries that have designed curricula based on these concepts and therefore ideas can be taken from those countries and infused in the unrevised curricula. Textbook development and the training of teachers can be accordingly done. While designing the curriculum four questions must be kept in mind like what is the purpose of the curriculum, what things are required to be infused; how to infuse those concepts, and when to implement them for the learners. According to IBE in the toolkit of the GCED curriculum, there must be seven significant modules, relating to the introduction and concept of GCED. First Module covers introduction, the second deal with the national policies, third may be relating to curricula and syllabi, the fourth module relates to teaching, learning, and assessment, the fifth relates to teaching and learning resources, sixth related to whole-school approach, and the seventh related to teacher education and professional development. The decision to keep GCED as a separate subject or to integrate with all other subjects is left to individual countries. Care is required in the professional development of teachers as they are the important stakeholders in the teaching-learning process. The integration of sustainability in different subjects work more effectively than keeping it separate and teaching it as a stand-alone subject. In the era of technology, the teacher is seen as the knowledge producer rather than the knowledge transmitter. The curricula must address SDG goals 4, 10, and 16 for imparting the societies with quality education, lessening inequalities, and developing peace and justice respectively. Ultimately whatever is planned to teach and implemented must lead to a more inclusive and peaceful society where learners are prepared to learn all their lives (IBE-UNESCO, 2018).The government of the United Kingdom made the Qualified Teacher Learning and Skills (QTLS) program compulsory with the purpose

to make changes in the teacher education program and seeing the concept of sustainability is added to it. The importance of education has always been underscored by the sustainability proponents, as for them it is only through education and grooming of teachers, the minds of the young can be transformed. The administration acknowledged sustainability to be included at the schools, colleges, and the university level. It also aimed to include the same in the teaching, learning, and administration, and management courses. The government of the United Kingdom also made efforts to encourage studies related to sustainability and identified the existing gaps regarding sustainable development education and focused upon the preeminent practices spread over the world. It was stressed to change the focus of education from post-industrialism post innovativeness to new types of knowing and consolidating information which is related to economic, social, cultural, environmental, and personal fields. The character of community, fairness and active social responsibility was much stressed. Higher education stressed the chief sustainability theories. The pedagogical practices were also identified. Such a professionalism model where the teachers can think regarding sustainability issues especially the change occurring in the climatic conditions. So a need was felt to identify the gaps related to teacher education curricula for the missing sustainability concepts so that the same could be incorporated (Ken, Summers & Harriet, 2007).

2.19 Target 4.7.1 Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) and its subthemes

Global citizenship education (GCED) and education for sustainable development (ESD) is the dream of UNESCO especially about education in the 21st century and it is the backbone of sustainable development goals and the agenda of

education 2030. Target 4.7 of the SDG4 highlights the key role of GCED and ESD for attaining sustainable development (UNESCO, 2016b).

"By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development" (UNESCO, 2016 P. 13).

2.19.1 Human Rights

As per the Universal Declaration of Human Rights (1948) every individual is free to express his thoughts and has a right to get information from any source. These international laws are also adopted by the regions and nations throughout the world. For the covenant with the international laws, the countries willingly agree to stand by these laws. The liberty to freely talk and convey the feelings of oneself has two dimensions. One is the individual and the other is the societal dimension and allows the complete development of a human being. Any person can freely adopt any culture, express oneself through speech, dance, and act in other ways. Freedom to write, receiving information without fear of barriers and boundaries is the right of all. In a democratic society, an individual has the right to elect a person of his choice and freely assemble and mutually discuss any matter of public interest. Any act which is causing hindrance to others is not allowed. Different types of rights are conferred upon people by different countries like the right to own a house/property, to be educated, and to remain healthy, while in some other countries, the right to peacefully assemble and speak is encouraged. Sometimes it is observed that the rights of the journalists and other freelancers are restricted and the right to assemble for protesting is also

constrained. This develops resentment in the people as in democratic societies basic human rights need to be protected, so that nations become strong and progressive (Howie, 2018).

Moreover, the contents which the prospective elementary teachers and the learners require to learn regarding human rights education are the topics related to civics and citizenship, values, child rights, and the right to education. Many of the curricula highlight more on the responsibilities of the youth rather than speaking about their rights. The role of education is vital in building democratic citizenship. There is a call for learning that promotes cosmopolitan citizenship, where the individuals recognize the common humanity and make connections with themselves and others. The learners must be imparted knowledge of universal values like equality, uprightness, impartiality, evenhandedness, and democracy. They must be given knowledge about manifold legacies and universal perspectives. When children know their rights they learn to respect the rights of others and develop a spirit of sharing and group work and become responsible for their actions. The right of access to quality education, equal appreciation to every child, and giving protection from all forms of violence, respect for their language, religion, and culture are the basic rights of people everywhere. So the subject of human rights can be taught as a standalone subject or it can be integrated into already existing subjects or units or it can be integrated throughout all the subjects (Burridge, Chodkiewicz, Oquro & Varnham, 2013).

There is a call for incorporating human rights in the education policies of the countries and putting this to practice from global to local levels stressing that human rights be encompassed at all levels of human activities. There is a need to build a link between education, development, and human rights. Eradication of poverty is possible only through education. Universally made pledges can also be materialized only

through education. There are several treaties and conventions which emphasize on application of global human standards. Monitoring agencies also exist to keep a check on the human rights situation globally. Several human rights issues and their dealing procedures are laid in it. Gender disparity is a much-discussed topic. But certain topics are less communicated like the rights of teachers and the rights regarding religion. Certainly, there is a need to link education and human rights. It is an acceptable reality that education aids in reducing poverty and is a means to transfer culture to the coming generations. Education is a fundamental human right therefore every citizen must have access to education, it must be free of cost, the parents may have the choice to pick whatever education they wish to provide their kids and it must be available to all without any discrimination (Tomasevski, 2004).

Despite the calls from the United Nations for the integration of human rights concepts and values in the education system, very few examples of their incorporation are witnessed, especially in their school-based policies and practices. Though it is the responsibility of the teacher to educate children about, over, and for human rights still the delivery depended upon the individuality of the teacher. Moreover, there seems lack of direction and clarity about the instructive approaches to upkeep human rights education. If we intend to impart human rights education in the schools and across the school systems it requires clarifying the teacher's responsibility to impart the same. Curricular analysis and identification of gaps in teachers' responsibilities for imparting also provide an idea of teachers' role in imparting human rights education. The role of school administration and administrative strategies is also very important in embedding human rights education in schools (Robinson, Phillips & Quennerstedt, 2020).

Studies reported so far regarding the inclusion of human rights education say that 10 percent of the increase was seen in the five years and it was noticed that reports

obtained through a questionnaire from all members of United Nations show that many of the countries have included this either in the primary level national curricula or at the secondary level and some of them are teaching it as a separate subject. In the second attempt, an effort was made to include the same concept in higher education including teacher education and at the other levels. Empirical studies showed that the topic was mostly integrated into the core curricular themes. Efforts were also made to develop an indicator framework so that every country records the implementation and the achievements made in this area (UNESCO, 2016a).

The right of rights must never be studied or seen in segregation with human rights. The group of people like the children, women, old people, indigenous and disabled people all fall under the vulnerable category. They are either weak or not self-dependent. Concerning women's rights, it is not about their vulnerability rather it is about making them empowered and self-sufficient. When we see the children of indigenous people, they are brought up in a different ethnic, topographical and socio-economic situation. Such children when they grow up have different psychological issues. Older people seem to be in a different situation. They are moving towards a reverse order and require more care, support, and nutrition. More laws have been made for women and disabled people as compared to the rights of children, old and indigenous people. Their rights are still missing and they are in a more vulnerable position. Human rights may not be seen in isolation but they may be seen with the groups of people who are vulnerable and weak (Brems, Desmet, & Vandehole, 2017).

Moreover, the people living in all continents like Africa, America, Asia, and other continents are indigenous. The people live there with certain rights and responsibilities and follow the cultures and traditions of that particular state. As per the declarations of the United Nations the rights of the indigenous people are all-inclusive as compared to

the minorities. Some of the tribal people live according to their own cultures and civilizations. Some of the people, due to subjugation or annexation hold their own communal, financial, ethnic background and governmental institutions. The other type of indigenous people is the self-identified ones. Many of the indigenous people are facing basic rights issues and they are disturbed when their land is occupied for mining or when their land is used for other purposes. They are given the right to self-governance. And they are also considered for having their say in political decisions. And due care is taken to see that no such law is made which directly or indirectly affects the indigenous people. The rights of indigenous people concerning their property, areas, and incomes are protected and recognized. They are given the right to have better health facilities, service, instruction, accommodation, and societal security. To allow the indigenous people to enjoy human rights they are given cooperative rights so that they protect their cultures. They are treated fairly and justly like other people living in that state. The purpose of guaranteeing these rights by the United Nations is to ensure that their basic rights are not snatched and they are assured of their right to self-determination. Their rights are also included in the inland lawful schemes (UNHCR, 2013).

The monitoring report 2019 has made several recommendations for the migrants and the refugees. It is ensuring to provide education to the migrants and the emigrant people. Making efforts to enroll them in their countrywide education schemes and planning to meet the educational needs of the migrant people. To keep a proper record it was proposed to enhance the capacities of teachers to teach diverse classrooms. Utilize humanitarian and development aid to educate the refugees. But there are some obstacles in educating the migrants and displaced, hence the report asks to take the following measures:

(i) The education agenda 2030 intends to involve all children to provide them quality education without any discrimination and it must be provided to all leaving no one behind. The report mainly focuses on the education of migrants and displaced individuals. It states where people migrate due to various reasons are the most vulnerable and they mostly belong to middle-income group countries. Among the migrants, 10% of the people are left uneducated and the children are almost in their teens. The moving of people from their native countries affects more on education so, the host countries must fulfill the international obligations and provide education to the refugee people living in the camps and slums. The teachers need to be trained for speaking more than one language and also provide psycho-social support to those children affected by migration. There is another possibility that people who are well educated migrate to other countries to make use of their skilled education. The children of such people add diversity to the classroom and bring both opportunities and challenges to the instructors in the classroom. Such children need proper content material to comprehend what they are being taught.

(ii) After committing to attaining sustainable development goals the host countries are making efforts to include the refugees and also the displaced persons to educate them. Canada was the first country to design curricula for various cultural people but now multicultural curricula have been adopted by many other European countries including Finland. Earlier the countries provided separate education to the refugee population that was not of good quality but now the trend is changing and many countries like Iran, Turkey, and Chad are accommodating several refugees from their neighboring countries and providing them education. Similarly, Columbia is managing to provide education to displaced children. Internal migration is also a big issue and it has displaced so many people. In China, many migrate from the villages to the cities and

try to enter unapproved schools. Similarly in India people from one state migrate to others in search of employment and for them, there is a national policy to provide residence and other facilities.

(iii)   There are several other issues concerning age-appropriate education. Sometimes the child of 15 years is not competent enough to pursue education relevant to his peer age group and in such situations, special classes are arranged for them. Sometimes the refugees do not show up with the fear to be sent back or deported and remain uneducated despite the global commitments to educate all. It is sometimes noted that the refugee children may be quite competent in their own country but they lag in the host country. Asylum-seeking people do not send their children to school.

(iv)   Many of the refugees do not turn up to the schools and among them, most of them are girl children. In Pakistan, the Afghan refugees who attend the schools are mostly boys and only half of the girls are showing up in the classes (Ferede, 2020).

When we talk about human rights regarding Islam it means that they are granted by God and no one can withdraw them as they are neither granted by the state or its assembly. No human has the right to repeal them or declare them invalid. The foundation of human rights in Islam is laid on the principles of treating everyone equally with reverence and dignity. Allah has created humans as grander to all creations. It was very long ago Islam conferred upon humans a covenant for individual rights and freedom so that all humans are free and not treated unjustly and cruelly. Both the Muslims and the non-Muslims are equal as per the laws of Islam. According to the Holy Book Quran, every individual must be honored and protected including his life and property. The right to be educated, protected socially, own property, and be safe from torture is guaranteed in Islam. Every individual has the right to live his life with dignity and honor as God has not discriminated against any person based on his color,

creed, race, or religion. There is no superiority of one human over the other. Similarly, every human was born free and he is free to adopt his own culture, religion, or belief. Holy Quran has given an individual the freedom to pick evil or good and nothing is imposed on him except he has been shown both the paths of truth and falsity. Islam obligates every individual to have respect for the right of others and also know his duties. Property rights have been conferred upon the individual but the same must be acquired by lawful means. And as per Islam social security is conferred and the people who are poor, disabled, needy, and vulnerable are compensated from the money collected through zakat. The first verse of the Quran 'Iqra' stresses the importance of reading which means educating oneself and Islam holds in high esteem for those who are educated than the ignorant. The lifelong learning concept has been given in Islam where an individual is asked to seek knowledge from cradle to grave and if one has to go to any country he must proceed with the objective to learn. Holy Quran forbids people from any physical or mental torture and has given them the right to be treated fairly and justly. Islam had dealt with the concept of human rights very expansively and has specified different roles for the fulfillment of their duties and acceptance of rights (Abroo Aman, 2016).

It is sometimes observed that adolescents of ethnic minority groups are deprived of social justice and are ill-treated with violent behaviors by the more influential rich. Social justice is ensured when the available natural resources and basic needs of the people are properly given to every member of society irrespective of discrimination on any pretext. The denial of social justice results in more physical and psychological dissatisfaction among people which leads to diseases and suffering. The injustice done to adolescents may cause misbehaviors and resentment in them leading to quarrels and conflicts at home and family stress. Violence is especially caused when people are

dissatisfied with the non-availability of resources. Besides getting mental health issues they get prone to physical abuse. Resultantly they perform poorly in schools and colleges. Usually, the institutions of poor and vulnerable societies are overcrowded and the instructional activities are suffered due to lack of staff and resources or sometimes incapable instructors. Here the youth get less motivated and with low self-esteem show poor academic performance. In such situations, it is essential to reduce discrimination and encourage justice for all. The background of such students may be investigated and they may be given support at the school, family, and community level. Mediation programs enable the youth to effectively deal with unjust situations allowing learners to effectively deal with such issues. The role of teachers, psychologists, and proctors in schools can help in the inhibition of bodily and emotional suffering among youth. Legislative coverage can also help prevent social injustice so that the youth become productive future citizens (Hage, Ring, Lantz, 2011).

Certainly, human rights flourish in democratic societies. In a democracy, the government is elected by the people and is accountable for its acts to the people. The individuals enjoy the freedom to speak and take the roles of responsible citizens, they make informed decisions and take positions, and respect the opinion of others. When the opinion of others is valid it means the democratic setup is functional and it lessens the chances for violence and war. In truly democratic societies problems and issues are resolved through dialogue and debates. The government provides identical economic, social, cultural, and political opportunities to all its citizens. It ensures that they attain sustainable development by eradicating poverty through the provision of employment to eligible citizens. It imparts education both by formal and informal means and equips the individuals with literacy and numeracy skills and the values which enable them to have respect for common morals, human rights, peace, and acceptance. A truly

democratic government makes efforts for the establishment of inclusive societies where women, children, and the vulnerable including all others are given equal rights, opportunities, and responsibilities (Chepkuto, Ombongi, &Kipsang 2014).

Similarly, as per the foundation for democracy and sustainable development, democratic value rely upon the principle of treating all people equally. They are respected for their identity and are enabled to progress and prosper with dignity. Democracy can be ensured when all people are included in the decision-making process and are given a chance to speak and participate. Transparency and accountability are essential in all affairs of the state. Democracy is thought to be strong when its civil society is free with no restrictions on its press and there is a free elected government and a proper legal system. Graham Smith who is the trustee of the foundation for democracy and sustainable development says it's not an easy task to maintain autonomy, inclusiveness, accountability, and openness. He is of the view that certain decisions are made with the people who are not involved and are affected by those decisions. For instance, the emissions of carbon are carried out without considerations of the boundaries, similarly, the economic policies have their effect both in its national and international boundaries which lead to inequalities among both the producers and the consumers. Lack of trust in political leaders and low voter turnout all requires the masses to be educated about democracy so that a purposeful, participatory, and unmediated democratic organization is formed. For democracy to flourish citizens must be kept engaged, there must be awareness among the citizens regarding policy decisions and civil societies (Westall, 2015).

While the attainment of sustainable goals does require efforts not only at a global level rather it is also necessary to take steps at the local level appropriately. Cities can play a major role in the attainment of SDGs. Local governments require

financial, political, and institutional empowerment and the partnership to work with other regional stakeholders. The advantage of decentralization of governance is, it enables us to have more resource development capacity, executive authority, and monitoring mechanism. When local governments are given the responsibility of health, education, transportation, water, and sanitation, many of the necessities are fulfilled and more inclusive representation is witnessed. With proper revenue collection and resource distribution, the local and regional authorities get empowered. To attain sustainable development goals the local governments, need to have adequate information about legislative and financial, and administrative powers. They may be able to assess their performance as per the given indicators. Partnership and collaboration with higher levels and neighboring local governments increase greater liberty and accountability. The rural-urban divide can be reduced by metropolitan governance. The benefit of single and multi-projects benefits both smaller and larger cities and towns. The other way for the achievement of SDGs is through integrated local governance where social, economic, and environmental authorities work together for the greater goals. To attain the above objectives, the citizens need to be trained and educated regarding democracy and sustainable development (SDSN, 2016).

2.19.2 Education for Sustainable Development (ESD)

Education of Ecology can better be imparted by thinking and experiencing rather than theoretically learning about the concepts and definitions. When learner gets capable to question the variation of creatures in different places and times, their understanding improves. The practical experience of a child contributes to lasting impressions. It is also essential for the teacher teaching ecology to be updated and explain students from the current examples rather than preferring to pick old instances. For example, when the topic of recycling is taught, the learners always understand

recycling is possible only with used bottles, tins, and carry bags. They can also be taught about the decay caused due to organic matter and the role of bacteria, fungi, and saprozoic in such decays. It is important to develop ecological thinking in the child which directs the individual to ponder about various possibilities. Instead of encouraging students to cram about the meaning of ecology, it is essential to focus learners to observe, think, reflect, experience, and come to conclusions. The instructors who educate learners regarding the environment or ecology have to be well versed and keep themselves updated with the current knowledge and instances. (Slingsby, 2011).

Additionally, education is the means through which the present and the coming generations can attain the knowledge, skills, and values for a sustainable society. Education is an interdisciplinary theme and is necessary for the attainment of every sustainable development goal. Education for sustainable development is for the transformation of society. It reaches every phase of education beginning from the policy, planning, implementation to change in curricula for the inclusion of sustainability, and the change in teaching-learning styles, assessment, administration, and financial allocation. It connects society through education and training for sustainable futures. The focus areas of ESD are improving access and upkeep of prominence in elementary education, redirecting the current educational programs to address sustainability, enhancing community awareness regarding sustainability, and giving hands-on learning to all the stakeholders. The quality of education can be improved when both genders are given equity in attaining the knowledge skills and values for adopting sustainable lifestyles. The plans, policies, and curricula need revision to include sustainability content as the future learners require knowledge, skills, and capabilities to tackle the challenges and threats of the future. Sustainability cannot be attained only when it is taught to the students. Its results can be widespread

if it is communicated and adopted by the community at large. Therefore, both at informal and non-formal levels there is a need to make the community aware. On an informal level, the media can play a great role in bringing awareness to the community. All members of society need to be trained to adopt sustainable lifestyles. Education, wherever it is taught, must base on the five pillars. For example: learning to identify, learning to organize, learning to be aware and be together, and learning to be situated, and finally, the fifth one is learning to change oneself and humanity. The present education system is mostly focusing on learning to know and little attention is being paid to learning to do and other pillars of learning. For a sustainable tomorrow, one needs to know his or her values, the values of the community, and the values of the globe and they also need to appreciate the values and cultures of others. The curriculum is the source that engrains knowledge, skills, and values for sustainable development. Earlier it was the monetary benefits the countries watched at the cost of social and environmental degradation. The countries developed individually without caring for their neighboring countries which increased pollution of the adjacent country. But today there is a shift. The industries are stressed to go green and adopt sustainable measures to safeguard the interest of their employees as well as take care of the countries living around. It is therefore essential to see the undeclared and the clear values covered in the curriculum to address sustainability (UNESCO, 2012).

Education for sustainable development enables student teachers to develop in them the love for their discipline which grooms both their professional and personal lives. They comprehend the concept of ecological care concerning their discipline. They can think about the issues of social justice, ethics, and well-being keeping connections between, society, the economy, and the environment. It will enable them to propose an

innovative approach to know the consequences and the consequences of their acts and ways they can follow to live sustainable lives (Longhurst, 2014).

On the other hand for effective implementation of sustainable development goals, it is necessary to see how teachers perceive sustainability. Education for sustainable development demands learners to gain competencies related to problem-solving, communication, critical thinking, and possessing positive attitudes towards the issues related to the environment. In such a situation it becomes necessary to integrate the theoretical base with the practical aspects in the curriculum of teachers. In the majority of cases, ESD is not necessarily linked to the environment or nature. It has all three aspects of society, culture, economy, and ecology. The concept of ESD can be more improved if it covers the theoretical, pedagogical, and environmental bases. Besides this, it must also be embedded in the assessment strategies. It is also necessary to embed the competencies like critical thinking, problem-solving, group work, conflict management, and emotional management throughout the subjects. Future forecasting concepts may also be integrated into the curricula so that the trainee teachers can link the social, economic, and environments besides having the knowledge, skills, and attitudes of the same. Better results are produced when the studies are carried out for hands-on learning and gaining knowledge about sustainability instead of simply examining trainee teachers for possessing positive attitudes towards sustainability. Whenever the curriculum is made it must be ensured that the competencies required for the 21st century are integrated so that the trainee teacher attain the needed skills (Cebrian & Junyent, 2015).

However, there is an understanding at the global level that universities must embed sustainability in the curriculum and it is not a difficult job if the methodology and enough resources are provided. Highlighting the importance of sustainability in the

academic program four undergraduate courses were studied to investigate the coverage of sustainability in the program level mapping. The disciplines included in the study were Bachelor of Media, Human Sciences, Mechanical Engineering, and Business Administration. The study was carried out as per Macquarie University Sustainable Framework. The purpose of choosing these programs was that they are thought of as programs that do not have sustainability. But on mapping, it was found that there is maximum coverage of sustainability in the programs. The study concluded that the approach used for identifying barriers related to a lack of understanding of sustainability was very helpful to the investigators of the study (Denby & Richards 2016).

Largely, for a sustainable society, energy is an inevitable prerequisite. There is a demand for renewable energy resources in every country around the world. More use of fossil fuels causes pollution in the environment and also they are not sufficiently available. There is always an issue of demand and supply when the traditional energy resource is used. Continually a request is made for an inexhaustible supply of energy because it is cheaper, consistent, and harmless for the environment. Pakistan tremendously depends upon thermal energy and due to this, there is a huge shortage of electricity especially in the rural areas of Pakistan. In such a situation it is necessary to use renewable energy. Due to a shortage in the supply for the demand of electricity, we have hours of load shedding and scarcity of electricity supply to industries due to which the trade activities are suffering. Even the offices due to energy shortage are working five days a week. The rise in oil prices in the international market impact the local population in the form of price rises in commodities. In the world around the developed and the developing countries though depends on fossil-fuel for energy, also are making use of renewable resources for producing energy. In Pakistan, we have a

bright shiny day especially in summers and to an extent even in other seasons of the year. So, solar energy can be used as a renewable source. Solar energy can electrify so many villages in Pakistan. The electricity can be used for pumping water in the fields, heating water for domestic purposes, and street lights. Wind energy can also be an alternative source and this can also be a source of electricity for some villages where these wind resources are tapped. Water resources can be used in places like Punjab and Khyber Pakhtunkhwa and presently they are providing electricity to cottage industries as well as electricity is being used for domestic purposes. Pakistan being an agricultural state can use biomass to produce energy. Besides the above, there is also biogas, tidal, or wave energy which can also be helpful. There is a growing realization in the countries around the globe that self-dependency can be attained only when countries find out alternative energy resources. Sustainable development is also focusing more on the use of renewable energy therefore it is the need of the hour that we investigate more on the possibilities for such resources. There is an abundant possibility in Pakistan to harness renewable energy. Nearly about half of rural areas in Pakistan are without electricity. This can be compensated by making use of such alternate resources. We in Pakistan also have to understand that there cannot be self-dependence and economic independence unless our country is sufficiently equipped with energy resources and more reliance is required on renewable energy rather than the non-renewable energy source (Raza, 2015).

Another aspect of educating learners for sustainability is climate. When we talk about the climate we come to an understanding that it is customary weather which is due to the existing considerable heat, rainfall, and the airstream at a certain place in a similar fashion for a long period. It is noted with concern that in the previous century normally the temperature rose at a rate of plus 0.76 degrees. The main gases responsible

for polluting the air are carbon dioxide, methane, and nitrous oxide which are temperature-duping greenhouse gases. Due to climate change, we can see that the glaciers are melting and there are also dangerous weather conditions. There is no rainfall causing droughts, and in some places, there is huge rainfall. There are stormy conditions, cyclones, and floods. These unusual weather conditions cause ill effects not only on human beings but also cause damage to soil and agricultural lands. Experts believe that certain activities of human beings affect the climatic conditions and it is witnessed that plants and animals suffer causing a shortage of food production. Harmful diseases are also caused due to extreme weather conditions. The melting of glaciers and the flood conditions affect the people living in coastal areas cause damage to their cattle and their residences. The results of climate change are so cyclic that it results in major issues like poverty, hunger, disease, and gender indifferences which make a huge impact on the growth and progress of any country. The change in the climatic conditions has changed the cycle of water resulting in more rainfall in some places and very little or no rainfall in other places. In some places, it is noticed that lack of water and rainfall is lessening the electricity generation and shortage of drinking water. Even water for domestic use has become lesser and in a few places, people have to travel a very long distance to fetch a few gallons of water. In a few areas, the water table is so low that people have to go deep to dig out water. The poisonous gases are making the oceans more acidic. These acidic oceans cause threats to life in water and the seafood is lost due to polluted water. Marine lives are put in danger due to contaminated water. Taking note of climate change the policymakers can take certain steps which can create suitable living conditions for people, provide those jobs with decency and give equal opportunity for every human to get educated, have sufficient food and shelter, and protect the people who are weak and vulnerable, guarantee them least health facilities

and educate them to be responsible consumers. The plantation drive can bring many positive results for the improvement in climatic conditions in the long run. Countries, where there are extreme climatic conditions, suffer from famine and scarcity of food. Hence there is a need to educate the masses regarding the cyclic effect that adverse climatic conditions can have on human lives (UNESCO-PNUD, 2011).

First of all, to know what climate is, we can define this as the regular meteorological conditions at a particular place. It is also the situation regarding the rainfall, the rise, and fall in temperatures and winds over some time. Any change in these conditions during a certain period or on a long-term basis is called climate change. Change in the climate can be possible due to various factors like the changes in the earth's revolution, volcanic crater movement, and the burning heat caused by the Sun. The main cause of climate change is the actions people take. Fuel is the need of all to run the factories and industries and for the vehicles to move and for domestic purposes. Sometimes the coal and other fuel are used to produce electricity and we cut forests in search of wood for construction and the land for urbanization. The smoke coming out of the industries, the bombing, and shelling during conflicts, all cause the 'greenhouse' effect. All these moves cause global warming and resultantly change the patterns of climate, affecting the rainfall, causing storms and floods. Climate change is a wider term that can cause more harm to humans. When we keep ignoring to remedy climate change it becomes huge and irreparable. Sometimes the developed industrial countries at the cost of poor neighboring countries carry on massive production activities leading to social injustice. Though humans are good at detecting smaller period's climate change but can't detect long-term changes. Under the auspices of the United Nations, an international committee to assess climate change and release the assessment reports every five years was formed. The reports are very much authenticated and they are

helping in knowing the prevailing climatic conditions of the globe. Experts assess global warming causes due to the melting of glaciers, the rising of seawater, and the growing greenhouse effects which are becoming matters of concern. Still, there seems no such action taken by the states to address these growing concerns. Few growing economies are also contributing much to climate change. Some developed countries produce more greenhouse per person emissions and still do not show the willingness to reconsider their actions. But there is a concern being raised by some non-political organizations, some alarmed individuals, and other broadminded business organizations. Therefore in the larger public interest, it is essential to change our everyday practices at our homes and in the working places to make responsible production and consumption and consider the concerns of international assessment reports to address climate change for a better future (UCS, 2016).

On the other hand in the mid of the 20th century the discussion to educate learners about the environment started and then it was mainly concerned with air and water contamination. The increasing population is causing harm to nature and its resources. Initially, the purpose of teaching about the atmosphere was to give knowledge, skills, and values to the learners regarding the environment they live in. The curriculum was also focusing on imparting understanding about the economic, civil, technical, cultural-historic, ethical, and artistic aspects which today have been summed up as monetary, societal, and environmental domains on which the SDGs are presently focusing. Since the 1970s United Nations and its specialized agencies are continually focusing on the environment. The main concern about environmental education is its diverse nature which can't be appropriate to adjust in any particular subject. It has a multidisciplinary nature and has been often ignored to be taught. In the late 1980 and 1990s, environmental education became more practiced and later got

changed to a "green" process and was meant to develop a sense of belonging in the learner for the environment and got broad-based. The individuals here get involved in groups, in identifying the issues and concerns related to the environment and critically analyze their social aspects and find ways for its solution. Gradually greater acceptance began and the teachers initiated teaching from the classroom and then moved to outdoors for collecting information and in this way learning 'about' environment, 'in', 'for' and 'with' the environment became possible. There has always been an emphasis that environmental education needs attention and be included in the curriculum and education 'for' environment must be made possible (Gough & Gough, 2010). Initially, the empirical studies carried out on environmental education were mostly based on a quantitative approach but presently it has taken a shift from positivist, critical, post culturist to the interpretive qualitative approach. A big move which was seen from the 'Environmental Education' to 'Education for Sustainable Development' in (2005-2014) and now in (2015-2030) is a great progression but its practical application can be possible only when there are a clear understanding and consensus upon its implementation. (Gough, 2016).

Presently we see many other different challenges faced by the world like water shortage, hunger, poverty, and extreme climatic conditions. Besides this attaining quality education has become more difficult as it is a multifaceted issue and includes the teaching strategies as well the learning material. With the threats to the planet in various forms, it now has become essential to include sustainable development and global citizenship education to be made an integral part of the education system and there is an agreement regarding it at the global level by all stakeholders. Integration of SDG target 4.7 is a universal indicator in various components of the school system. When we integrate ESD in the whole of the curriculum instead of only as separate

subjects the results are amazing and there is wide-scale acceptance regarding this technique of integration. The basic purpose of integrating the concept across the curriculum is the multifaceted nature of ESD. The purpose of acquiring the competencies is to fill the gap which a person acquires only through knowledge. When the acquired knowledge is applied appropriately for the solution of issues the real ability comes up. Capacities are the intellectual capabilities and the skills a person possesses for the resolution of issues. All these capabilities are required to be acquired by the individual (Mochizuki, 2017).

Moreover, the actions of the people affect more or less the other people and the environment we live in. Change in the system begins when there is a demand for that change from the public. The policymakers then attempt to bring change in teacher education. Ecological consideration is as important as other topics. It must be taken as a process where both the learners and the instructors question themselves for the way they think and act regarding their ecological concerns. Reflection in both teaching and learning is equally important to understand the environmental issues as this enables us to personally practice what is taught and learned. To conserve and preserve the environment, an individual needs to think, understand reflect, and then act, and such education lasts long and becomes productive (Wright, 2017).

UNESCO considers education as a fundamental human right and has been playing its leading role as a principal agency for the promotion of education. It presumes that education is the only guarantee for the ultimate peace in the globe. Therefore, it is collaborating with the world nations to attain the Education Agenda 2030. Goal 4 especially relates to education and major partners are working in several countries from Africa, Arabia, Europe, Asia, and Pacific, American to the Caribbean states under GAP (Global Action Program) on Education for Sustainable Development

(ESD). The purpose of this initiative is to save the planet earth from unsustainable usage of the available resources so that the coming generations do not suffer. Before the announcement of the sustainable development goals SDG-2030, a decade from 2004 to 2014 was dedicated to education for sustainability which gradually led to Education Agenda 2030. UNESCO is specifically focusing on Goal 4 with special emphasis on target 4.7., which is directed towards including the themes of sustainability from policy to practice beginning with the key policy documents to the classroom practices on ESD. In a report issued for the achievement of targets from 2015 up to 2019, it was witnessed that as compared to the set aim of 40% there was surprisingly more than targeted success in the five areas like policy, schools, teachers, youth, and community. Two indicators were set for each target and it was witnessed that in policy reforms above four hundred important policy documents incorporated the 'Education for sustainable development program while more than seven hundred programs committed to putting the policies into action. In the area of schools and learners, it was reported that about seventy-three thousand schools and more than 2.4 million learners were helped to adopt the ESD practices. Similarly, 1.5 million teacher educators and about fifteen thousand teacher training institutes adopted the ESD program and practices, In Youth empowerment, about 1.7 million youth leaders were trained, and 0.6 million youth leaders were trained. In community and civil society more than eleven hundred community networks were trained to adopt sustainability practices and 745 local activities and programmers were capacitated to include sustainable activities in their daily lives. Compared to the set target, all areas achieved more than sixty percent of success while the training of youth leaders was 37%. Overall the achievements were much higher than the expectations. The key partners of the global action program intend to keep monitoring the qualitative and the quantitative aspects of the ESD with

an effort to maximize the capacity of five prioritized action areas identified by the 'Global Action Program' and recognize the good work done in every corner of the world by awarding to every big achievement. It also intends to hold seminars, meetings, consultations, and symposiums for the planning of the future which will go beyond 2019. Japan is coordinating with UNESCO in acknowledging good practices undertaken in any part of the world (UNESCO, 2017)

Furthermore, education for sustainable societies emphasizes social cohesion. The term social cohesion is usually assumed as mixing up with the people in the society to keep unity and steadiness. When the real meaning of social cohesion has dwelled it is noticed that it includes having an empathetic attitude towards others, showing respect to fellow humans, and embracing people of different cultures and backgrounds. In other descriptions, it has emphasized to have even opportunities concerning the rights and be the proponents of peace. The cohesiveness in society is enhanced when people are treated likewise and with reverence. In recent times the term social cohesion has come up with the understanding that the weak people will be given such incentives which will enable them to contribute towards the hale and hearty societies. There is a perception prevailing that the differences in the income and the divide between the have and have not, can create a rift and affect social cohesion. The purpose of highlighting social cohesion is despite the social, economic, cultural, and religious differences it is necessary to keep people united to maintain peaceful societies. Education can play a greater role in social cohesion. When students are taught to respect and regard the opinion of others cohesive societies can come forward and live together in peace. The author gives various explanations of social cohesion as the social and the cultural collective norms, a shared order, public harmony, communal investment, and

attachment. In the current scenario, social cohesion is taken as a multifaceted event and has various indicators (Mekoa &Busari, 2018).

2.19.3 Peace and Non-violence

Peace is an essential component of life. Every human desires peace because all human beings are in a state of equilibrium when they are in peace. The atmosphere of peace is sometimes lost due to quarrels arising out of misunderstandings, intentional fighting, and devolved interests. In the atmosphere of nonviolence, both parties abstain from using physical force. To avoid quarrels requires a lot of courage. Peace can be attained when people have their necessities like food, water, shelter, and clothing. People must be more tolerant and thankful for the blessings of God. Education develops democratic attitudes in people, and they accept other people without indifference. Cultural diversity is adopted by them and they embrace people belonging to different castes, creeds, and races. Peace can be found when people find the actual cause of the dispute and try to resolve it. People need to stop suppositions and eliminate all sorts of mistrust and misunderstandings. Disputes may be resolved by talks and dialogues. Main causes of the issues when addressed establish peace. For addressing any violent situation three types of responses are essential like reconciliation, pacification, and peace-making. When students are taught how to co-exist peacefully, they will become creative to develop critical thinking and problem-solving skills. When people avoid conflicts and embrace acts of human dignity violent acts get reduced and long-lasting peace is established. UNESCO in its preamble recognizes the education for peace and stresses upon individuals to acquire knowledge skills, and attitudes required to keep a peaceful environment. When the people of the world get aware of the issues facing the globe and focus on the resolution of those disputes culture of peace evolves. Children everywhere are very special. All nations of the world agreed upon child rights in United

Nations in 1998. The conventions on child rights stress upon educating a child to develop his understanding of tolerance, peace, equality, and having acquaintance among people. It is direly required that the teaching process and the teaching content both must be educating the child for peaceful coexistence, keeping justice in society, and having respect for the rights of a fellow being. The teacher must inculcate critical thinking skills, problem-solving, and conflict solving skills so that the learner gets capable to resolve conflicts and disputes instead of flaming them to violence and hatred. Their behaviors with the family, friends, and society must be developed to keep harmony and tranquility. Education must make an individual adjust to the environment. A sense of empathy and emotional control can help individuals to keep the peace. The eventual aim of every individual must be to live peacefully and eliminate anger, hatred, jealousy, pride, and greed. Learners may be given the knowledge and skills to adopt peaceful behaviors so that violent conduct does not affect them, and they can handle such actions. There is a need for every member of the society to develop and adopt peaceful behaviors and these individuals form the units of a society. The role of a teacher in establishing a peaceful atmosphere and nonviolent behaviors is very significant. As educators, every instructor has the role to develop peaceful behaviors and thinking in children. A culture of peace must be established with the collective efforts of the family, friends, fellow citizens, organizations, and all other people of the world. During the initial ages especially in the teens, the youth must be taught how to work cooperatively for the benefit of oneself and society at large. Competitive environment, aggressiveness, and superiority always lead to conflicts and sometimes violent conflicts. Hence the assessment activities in education must not lead to comparing one person with the other competitively rather group tasks may be encouraged and cooperation instead of competition must be preferred. Careful

selection of the contents must be done while teaching the teacher educators. Any negligence in imparting peaceful education can lead to huge losses. Care must be taken in including the objective of peace and non-violence in the contents and the process, being taught to the student teachers so that the same can be transferred positively to the coming generations (Tondon, 2014).

Peace is established when a person is in peace with himself, others, and the environment. Learners in the school must gain knowledge, develop skills, and get the attitudes required to live in harmony. Peace education must contribute to changing the way people think. In the present scenario, various issues are confronting the people, like the massive presence of destructive weapons, the gross violation of human rights, the divide between the rich and the poor countries, and the dilapidation of the atmosphere. Peace education must include respect for fellow human beings and their cultures, promoting tolerance, and enhancing the thinking skills required to solve the issues peacefully and amicably. Learners must be encouraged for having empathy with others and must develop an understanding to appreciate the versatility of cultures, their languages, and their living styles. The relevant governments must take care of the fulfillment of the basic rights of people like pure drinking water, sanitation, and health care. Steps may be taken to provide employment to the eligible or find ways to utilize their talents fruitfully. The authors argued that peace is linked to settling various issues by educating learners for economic development, political development, socio-cultural development, respect for human rights, making them aware of the role of religious institutions in resolving conflicts, and the role of education in fostering democratic values and equality of all. Economic steadiness enables individuals to live in peace. When governments provide opportunities for learners to get skilled education, and when the industry demands are linked with the people getting those skills, the

opportunities for jobs are created and when steps are taken for employment locally and abroad economic stability originates. Education plays a vital role in the imparting of knowledge and skills required for the different types of professional and skillful personnel to find ample job opportunities thus it leads towards the eradication of poverty. Educated people elect and choose their governments carefully as political stability can bring peace and tranquility to the nation. Prudent politicians ensure human rights for their people and establish the rule of law. Education enhances the understanding of learners from various cultures. It engrains tolerance and peaceful ways of conflict resolution. Societies that stand for the respect of fellow human beings always prosper and remain in peace. In the present world of information and communication media can play a very effective role in the propagation of peace and non-violence. Religious institutions like churches, mosques, and temples can play their role in propagating the message of peace and tolerance. The schools and the curriculums can play a vital role in inculcating the attitudes of peace and tranquility in children. Through role-play, conflict resolution can be taught. The learners can be told to respect others' opinions and diversity of views may be accepted, and ways may be found to settle disputes or conflicts through negotiation. Children when taught to be responsible citizens and develop a tolerance for other cultures and religions, grow up fostering peaceful human relations. The future of coming generations can be secured when the governments focus on fulfilling the social, political, and economic needs of the people. When the issues of basic needs are established and the root causes of violence are settled, peace can be attained. Instead of spending huge amounts on acquiring mass destructive weapons, the money can be spent on educational organizations that teach peace and tolerance to learners. Quality education can be attained when the individuals have imparted the values, attitudes, and behavior for

personal development, betterment in their quality of life, and vigorous participation in society. When basic education is provided to the citizens, they get enabled to pursue higher education and develop the required thinking skills and get eligible to understand the value of peace and the place of fellow human beings and the empathy towards them. Then tolerance, respect for different cultures, languages, and religions are established. When individuals feel the responsibility of keeping their inner peace and ensuring the peace of others, a society emanates which witnesses progress and prosperity. The benefits of peace are not only for the present, but its fruits are everlasting. There is always a possibility of conflict when different people think differently but when everyone's opinion is respected violence does not erupt. Conflicts are resolved and peace is established (Chepkuto, Ombongi, &Kipsang, 2014).

The purpose of education is to develop such learners who possess multiple language skills, technical and technological skills as well as be prepared to learn wherever possible. They remain relevant to the community, they stay competitive enough to work in partnership. They know about the four pillars of learning. Saying is easier than implementing such strategies to produce the ideal learners as we desire. The individuals are required not only to possess the knowledge base but the skills and the competencies along with the dispositions. The learners of today are required to get educated for international understanding as well as for educating themselves for sustainable development and peace. They are also required to adopt the culture of peace and have knowledge about international citizenship education (Avery, 2017).

On the other hand, it is argued that the textbooks and curriculum both play an important role in inculcating peaceful attitudes in young learners. In Pakistan, civic education and social studies are taught from grade 1 to 8, and Pakistan studies are taught from grade 9th to 14 as a compulsory subject and it is intended to make future learners

aware of the historical background of our country. Civic education develops morals, bravery, and respect for other people and societies. The real purpose of this course must be to develop individuals who attain conflict resolution ability and reflective minds to maintain peace in both their local as well as regional surroundings. Pakistan is successfully attempting to fight against terrorism. Poverty and illiteracy are the main challenges facing Pakistan which requires measures for their readdress. Peace education can change the mindsets of the people towards being more tolerant, satisfactory, and patient. The course of peace education must be grounded on the philosophy of teaching love, compassion, confidence, impartiality, teamwork, and respect for humankind and lead towards peaceful living. There must be an earnest commitment in the institutions and the teachers to keep the learners involved in their learning process and instill in them social, ethical, and moral values, so that contentment is seen in every member of the society. For this purpose, our curriculum needs to be reviewed and the textbooks must address the conflict and violent behaviors and include more content related to tolerance, patience, and peace (Hina, Khalique, Nudrat &Kashmeeri, 2018).

Peace starts from the premises of schools and teachers have a great responsibility in promoting the culture of peace in the school environment. As promoting peace requires relevant knowledge and competencies for resolving conflicts, it must be included in the teacher education curriculum. Besides the inclusion of peace in the teacher education program it must be holistically adopted by all stakeholders of the school. When a study on the integration of peace education in the Pre-Service teacher education program was carried, and the opinions of teacher educators and trainee teachers were taken concerning peace, it found that there are various ways to impart peace education and the teacher educators expressed their views that inclusion

of peace can make the student teachers get aware of themselves and aware of the rights of fellow human beings and lead to a just society. A need was felt to assign enough funds to prepare a planned peace education program through which the trainee teachers can be imparted knowledge, skills, and values regarding peace so that they impart the same to the coming generations, leading to peaceful societies (Amin, Jumani & Malik, 2019).

While some scholars agree that, the main hurdle in the establishment of peace is religious extremism. Some think they even have political links. They also get funding for various purposes. The policy documents condemn all sorts of extremism and social injustice terming it as a threat to peaceful living in the country, still, extremism exists. Instead of directly including the objective of peace it will be more useful if social consistency, cultural coherence, sense of unity, fraternity, and accord in society be included. This can lead to peace. Teachers most of the time lack teaching strategies which promote a peaceful classroom environment. Their methods of assessment are also incompatible with the advancement of peaceful attitudes in learners. Peaceful attitudes in learners cannot be directly measured but can be observed in their behaviors with fellow students. Peace can be stimulated in the learners with properly defined learning objectives, curricular content, and teaching and assessment strategies. Contents of peace in the subjects like Pakistan studies, English, Urdu, and Islamic education can foster peace but practical approaches and implementation are more important. Training can play a role major role. Instead of just focusing on rote memorization for examinations teachers must act as role models for peace. Peace can be promoted only when there is national harmony and a single education system in the country. Patience, tolerance, treating all humans equally and with honesty can develop

peace in society. Moreover, there can be social, economic, and scientific development if peace prevails (Khan, Khurram, & Tahir, 2020).

2.19.4 Gender Equality

Awareness about gender equality enables girls and women to know what type of gender inequalities exist and how they can be tackled. For a long, it has been thought that gender equality prevents violence. Several ways can be adopted to promote awareness regarding gender equality. School-based interventions, community interventions, and media interventions promote gender equality. Studies have proved that early interventions at the school level enabled teenagers to have safe healthy relations. In developed countries like the United States and Canada, the inclusion of Gender Equality in the curriculum and the organization of poster competitions, films, theatre enactments enabled youth to have less physical, psychological, and sexual abuse compared to those who were not given such training or awareness. It enabled the youth to have a healthy non-abusive relationship. Interventions done to the students of class 9th to 12th for managing conflicts helped them have a safe social relationship and allowed them to increase their knowledge regarding violence against women and assisted them to speak against such violence. Similarly, other campaigns like an end to gender violence, get united to end the violence against women, say no to violence against women, and stop violence against women enabled to build awareness in the masses. Inclusion of male and female, boys and girls members is essential for the success of gender-based issues and still, there is a need for more research on the above topics since school interventions are more suitable for enabling awareness in both genders as they can be effective before they get deeply entrenched as they progress in life (World Health Organization, 2005).

When addressing the gender issue it is not sufficient to simply examine the access given but it is necessary to be vigilant about the treatment boys and girls are given in the passive speaking texts and curriculum. To address the issue of gender parity the role of the teacher and the text are very crucial. The images and the story given in the text greatly influence the reader and make an impact on the mind. Being an Islamic state Pakistan's culture and literature both are depicted in the light of the Quran and Islam and sometimes the notion of gender equality pronounced by the western nations seems threatening. Durrani (2008) carried a study on the curricula of Urdu, Social Studies, and English. She studied these textbooks as well as carried out interviews with the teachers and also took open written and oral responses regarding the perception of children towards gender. She contends that the curriculum of Urdu accepts the role played by teachers in the socialization of the learners and tells the learners regarding the behaviors required for modifying the behaviors of the learners. It expects all instructors to be followers of Islam and their conduct must be to shower love for Islam and the country Pakistan and the morals of our culture. Similarly, she says that the curricula of social studies refer to every person Muslim who believes in one God and the Quran and followed the teachings of our beloved prophet (PBUH). The curriculum of social studies expresses the love for their identity and the love for God and Islam. Similar expressions were also noticed by her in the drawings of the learners who depicted Allah and the descriptions related to Allah. The textbook she analyzed seemed to be mostly represent the male gender as compared to the female. While comparing the gender of authors of these textbooks it was noticed that most of them were male and only a few of them were females. During the analysis of the text, it was felt that the role of females was less emphasized as compared to males. The boys too skipped mentioning girls even in the images they drew. Even the girls when

drawing the pictures of the flag handed the flags to the boys instead of carrying themselves. The images as per the perception of the learners showed that there is a strong relation of men even towards the defense of the country as it is the brave men who stand high to protect their nation. The author ultimately found that the women according to the perception of the male, were supposed to be in the roles of caretakers and homemakers. The textbooks also depicted and highlighted mainly the roles of men and ignore the role females play in every sphere of life. Ultimately the author concluded that the curricula must be designed carefully to include the role of both male and female and as the teachers being the implementers may also be asked to carefully make up the missing components of curricula and periodically they may be given continuous professional development training (Durrani, 2008 pp. 595-610).

The reason why importance is given to gender equality is, according to the report of the United Nations half of the world population comprises girls and women, and if they are included and made equitable to men then half the potential can be realized, and if they are left behind half of the potential is lost. Still, gender disparity is persisting in several parts of the world. According to the figures quoted in 2014 among all the world nations, only 143 have included gender equality in their constitutions while 52 other countries have not included it. In some other places, women face malnutrition and improper health care which results in high mortality rates. Girl child marriages are still common in many places and millions of girls still get married before the age of 18 years. In many African and other developing countries, girls still do not get equal opportunities for education at the basic and secondary levels. Unless women are educated and are included in the economic fields there cannot be growth and prosperity. Women's empowerment enables the economic growth rate to go high. There are several issues faced by women like physical or sexual harassment

and many of them in African and Middle Eastern countries experience female genital mutilations which results in extreme blood loss and infertility as well as dangerous infections like HIV and death. The reason we need to work for gender equality is, it is the fundamental right of every individual to have similar access to health, comforts, and authority. Women need more protection of such rights so that poverty is reduced and society is improved. The investment made in educating the girl child and prolonging the marriage age to 18years can bring large benefits in return. Every government and member of society can put his or her contribution to empowering girls and women. Communities can prosper if the girls are encouraged to go to school, complete their primary, secondary and tertiary education, be allowed to work on equal footing with men, give them protection at home and workplace and provide them health and nutritional facilities (Un.Org, 2016).

Women empowerment is required because every individual is entitled to certain rights like the right to have a proper home, nutrition, education, job, public safety, and adopting one's own culture. And all these rights are accepted on the global level and are approved by more than 150 countries of the world. Women are likely to enjoy similar rights as men and such rights are given to the women belonging to any religion, race, color, and ethnicity, migrant, with any disability, health, or marital status. Sometimes the culture of certain areas restricts women to participate in some social, economic, and political affairs. It is also witnessed that women are treated badly by their families and in-laws. They are also harassed in the study and workplaces. The rights of women allow them to enjoy equal facilities as men including the rights to equal opportunities for employment, pay, and perks. The states guarantee rights to all women who are at home, in offices, in agricultural farms, and business sectors making women powerful. It also aids in achieving inclusive and unbiased education. For the last many

years steps are being taken to control forced child marriages, care during their maternity and childbirth, reducing death rate which causes due to illiteracy, and for the women whose children die before the age of five, delaying the conception period until they enter physically appropriate age and keeping an eye on gender-based violence, educating those regarding pregnancies before marriage, etc. According to the reports of UNESCO one additional year of education of a woman reduces the childbearing age of a woman from 0.3 to 0.5 per woman. An educated mother is more responsive towards her children especially in providing them proper nutrition, educating her children, giving them moral and ethical education, being aware of the needs of her children, and keeping proper gaps in childbirth, etc. Educated women are more cautious regarding their daily social life and less susceptible to fatal diseases like HIV and AIDS. They are more concerned about their children's education and character-building, hence they ensure children sending to schools. They are the co-bread earners with their male counterparts and contribute to the family income as well as the economic prosperity of the nation. The nations where women's education is not much focused lag in economic prosperity and continue to be poor. Educated women when posted on the positions of decision-making work in the interest of other women and significantly contribute to the development of the nation. Victimization of women is a violation of human rights and if these vulnerabilities are left unaddressed the society remains un-progressed. It is necessary to develop realization in men for switching roles and accepting the household chores without labeling women to perform those roles. There is a need to mainstream gender equality in access to jobs, in teaching/pedagogy, in the text materials, and every segment of life. Progress of society fastens if women are given an equal and fair chance to education and work (Osman, Ladhani, Findlater, & McKay. 2017).

UNESCO places immense importance on gender equality by providing equal opportunity to both male and female boys and girls according to their needs, requirements, and interests. The prospects are given as per the international norms. UNESCO encourages gender equality in all nations. It encourages women to contribute to interstate science cooperation to peace and act as mediators of moderation, flexibility, variation, and sustainability. UNESCO ensures capacity building in sustainable development plans and policies by keeping the representation of both genders. Making member states cognizant of including a female in the cultural lives and creativity, UNESCO involves women in the public conversation and intercultural dialogue and ensures that women are given liberty to express their opinion and concerns and enjoy equal rights with men. According to UNESCO gender-based violence is reduced if governments ensure gender equality, portraying and representing females in the textbooks and media and discourage masculinity portrayal. Women can be stimulated for the leadership and decision-making roles and positive gender images are encouraged if the promotion of gender equality is taken care of. Education is thought of as a means and a goal towards attaining gender equality. According to UNESCO, the right to education for all encourages both males and females to attain education on the equal front and after the culmination of Millennium Development Goals, the Sustainable Development Goals has also focused on equal access and opportunities to quality education. The EFA Programme succeeded in extending education to both genders to a great extent but still, there are a huge number of women who were deprived of quality education. The reasons may be the cultural background, the school infrastructure, the teaching-learning environment, etc. The most vulnerable are the women belonging to the rural areas and low-income groups or countries. A big number of female students who lacked writing, reading, and numeracy skill, are mostly out of

school. In a few countries, it is noted that despite proper economic conditions there is inequality seen in both genders concerning admission, quality, and achievement. Gender equality is being stressed because an empowered learning environment, materials, teaching and delivery methods, and assessments, etc. are missing. UNESCO encourages women to participate in the programs of sciences, technology, and engineering as the present situation shows the female participation low in these fields. Women also are encouraged to step forward in the protection of cultural heritage. Access to ICT for women and girls is also encouraged. The media is encouraged to focus on women empowerment giving them freedom of information and ensuring the safety of female journalists in the conflict areas. Steps are taken for the promotion of media partnership on gender, gender integration in journalism education globally. Women are encouraged to participate in online media and information literacy. They are encouraged to propagate regarding women's participation and ensure gender equality in broadcasting. Capacity-building measures are also taken with the help of ICTs. Women are encouraged to make use of communication technologies in the area of education, science, and culture and make use of free and open-source software methods for it. UNESCO also ensures women's participation in its strategic planning, human resource management, financial management, external relations, and public information (Sharp, 2016).

Another study carried out in Pakistan to see the gender depiction in the textbooks found that there is a gap between what is claimed about gender equality and the actual practice. The authors of textbooks truly do not see the reflection of the decisions of the government in this regard. The male-dominated opinions present in society do not apprehend the treatment rendered to women. Besides this, there are no perfect guidelines provided to textbook writers to give proper representation to women

in the contents. And even if the procedures laid yet the textbook writers do not distinguish how to positively depict female gender and have developed the habit of ignoring the importance of women depiction and trust in the present state of affairs. The authors showing their concern expressed their findings that female characters are not properly represented. In most of the chapters written, women are shown as weak, feeble, and helpless. Very rarely some daring and dauntless women are described. The authors showed their disappointment that women in Pakistan are not given equal status and opportunities as UNESCO desires in its target 4.7 themes of gender equality. The textbooks are mostly preparing learners for spiritual and national identities and are lacking the recommendations given by UNESCO for equal prospects to women. They finally recommended reforms at the higher levels and asked all stakeholders including the ministry and the curriculum wing and the textbook boards to take steps in this regard (Noreen & Sumaira, 2020).

2.19.5 Health and Well-Being

Healthy lifestyles play an important role in keeping a person free from diseases and other illnesses. It can be achieved by adopting certain healthy habits like eating a balanced nutritious diet at proper timings, sparing time for physical activities, and other recreational activities. Healthy lifestyles provide stamina and strength to the body. A person has to be healthy physically, mentally, emotionally, and spiritually. Youth has to be specially educated in this regard (Kumar, 2017).

Physical health is essential to every human being and without activity, it is not possible to keep oneself physically fit. It is something more than normal working like being able to work do routine chores and participate in sports without easily getting tired. To keep oneself fit a person needs to have proper healthy food, sound sleep, and physical exercise. The consciousness of keeping oneself healthy allows an individual

to maintain regular exercise, adopt healthy eating habits, and keep proper body weight with physical work and exercise. In Pakistan, people mostly are unaware of the ways to keep themselves healthy. Moreover, they do not have proper facilities to keep themselves healthy and physically fit. They do not realize the benefits of exercise and physical activity and get trapped in many diseases. Unawareness of the importance of physical activities is making them fail to keep fit. Housewives who are aware of their health and are unable to go to walks in parks and remain indoors use treadmills etc. to keep themselves fit, also remain healthy. Empirical studies suggest that awareness plays a greater role. There is a need for sparing time to some activities like games, sports, exercise, and gyms to keep oneself physically fit. The money spent on keeping oneself healthy can be saved from spending on curing diseases (Nazeer, Ilyas, Gill, Shoaib, Rabia, Fayyaz &Jabbar, 2016).

Besides physical health, a person has to be mentally healthy. This can be possible when he knows his capabilities and can handle his anxiety issues and work successfully for himself and the community (WHO, 2005 p. 5). Mental health has become an issue for people of all ages and everybody at some stage or other suffer from depression and anxiety and suicidal thoughts make an individual take extreme steps. These issues are mostly seen at the age of 16 to 24 in women and comparatively, males are less prone to these issues but at the age, of 50 years both men and women equally get depressed due to various reasons. It is also witnessed that most of the people who have such issues do not seek any medical or counseling support. There are several reasons like social, economic, and political for mental health issues. Some of the mental health problems begin with the parents who do not understand their roles in bringing up the children. These, in the long run, can affect the child. Sometimes the parents themselves are at risk of mental health issues. Mothers especially having mental health

issues during their pregnancies also continue to have them even after they give birth to the child. Studies suggest that mental health problems can be controlled. In the young and the adolescent, such issues become common due to various physical and emotional changes they undergo. Emotional issues are more common in girls as compared to boys. Bullying at educational institutions and workplaces is common which results in learning difficulties, people get fever job opportunities leading to further anxiety and depression for both the parents and the children (Mental Health Foundation, 2016).

The fear of getting the coronavirus disease had put the whole world in a state of panic and depression. There were also instances of suicides for the fear of being socially distanced and going into seclusions, monetary downturn, fear among the healthcare experts, and fear of getting ill-treated both at the care centers and society. Due to the closure of all business entities, there is an economic downfall and increased joblessness among the laborers, daily wagers, and private jobholders. People fearing the loss of jobs experienced anxiety, fear, and depression. The mental health issues due to various reasons were witnessed more in the underdeveloped and the developing countries and Pakistan is one among them. For the already persisting problems like poverty, increasing calamities, and lack of food to the people, the fear of disease has caused people to attempt suicide and fall into mental health issues. Therefore the curriculum must have topics related to dealing with both physical and mental health issues in general and at times of crisis in particular (Mamun &Ullah, 2020).

Youth needs more comprehensive health and well-being education. For years it has been a challenge to cope with the transition of young people to adulthood, especially in the present times when HIV and AIDS have become much more provocative. Sexuality education provides young people with the knowledge, skills, and behaviors required for adopting healthy lifestyles by understanding the physical changes occurring in them

and taking well-knowledgeable decisions. It is necessary to have some content regarding sexuality education so that pupils of this age develop positive values about themselves. There is some sort of sex education in the instructive programs of some countries but usually, they are not steady and its implementation is also not very effective. Inclusive sexuality instruction is a general approach to the development of humans and sexuality. UNESCO emphasizes the purpose of sexuality education as the attainment of knowledge, skills, and values to have safe, healthy, and social, sexual relations in the era where the universe is affected by Aids. Comprehensive sexuality education identifies and encourages gender equality, human rights, and the acquiring of knowledge and skills, and behaviors required for the prevention of HIV and AIDS. Empirically it has been witnessed in the previous two decades that if the youth are given sexuality education, they get enabled to manage themselves responsibly and have knowledge about the dangers of unsafe sex, think critically, and make informed decisions regarding their social and sexual life. It enables them to avoid unnecessary pregnancies and abortions, prevent themselves from the deadly diseases related to unsafe sex, have respect for fellow humans, and have a good transition period from childhood to adulthood. The child rights conventions have stressed the need for a child and adolescents to receive information and instruction regarding sexuality education. These rights have been enshrined in various documents since 1994. UNESCO has identified various ways to impart this instruction. For example, it can be included in Family life education, Population education, Sex, and Relationship education, Life skills education, and through the complete sexual instructional program. The advantage of imparting such education results in the protection of the vulnerable groups, safeguarding the rights of youth especially their well-being, education, and public participation, preserving the cultural norms and values by educating youth in a practical

and absorbable way, emphasizing to maintain the social relationship in a healthy way. The United Nations agencies have been emphasizing the provision of compulsory sex education for the growth of healthy societies. The committees on child protection have been stressing compulsory sex education in the curricula of primary as well as secondary levels. While pursuing sexuality education the gender and human rights education must be at the core. Convey youth about the cultural norms and the respect for the vulnerable groups and instruct about the optimistic maturation approach to sexuality. The thing which needs consideration while making sexuality curricula is to educate the pupil before their active maturation period. It is also essential to consider those who are surviving with HIV, youth who become young parents and have HIV. The family role is important in educating the child about sexuality and they also can cooperate with their teachers and institutions. Various tools can be consulted before the designing of a sexuality education course. UNESCO and UNPA have made various guides that can be helpful for the sexuality education program. The teaching of such courses must start at an early age of five years and gradually proceed until they enter adulthood (UNESCO &UNFPA, 2018).

About the Islamic perspective for youth sexuality education, Shahidul Islam & Rehman (2008, p. 1-20) deliberating upon sex, quoting the Quran says that Allah has created all things in pairs, and it is an indication of a divine miracle. According to Islam sexual life cannot be considered without married life and sex without marriage is taken as punishable. Sex with one's spouse is Ibadah and the child which a wife carries in the womb is a reward. Further quoting Quran the authors writes that man was made from the wet earth and then placed as Nutfah, this was made of a clot and then the clot was made as a little lump of flesh and bones and in this way, the child was created, and Allah is the best creator. Sexual education is knowing about human reproduction,

knowing about the structure and composition of the human body, or about the performance of sex and family life, or the deterrence of sexually transmitted diseases and unwanted pregnancy. It also describes puberty in both boys and girls. It is essential to know about healthy sex education to lead a satisfied and happy wedded life. In Muslim societies, sex is taken as a dirty word and people prefer to remain silent instead of talking about it. These days our youth are getting involved in sex and there are several reasons for it. It can be peer pressure, no alternatives to avert their sexual drives, no parental guidance and counseling, and media including cell phones. Keeping all the above situations, it is necessary to introduce sex education. There is a growing disease related to unsafe sex which is called AIDS and HIV. In Western countries, the youth are asked to keep self-control over sexual indulgence until they are married. In the United Kingdom, sex education is compulsory at the secondary level where the children are taught about the reproductive system. In France, there is a fixed period for this course to be taught. Sex education is imparted in almost all Asian countries starting at the secondary level. In Bangladesh and Pakistan, there is no sex education program in the curriculum of education. In the madrassas of Bangladesh, the students are taught different topics related to puberty in the light of the Quran and Sunnah. The authors contend that normally if sexual matters are explained to the child without the consent of the parents it is taken as untimely child grooming. In many countries, children are educated regarding sex, but it lacks the moral and ethical aspects. Muslim parents must instill in their children the religious principles, community, and cultural values in the light of Islam and take care of their physical wellbeing. The children are asked to perform prayers and avoid the behaviors which are forbidden. They must also be trained for avoiding toxic drinks, drugs, and immoral sexual acts. The education-related to sex must not be left totally to the mercy of schools, parents must also pay attention

to getting awareness from early childhood. The appropriate age to educate regarding sex is eleven and twelve years. Regarding cleanliness, the child can be trained to use toilet habits at the age of six or seven years. Providing references to sex from the relevant Quran and Hadith the parents must teach the students. They must be prepared to answer questions related to sex. The learners must be told that it is natural to get attracted to the opposite sex, but a person must behave according to the teachings of the Quran and Sunnah as adultery is unlawful as per Islam. Many religions like Muslims, Jewish, Christians, Buddhists, and Hindus have strong moral norms for sexual behavior, and if an individual acts beyond these set moral norms it is termed as wicked and incorrect. Whenever the curriculum for sexual education is designed for an Islamic state it must be designed in the light of the Quran and Sunnah with proper references quoted from the Quran (Shahidul Islam & Rehman, 2008, p-1-20).

Inclusive Sexuality Education was to be made mandatory as per target 4.7 as it is the prioritized area for ensuring the health and wellbeing of the learners. Educating young people in this area not only helps them avoid health and other issues coming up because of relationships with people, but it can also make young people aware of the moral and societal requirements. All three areas of human rights, gender equality, and sexuality education are linked with each other. Sexuality education also helps to avoid early pregnancies and inculcate in them the behaviors required for accountable parenthood. Studies show that in Asia and the Pacific out of 22 countries, 20 countries included sexuality education both at the primary and secondary level curricula, whereas in Pakistan there was limited or no inclusion of such subject in the curricula which possibly indicates the cultural scenario of the country. It was also witnessed that only a few countries gave life-skills-based HIV instruction. Among the five main elements

included in Target 4.7, it was seen that most of the curriculums predominantly included the theme of Human rights (UNESCO, 2016).

2.19.6 Global citizenship

The word global Citizenship got widely held when the then Secretary-General Ban Ki-moon talked about the Global Education First Initiative in 2012. The purpose of such education is to promote societies that are more tolerant, socially just, and inclusive. Education must enable individuals to develop the knowledge skills and behaviors which allow people to work in coordination with one another in this interdependent world. This term has some uncertainties for its meaning and also for its application. It cannot be legally binding as it does with the word citizenship because the globe deals with the nations not with the individuals. But with the wider access in the present world for knowledge, people's movement, relocation, trade among nations, and certain collective problems facing the universe, dependence of people for sake of improving their economic, social, and political relations have provided global significance to the people around the world. Moreover, as all human beings live on the same planet hence without any legal binding everyone can have consideration for others and feel duty-bound to cooperate. Even otherwise in this cultured world, every individual must feel morally responsible to respect the culture, language, region, and religion of others. Also, appreciate the diversity and find unity in it (Tawil, 2013).

The learners can become global citizens when they are allowed to practice whatever they learn. The instructors must find out more probabilities to know about the globe they live and involve in meaningful dialogue and hold manifold viewpoints. The students must be encouraged to ask questions, feel comfortable to express their opinions, and allow to disagree with the genuine stance. The teachers must themselves have an understanding of their instructional practices and give freedom for their

learners to disagree with their peers without feeling insulted. Global competence is nurtured when the notions of interfaith understanding, universal citizenship education, 21st-century skills, and profound learning, and shared expressive learning occur. It includes all three domains of learning. They include the cognitive sphere, the socio-emotional, and the behavioral sphere. The learners must have an understanding of the reason for unequal social conditions, different cultural groups in the society, the reason for migration, the ecological issues, and the socially unjust topics, and the socio-emotional domain. They must have empathy, appreciation, consideration, and acceptance for the people with different backgrounds and keep divergent viewpoints. They must be able to communicate positively to the various backgrounds of people locally, nationally, and at the international level. And possess the competence to resolve the issues peacefully. The universally competent students understand that there is a connection between the actions of their own and others (Colvin &Edwards, 2012).

Globalization is a multifaceted and vibrant occurrence. And different viewpoints are held by different people. Though globalization has started very much before the scholars hold the view that it has progressed much after world war-II. This huge phenomenon like globalization cannot occur only recently and the authors contend that this may be having roots decades in the past. As the cultural exchanges between the people were carried out even in the past. The beginning of the world economy has led to the rapid spread of globalization. The author says that though the scale of globalization was partial in the pre-historic period the conflicts, farming, government, and beliefs led to the growth of globalization. In the pre-modern era, the invention of the wheel has led to transportation, and the people traveled from one part to the other and many other inventions in the field of manufacturing and industries promoted globalization. In the initial modern period, the people of Europe largely benefitted from

Islamic and Chinese inventions. They put the groundwork for an entrepreneurial global system and they occupied many of the countries using the sea routes and by the mode of traveling through sea. In the modern era which started in the 18th century and ended in the 20th century, there was a lot of progress in the communication systems like the railways, airways, and primitive waterways. Then the advancement of technological devices also led to growth in globalization. In the present era with the advancement of information technologies, electronic and social media, globalization is at its peak. Economic globalization started after the developed countries made agreements for their business and trade and after the establishment of the World Bank and the global monetary system led the countries to come closer for business and trade. Similarly, cultural globalization became possible when people traveled to other countries either for jobs or for their settlements. The rise in the satellite channels on television and the internet has led to cultural and social globalization. Exchange of ideas and information is carried out and any information in one part of the world is spread with a great speed. Political globalization arises when individuals showed their sense of belongingness to a specific nation and sometimes claim the territories to be theirs resulting in political conflicts. The authors finally conclude that globalization began with the meeting of the people and this will keep going on even in the coming days and it is putting its influence on every facet of life. As long as the people depend on each other for whatever purpose the process of globalization will keep growing. As human beings, we cannot remain alone and have to interact for the exchange of knowledge, ideas, and experiences. With the growth of smart technologies, there is a possibility of speedy growth in globalization (Mir, Hassan & Qadri, 2014).

Nonetheless, for promoting global citizenship we all need to work in teams for the combined benefit of all. GCED must be mainstreamed in all levels of education

including formal, non-formal, and informal levels. The main subjects in which this concept can be incorporated are Geography, Civics, Environmental Education, and Cultural Education. Its inclusion can be across the subjects or can be introduced separately as individual subjects. This concept can also be encompassed in different media like Facebook, Twitter, network, mobile equipment, etc. This can also be made part of recreational activities like art and music of both old-fashioned and modern forms. There is a need to come up with candid ideas that how this concept can be used for developing universality in diversity and move beyond the narrow thinking approach to collective wide-level interests. When the learners build the knowledge, skills, and values and implement universal citizenship education they will be able to pass from tapered automated judgments to wide broad-based totality (UNESCO, 2013).

Thinking globally and acting locally has become more important in the present interconnected world since several issues affect the planet especially natural resources like climate change, limited natural resources, water, plants, and environmental pollution issues. These issues cannot be solved only by a single nation. It requires collective efforts. Moreover, in the past the economic prosperity of one country was pursued at the cost of the poor developing neighbor without any consideration for the environmental ill-effects it is causing to that state. So, responsible global citizens adopt responsible production behaviors. Irresponsible local production behaviors cause a threat to the atmosphere. Similarly, local plantations by individual countries can contribute to a greener environment and can have a collective global effect. If similar practices are adopted by other countries and in the same way, if the water is preserved and properly utilized it can be beneficial to many others who are suffering water shortages (Mohammad & Osman, 2015).

On the other hand, people living in multicultural societies perceive, believe, speak, behave, and reason differently. It is a known fact that human beings are different and these differences can create conflicts but the specific feature of all humans is reasoning. Therefore these conflicts can be resolved to a certain extent through reasoning. Nature is symphonic and all difference between humans is due to irrationality. It isn't possible to expect uniformity among all human thoughts. Human beings are unique creatures as they think differently and everyone wants to have freedom for their thoughts and beliefs. The difference among human beings is not something new rather it has its roots in ancient times but with time, it came to be realized that this diversity must be appreciated and all must agree to some of the universals of life. People practicing different cultures have always been there and no society how conscientious it may be, succeed to show true neutrality towards all the cultures. Different cultures are a social reality and this is inevitable. People cannot be culturally unbiased and it gives them individual recognition. And to stop people from following their cultural norms create issues and conflicts. Both society and culture go hand in hand. Different cultures create a society where one can witness a variety of art, culture, music literature, values, and morals. The societies which have tolerance and appreciation for this variability, progress and prosper socially and economically. In a state, there can be different cultures, and whichever culture outnumbers is called a majority and the cultures which are proportionally in small numbers are called minorities. Harmony prevails when everyone follows their own beliefs and has no hindrance from others. People of multicultural thought believe or claim equal rights and treatment in a political society. They often feel ignored in the areas of health, education, and jobs. But there is still no agreement over the acceptance of cultural diversity and it seems a threat to their national individuality. But in reality,

multicultural identity brings richness to the society, and when states recognize this fact and accommodate the needs of people practicing different religions, beliefs, customs, and traditions, they prosper (Mishra & Kumar, 2014).

Global citizens respect different cultures. The people who speak different languages, have different eating habits, believe in different religions, adopt diverse living styles, wear different costumes and embrace different customs but still live mutually to show unity in the diversified society. In such a society the issue of upholding the privileges of the smaller group becomes essential. It is observed that ethnic minorities have limited access to social, economic, and political activities. Especially the women and indigenous groups are not given employment, housing, health and are mistreated in many ways. The people in the majority always dominate the minority groups and give them a feeling of seclusion (Columbo, 2015).

Cultural adaptation is one of the requirements of a globalized world. In the interconnected cosmos of today, people move from one country to another in search of jobs, study, settlement, or business. Hence there is a need to have an ability to blend with the culture of the host country and be more acceptable. Learners, when going out in the pursuit of studies, find themselves in a difficult situation to adjust to the country they visit. An embedded mix method design attempted to find out foreign students' cultural adaptation and their academic achievement. The study revealed that students studying in such countries face adjustment issues and they are also not much satisfied with the facilities provided to them. They complain about the non-clarity of rules and irresponsible attitudes of staff resulting in the wastage of their time, vigor, and academic loss. They also find language as one of the barriers to the cultural adjustment of learners. It was witnessed that there is a close link between cultural adaptation and academic achievement. Therefore it was felt necessary that for better academic

achievement, the issues of foreign students must be addressed on a priority basis (Dilshad & Malik, 2019).

However, peace prevails in society when there is less disparity. Every individual in a society does not hold the same status of wealth and prosperity. As per the reports of the World Economic Forum, there is global inequality and the income of some countries as compared to others are either more or very less. Many of the global disparity studies were carried before the 1990s and not after that. The reason for exploring the unequal wealth status between the states is due to the reason that equal distribution of wealth brings peace and prosperity and unequal distribution brings dissension. People prosper with their efforts and the conditions they have. Rest they are not responsible. Today the world is more dependent and interlinked. The authors in a study regarding global disparities came up to the conclusion that the worldwide comparative variation has decreased during the past few years. But there is disparity persisting in its entire form which can be because some countries are progressing more and if the investment is done in the very younger children and the people with disabilities the countries can progress a lot. The people of the state who do not have sufficient income levels suffer from health, education, and peaceful lives (Nino-Zarazua & Trap, 2017).

Global citizens keep moving to other places for many reasons. Immigration in modern times has become very common as people have more job opportunities, a safe non-violent atmosphere, better income facilities, and more peaceful lives. In most parts of the world, the main reason for people to immigrate is to find a safer place from the conflict zones. Whenever people settle in other countries they do not have proper health facilities at par with the natives living there due to various reasons, until they get proper stay authorization and such issues call upon the attention of therapeutic experts towards

the reorganization of public health systems there and focus on the issues of immigrants (Trost, Wankle, Ohlendorf, Klingelhoefer, Braun, Bauer, Groneberg, Quarcoo & Breggmann, 2018).

On the other hand, immigrants who are younger and more qualified and capable are less troublesome compared to the aged population as the younger individuals are the capable emigrants and they contribute to the economic development of the host country. As far as the cultural understandings between them are concerned it can be developed when both the locals of the host country and the immigrants get closer to the natives and understand each other. The effects of immigration according to the natives are, they feel deprived of the jobs in their own country and sometimes compel to work on lower wages. However, studies have shown that the claims of natives are not justifiable as the immigrants put the very insignificant loss on the economy of the host countries rather when skilled workers come to the host country they positively contribute to the wealth of that country (Edo, Ragot, Rapoport, Sardoschau & Steinmayr, 2018).

2.19.7 Competencies listed as per GCED & ESD

Every individual possesses some skills and competencies. But in the modern world, global citizens require to have the below-mentioned skills.

(i) Obtaining information: It is the expertise of the individual to gain knowledge from various sources and in a systematic manner using different resources and check the authenticity before acquiring it and to apply whenever required.

(ii) Resolving issues, glitches, and conflicts: Being selfless and solving the issues arising at local, national, and international levels and keeping the peace by talks and negotiations.

(iii) Sophisticated judgment: Without accepting anything that comes in the way, critical thinking is the capacity to assess, judge, redirect, dare to criticize oneself, and come up with productive explanations.

(iv) Collaborating and talking: To have expertise in spoken skills, interpersonal skills and be able to persuade and have a purpose to learn and convey in conflicting situations.

(v) Tackling with organizations: To analyze the problem on a wider scale and try to link the issues and see the relation of conflicts with its completeness at all levels

(vi) Facing the forthcoming: To predict the activities to occur and to have a great far sight for the issues and be prepared for the accidental happenings.

(vii)   Replicating on standards: To have a broad-based approach to see the values of others and to correct oneself if required and be able to talk for the resolution of conflicts.

(viii)   Contributing and cooperating: The ability to take part in the supportable change and be able to revamp oneself and others, and coordinate and cooperate with others for attaining maintainable futures.

(ix) Altering viewpoints: Taking the perspectives of others and thinking humanly and being prepared to change oneself if required.

(x) Discerning and acting inclusively: Being able to work with the people belonging to different vulnerabilities, genders, ethnicities, and people with different, social, cultural, and economic backgrounds and having different thinking and feeling abilities

(xi) Presenting solidarity and accountability: Collectively work for the benefit of fellow human beings and to protect the environment (Mochizuki, 2017 p. 21).

2.19.7.1 Problem-solving skills in learners

It is usually argued that traditional classrooms do not focus to develop the creative capacities of the learners. Thinking skills should be developed in pupils to foster creativity in them. Problem-solving is one of the means to teach pupils how to

think. It enables them to generalize the concept and hence learn its applicability in a different situation. The theory and practice of problem-solving advocate that thinking should be taught in situations where students have little or no knowledge about the problem. The primary element of problem-solving is content-less heuristics. However, problem-solving will not be effective if it is contentless. Knowledge base and its application is a must for this purpose. The importance of heuristics cannot be denied but procedures should also be taught for effective instruction. A combination of theory and practice is needed for the instruction to be real. To sum up, teachers must teach students about the knowledge that leads to successful solutions in past in addition to teaching sound thinking skills (Carson, 2007).

2.19.7.2 Transferrable Skills

Transferable skills play a major role in every part of life especially in the attainment of jobs. The individual applying for the job is examined for the skills and the knowledge they possess. In the present world, an individual requires to have greater personality traits besides his academic knowledge to get a suitable job. It is the task of the colleges and the universities that they develop such skills in students which make them competent in the world of work. Today in the information and communication world the change is continuous and the individual has to be prepared for the changes that are rapidly taking place and get equipped with the required updated skills. Moreover for the employees who were inducted long before require upgrading their skills. In such a situation the institution and the industries must make arrangements for training and education so that the required skills are learned throughout their lives and get updated as per the needs. The individuals require to possess cognitive, communicative, leadership, coordinative, collaborative, and team working skills (Muhammad, 2012).

2.19.7.3 Active Citizenship

Active citizenship is necessary for the present social, cultural, political, and monetary circumstances. The imparting of knowledge and skills is instantaneous but developing values and attitudes takes time. Various activities can be carried out for making a learner an active citizen but the learners at the lower middle and elementary levels are best suitable to get introduced for the course of active citizenship. However, whatever activity is undertaken for the building of an active citizen, develops awareness and understanding in both teachers and the learners (Akin, Calik, Demir, 2017).

Moreover, the active citizen keeps himself more engaged in the work of his family, his neighborhood, and the community to which he belongs. Citizenship is more related to the person with a sense of belongingness and who is bound to fulfill the duties according to laws bestowed upon him and enjoy the rights given by the laws of the land. A study was conducted to find how active citizenship roles are played in the organizations people work. Six countries were picked for the study and a mixed-method study design was applied. The results showed that the participants were well aware of their roles and also have knowledge about their characters at the local and global levels. Many of the participants were found to avoid taking their roles in political activities and they worked in cooperation with their colleagues for the betterment of the organization. The results also showed that the participants contributed very well towards the betterment of the world they survived in. They expressed their desire to indulge in political activities if the need is felt otherwise they showed less interest. The findings also showed some inconsistent results and it was found that only some of the participants could answer about their roles as active citizens (Onyx, Kenney & Brown, 2012).

2.20 Four Pillars of Education for Global Citizens

UNESCO intends global citizens to adopt four pillars of learning to live with a greater understanding for others and a partner jointly for the collective good and solve the issues and accept other people with their diverse living styles. The basic understanding is that all humans are equal and must get equal rights to education and live a peaceful, healthy, cooperative, and dignified life to be productive members of society (UNESCO, 2015).

The four pillars of education emphasize the institutions to change their teaching and learning process in the organizations to make individuals play their part in the practical field of work. The purpose of education in the present world must be to make the learners who are committed to keep learning all through their lives. As per the four pillars of education, in the 21st century, it is essential in general to have comprehensive knowledge about all topics and have in-depth knowledge of a few subjects which a person studies and be able to learn something new to know, think and teach. It is required by the individual to know oneself and to work in a group and be able to cooperate. A successful person shuns narrow thinking, understands the position and perceptions of others, and coordinates to lead the team and attain the knowledge to be able to practically perform. Becoming selfless allows a person to easily associate with others and live together with them to attain larger objectives. An individual according to the author has to be critical of oneself and be ready for self-evaluation and self-criticism so that positive changes occur and the individual understands the worth of oneself and moves as per the changes and demands of the society. The pillars of learning stress more on practical knowledge instead of theoretical or rote learning and teamwork and team success instead of individual achievement so that the person can change himself and society (Olarian, 2016).

Likewise, the success of future education is based on when the learner is taught the four basic learning patterns like what he is required to know about, what he has to do, how he has to live with others, and ultimately what he has to be. The last one is to make the ultimate personality of the learner. For any education system, the curricula or the teaching-learning material must be designed in such a way that the learner must have access to factual knowledge. The authors carried out a study by first analyzing the curricula which they found was not very relevant to the present needs and required revision. It was also found that the school environment was also not preparing the learners for future community challenges. When the calendar of activities was examined by them it was found that the essential components like life skill development and moral aspects were missing and the focus was on sports and other activities. The teachers were of the view that schools are preparing rote learners instead of critical thinkers and the curriculum does not provide any room for the learners to work in groups or teams. The learners lacked the soft skills of empathy, care, concern for others, and finally, it was felt that without the above three the balanced personality of a human being cannot be achieved. Therefore all systems of school need to be revisited. The authors finally suggested shunning rote memorization, and focusing on the understanding of concepts, and the curriculum was asked to be revised, updated, and prepared to the needs which focus on the four pillars of education. The learning in the school must be relevant to the world of work. The learning material must be designed to keep the latest trends and must be more interdisciplinary and interconnected. The policymakers hold a more futuristic approach and apply the latest trends in education. There is a need to analyze the gaps in the curriculum to meet future needs. Teachers also need to keep themselves updated with the knowledge and skills as per the four

pillars of learning and undergo professional training at proper intervals (Shirmal and Sharma, 2012).

2.21 The prominence of Global Citizenship Education and related domains

The topics covered in global citizenship education relate to civic education, human rights education, education for sustainable development, and international understanding education but more topics that are locally relevant can be added if required. The three domains of learning are based on how to learn, to know, to be, and to do for living together, and hence it covers the cognitive base, the socio-emotional base the behavioral base. All are linked to each other and are unified in the process of learning. It also specifies what type of knowledge do the learners of GCED need and what areas they require to be socially and emotionally connected and what practical steps they need to take to be a better global citizen. The learners are expected to gain knowledge, and acceptance for the issues existing at the local, national, and global levels and see its interconnectedness, and critically analyze as per their perspectives. The learners according to this domain must have a feeling of belonging to the same community with similar feelings of empathy, compassion, unity and have respect to the rights of fellow humans and finally, they are expected to practically demonstrate being responsible global citizens for being tolerant to propagate peace and maintain sustainability and develop in themselves the motivation to take appropriate measures for attaining the objectives of sustainability. The characteristics expected from the global citizens are that they are required to be knowledgeable and have analytical literacy, they are socially attached, and have respect for the varied cultures and be responsible ethically and keep themselves involved (Choi, 2015 pp. 11-23).

2.21.1 Knowledge

The learners must possess the knowledge of history, politics, and economics and have an understanding of their rights and the rights of others especially child and women's rights, and also their responsibilities. They must know how they are connected with the outside world and be able to evaluate the developments happening nationally and globally and be vigilant to gain information through media or other sources of communication. The learners must be able to find out regarding the universal themes. The learners must be knowledgeable about their governance structures and how their nation is connected with the international world and their global and local apprehensions and keep themselves actively engaged. Learn a language to obtain the required material so that they continue their learning throughout their lives. For being collectively associated and having respect for different cultures, the learners have to build an appreciation for the belongingness of people, their association with others, and what common things exist between them, respect, and appreciate the common and diverse features of each other. For being ethically responsible and engaged the learners to need to acquire the skills and competencies for caring for others, giving due respect to them, and having compassion and contribution for peaceful social existence. They have to know about what they and others consider and know-how these opinions have values for themselves and others and how these influences are making democratic decisions at various levels. Ethically learners have to feel responsible for preserving the climatic conditions, keeping the pollutants away, and be responsible for consuming and producing and enable themselves to be more tolerant and resolve conflicts peacefully, being just and showing empathy to others and be informed regarding the issues at local, national and universal levels (Choi, 2015 pp 11-23).

2.21.2 Skills & competencies

Similar to education for sustainable development, global citizenship is also a way of thinking which must be taken on a holistic basis. To incorporate sustainability in the school environment both physical, psychological, and personal, beginning from the learner to the administrator needs change in their perceptions. It needs both intellectual awareness as well as applied proficiencies. The knowledge base can prove futile if people do not have changed perceptions and standards regarding global citizenship. The way teachers can instill in learners the three aspects of GCED i.e. the knowledge base, competencies and values, and perception through their pedagogies are: for the knowledge base the policymakers in the first place need not only to just focus on the national developments but they have to go beyond and consider the global developments as we are now more connected with the world than before. The topics can be from subjects related to Peace Education, History and Political Education, Education for democracy, Education for Sustainability, etc. Instead of overburdening the curriculum by adding more topics, it is better to search for links and networks and search for a new viewpoint on the existing ones. In the present world of over-flooded information acquisition of all knowledge is not as important as thinking about what useful information can be discovered with the existing material. Presently the competencies are more stressed than the content. When knowledge and information are abundantly accessible, it is important to analyze the available information and find meaning out of it and utilize it to the benefit of oneself and of mankind. The competencies like taking independent decisions and being able to differentiate between worthy and immoral. Critically analyzing the available information and coming up with conclusions on the political and the social issues, thinking critically, empathizing, communicating, analyzing, collaborating, resolving conflicts, keeping peace and

tolerance to oneself and others, problem-solving, having respect for the cultures of others and recognizing their diversity, possessing technological skills and being able to read the statistics and evaluate the information are the required competencies in GCED (Wintersteiner, Grobbauer, Diendorfer, Reitmair-Juarez, 2015).

2.21.3 Values and Attitudes

Responsible citizens of the world require to value their fellow citizens. Respect their rights, keep peace with fellow citizens, consider the opinion of others, have justice in the community, and provide similar opportunities to all segments of the society, and have an empathetic attitude towards the vulnerable segments of society. GCED may be implemented as a system throughout the national policies, teachers' curricula, teachers' training, school curricula, among different stakeholders of education, and in collaboration of scholastic exchanges with other countries (Wintersteiner, Grobbauer, Diendorfer, Reitmair-Juarez, 2015).

2.22 Global Citizenship Education: Learning Domains

To attain quality education, the teacher has to focus on three domains of the learning objectives as cognitive learning objectives, socio-emotional learning objectives, and behavioral learning objectives:

2.22.1 Cognitive learning Objectives

The teacher ensures that the learner comprehends the importance of standardized education and the opportunities for learning throughout his life either by formal, informal, or non-formal modes and to attain education for sustainable development to eradicate poverty and make lifestyle changes possible. A learner can be made aware of how education fulfills the basic human rights demands and realizes the rights of all for social wellbeing. A teacher can make the learner aware of the

benefits of education for both genders in both the rural and the urban areas and find the hindrance coming in access to quality education. Culture plays a major role in attaining sustainability and learner must be told how education can help in establishing peaceful societies (UNESCO, 2017b).

2.22.2 Socio-emotional learning Objectives

The teacher can raise the cognizance of the learner for the standardized educational approach for the attainment of education for sustainable development. Different ways can be adopted to motivate learners to make use of various educational opportunities. The intrinsic value of education and sustainability must be known to the learners so that they can appreciate their skills for the betterment of their life, occupation, or trade (UNESCO, 2017b).

2.22.3 Behavioral Learning Objectives

Under this domain, the teacher ensures to see the learner, contributes in supporting and attaining quality education for everyone, and implement education for sustainable development and the approaches linked to it. The teacher can make efforts for the inclusion of both genders in attaining quality education (UNESCO, 2017b).

2.23 A pedagogical framework for critical global citizenship education

There is tremendous debate about how to carry out global citizenship education every quarter and in different quarters and how this education must affect the learners of tomorrow and what actions are required for managing the injustices for making this globe the most suitable place to live in. Different scholars have given different opinions regarding preparing the learner for global citizenship education. Blackmore (2016) citing Andreotti and Freire has suggested the chief framework which has four

dimensions regarding pedagogical approaches for imparting global citizenship education. They are critical thinking, dialogue, and reflection which will lead towards accountable lives and actions. Critical thinking enables a person to solve the problem differently and have more than one solution to the same situation. With the application of logical thought, and taking account of the present situation, and applying the previous knowledge critical thinking can be developed, therefore the learners can be taught how to analyze the situation logically and think divergently to come up with solutions. Certain questions about the reason, situation, and possibility for that occurrence can also enable critical thinking abilities. In the second instance, issues can be discussed and questions can be enquired so that different solutions can be found. The teacher must encourage dialogue to enable the learner to think about all possibilities of the conflict and develop linkages for coming up with the solution. In the following step, the learner must be taught to reflect and question the thinking of oneself and the other person. It allows the person to imitate and develop the relationship between their emotional state, rationality, and actions. When the above three pedagogical approaches are adopted positive development can be seen. Whenever a conflict comes before the learner, critical thought must be given, and then discussion with peers and later on reflection will produce a clear picture that allows settlement of that issue. The author applied the framework on the secondary school students and found that the results were not as expected and concluded that these features are something very peculiar and internal to learners and more studies need to be pursued with its application to different subjects so that the results can give further future directions (Blackmore, 2016).

2.24 Education for Sustainable Development and its Challenges

The UN decade for sustainable development had urged the world nations to adopt ESD strategies and asked the nations of the world to make policies, plans, and teaching-

learning material on ESD still there was no significant progress on ESD implementation. Even obligation at the higher level was also not seen. The author comments that there is a need to mention sustainability in its aims and goals and the subjects of "social studies" especially geography can have a proper place to mention environmental education. It is also vital to see that as long as the environmental issues and the problems regarding the unkind utilization of resources are taught and discussed in isolation there cannot be any effective implementation on ESD. In some of the subjects which are usually part of Social studies like History and Social Science, there is no specific goal regarding education for sustainable development. For the real application of ESD, it is necessary to teach the interconnectivity of the society and the economy with the environment to the learners. While explaining ESD in the curricula it is also necessary to mention the ethical aspects of sustainable development. There is a clear link between the economy, ecology, technology, ethical and cultural dimensions with sustainable development. According to the author, there are four main objectives of curricula like specifying the landscape and climate, the social conditions of any country, the assets of manufacturing companies and the inhabitants, cities, and rural settlements. But over time environmental issues also came into the picture. Anything studied in isolation cannot bring productive results in the learning of people until there is clarity about how human rights, their equal status, and social justice is simultaneously studied. Development at the cost of poor helpless nations cannot be taken as prosperity unless the progressing nations keep the rights of neighboring countries in mind (Saetre, 2016).

A study was carried out with the primary school teachers and the teacher educators to examine the beliefs of the quality of teaching geography in the primary schools and their beliefs for the importance of geography. The results of the study

showed that trainee teachers did not know about either environment or geography. The investigators suggested increasing the teaching hours of geography and integrating the subject of sustainability. It was noted that the concept of sustainability must be included in all vocational courses and at the undergraduate level, the knowledge, skills, and value integration for sustainability is more important as it can enable the learners to make connections between the economy, society, and the environment. Integration of sustainability across the disciplines can be a challenging task but once done can be extremely beneficial. Only cross-disciplinary integration will not be sufficient unless the teacher educators are trained to teach this concept so that they translate the curriculum in their pedagogies and benefit their students. The students can develop their cognitive, affective, and comprehensive capabilities if the knowledge, skills, and values related to sustainability are integrated into the teacher education curricula (Blankman, Schee, Volman & Boogoard, 2015).

Jaiyesimi (2016) while deliberating about the challenges in implementing the sustainable development goals in Africa contends that these are broader compared to the MDGs and have covered all the challenges faced by all countries of the world including energy and infrastructure. For the developing countries, the main challenge is financing as the cost of implementation can be high in the short term but may give long-term benefits. Among the 17 Goals and 169 targets, the 17th goal and 42nd targets deal exclusively with implementation. But the author observes that the first step towards the implementation of SDGs is to interpret these into the plans and policies of the nation and develop a linkage between them. For Africa the four identified challenges are funds, keeping the pace, tracking progress, and ensuring accountability. It also requires monitoring of the targets in quantitative terms. The progress report cannot be made until the results are quantified. Stress is laid on the non-segregated and organized

approach for implementation. The major flaw which is seen in the 42 implementation targets is that they are lacking linkages and dependencies among themselves which can result in unclear achievements. The results which one may intend to achieve in the short term may undermine the same in the long term. It may so happen that if coordinated efforts are not done they may result in the waste of resources. According to the author, there must be an interrelation between three sections like economic & financial domains, public, private & ordinary citizens, and between low, medium, and highly developed countries. It is usually seen that human welfare is done at the cost of ecological degradation. If the integrated approach is practiced then all three factors like social, economic, and the environment will be safeguarded. The major issue in the developing countries is keeping a balance between the three can be the lack of skilled personnel. Unless a proper monitoring system is in place progress cannot be measured. While implementing the SDGs there is a need both at the local and national levels to focus on policy, finance, the building of capacity, and technological know-how.

2.25 Studies in Pakistan and elsewhere on Education for Sustainable Development

A study was carried out on B.Ed. (Elementary) education regarding the inclusion of ESD and its components, the society, culture, economics, and the environment. The investigators carried out the content analysis as well as took the opinion of curriculum developers. It was revealed by them that the environmental factor of ESD was not allied by 87.09% in the curriculum, whereas the economic factor of ESD was not related by 96.77% and the social and cultural factor of ESD was not linked by 93.54% in the pre-service curriculum of B.Ed. Regarding the environment, the authors were of the view that integrating this aspect in the curriculum will enhance the trainee teachers' knowledge and help them to address grave environmental

concerns. Regarding cross-cutting themes of ESD, they expressed the view that peace and tolerance will be improved and the student teachers will know about protecting their culture and heritage. The trainee teachers will also get the awareness of prudently utilizing the available resources and further transfer the tradition of preserving one's own culture and change the opinion of the coming generation for a more nonviolent and accepting society they believed. Overall the results showed that the curriculum missed all the three components of economic, cultural, social including environmental issues, and expressed their concern saying that despite the passage of a decade for curriculum design, the teacher curriculum has not yet been updated to meet the current global needs. They finally recommended the revision of B.Ed. Curriculum (Durrani, Malik & Jumani, 2019). On the other hand, Kalsoom et al., (2019) investigated three key documents related to professional standards for teachers, accreditation documents for pre-service teachers, and the curriculum document of B.Ed. (Elementary) to find out the inclusion of education for sustainable development (ESD) concept. Their findings showed shocking results that despite a long history of sustainability and the observance of 'decade for sustainable development by the world, the document of curriculum incorporated only 5% of the sustainability content whereas both the other two documents did not have enough sustainability included in them. The investigators expressed their concern for the non-inclusion of global initiatives in the key educational documents which shows the dominance of the societal influence on educational improvements. They also observed that the curriculum of Pakistan was highly inclined towards US choices, though UNESCO also has a key role to play in the education system of Pakistan. They proclaimed that the curriculum was mostly concentrated on inquiry-based learning and creative thinking. And also they observed that despite the observance of the decade for sustainability (DESD) during the preparation of the

curriculum document it was found that the elements of sustainability were missing in the curriculum of B.Ed. in Pakistan. The curriculum focused mainly on pedagogical skills, subject knowledge, and classroom teaching. ICT was included in the professional standards of teachers. The teachers' accreditation program also did not include the sustainability component. There was also no focus for research on this topic. ESD was not seen either in the contents, process, or learning. Some of the concepts related to tolerance, peace, equality, brotherhood were found in National Professional Standards for Teachers. The subject of school, community, and teacher had diverse cultural, traditional, and regional values and learning needs in schools as well as their community. They concluded that in Social Studies, Pakistan studies, and School, Community and Teacher the themes related to ESD which are human rights, peace, cultural diversity, and different cultures, traditions, etc. were mentioned (Kalsoom, Qureshi & Khanam, 2019). In another study on mapping of various curriculum frameworks, policies, and provision in various countries of the world, the investigator picked three main issues of concern like, how many countries include interdisciplinary themes in their general curricula especially the environmental issues, and how many countries include the environmental cognizance in their curriculum framework and finally to categorize how any countries specially mention about environmental and sustainability issues in the common aims and goals of education. For this purpose, primary and secondary education curricular data and the aims and goals of education were considered in the light of world data on education. Coding was done to find out if the interdisciplinary themes are included and well-connected across the subjects and if the competencies and the skills, in general, are required to attain during the whole learning process of the students are incorporated. Most of the curriculum documents emphasized the latest teaching methods like collaborative,

cooperative, and more students centered approaches. Less attention was paid to the way how teachers need to prepare especially regarding interdisciplinary themes and abilities, education settings, and assessments. The purpose of adopting an interdisciplinary curricular approach is to avoid introducing additional instructional subjects and enable integrated rational thought in both the upper and lower secondary students and make possible the collaborative approach of the teachers to work in teams. The results of mapping of curricular frameworks found that out of the 71 countries studied, only 57 countries included the environmental and sustainability materials. In some countries, sustainability was mentioned using the terms education for sustainable development, sustainability, environment development, and global citizenship. Few of them used the terms of environmental safety, conservation, and cognizance. The decade of sustainable development also enabled countries to include sustainability. Latin American countries included sustainability and environmental education topics in primary as well as secondary levels. As far as the expected learning outcomes are concerned the learners were expected to know and understand the sustainable use of materials available on the planet earth and develop critical thinking, problem-solving, and systematic thinking skills regarding environmental and sustainable issues. Particularly in some counties like Finland the curriculum and the learning outcomes are designed to make individuals sensitized with the issues and challenges they need to confront at the local and the international level. Besides the theoretical aspects, the practical emphasis was also laid on actual life situations to work outside the school environment and in the community. The author says as far as the skills and competencies like communication, literacy, and numeracy were concerned they usually were included in the investigated curriculum whereas ICT skill is comparatively new were more stressed in the contemporary world. The emphasis on how the learning to

learn be taught, critical and creative thinking, and problem-solving in the interdisciplinary approach was not clearly defined. Four competencies like communication in the mother tongue, foreign language, mathematics, science, and technical expertise are considered as traditional skills which are usually included in the subject-based curricula but the other competencies like critical thinking, creative thinking, risk assessment, decision making, and self-awareness and self-management were not clearly defined. As regards the broad educational aims and goals associated with the environment most of the countries emphasized the protection, promotion, and preservation of the environment. The values and attitudes for protecting, respecting, appreciating, and intelligent use of planetary resources were also included in the curricula. Supported by the legislation many of the countries emphasized environment and sustainability. The author concludes that the global world has an awareness of the environment and sustainability. But the interdisciplinary themes are faced with challenges like the overloaded curriculum, the perceptions of teachers, students, and the parents who presume these as additional subjects and not have any relevance. Lack of expertise in teachers to link and transfer the knowledge, skills, and competencies regarding the interdisciplinary themes was also witnessed. The consensus was found in the present world for only cognitive development and academic knowledge was felt insufficient and need was felt to prepare the learners as successful people for community life and the unpredictable global challenges. Several trials were identified across the curricular frameworks among which assessment of the 21st-century skills seem to be a crucial issue and it was noticed that unless an assessment design is developed there cannot be much to change, and if the same traditional style of assessment is carried out the transversal capabilities can't be fostered. Finally, the author brought the attention towards the development of inclusive and organized

measures for the prevailing teaching, learning, and assessment practices and said that cross-curricular or interdisciplinary curricular approaches about environment and sustainability can be practiced otherwise the traditional memorization feature was inevitable to continue (Amadio, 2013).

A study conducted in 18 countries to investigate the influence of ESD for quality education found that when the concept of ESD is assimilated in the curricula it changes the teaching and learning in all perspectives and encourage learning of skills and pedagogies related to ESD and also changes the vision and attitudes of all stakeholders and promotes sustainable communities. The authors also persuaded the policymakers to include ESD in all the subjects and also impart training related to this concept so that its implementation is ensured (Laurie, Nonoyama-Tarumi, McKeown &Hopkins, 2016).

It is argued that teaching education for sustainable development as a separate subject is adequate but when it is integrated the benefits are enormous. Science is seen as seeing oneself in comparison to the proximate world. It is very much necessary to adopt an ethical component in the subject of science. The learners who take the subject of science must realize that they are after all the human beings, and they share the accountability for irresponsible consumption and production. Science has led us to adopt certain unsustainable attitudes. Keeping the interlink-age between the subjects of technology, math, engineering, and science the policies and curricula may be made keeping their cross-curricular connection. Sometimes other subjects like biology, physics, and chemistry are also lined up with the subjects of math, technology, and engineering, enhancing the possibility of understanding them holistically. The curriculum developers need to be vigilant while integrating the sustainability concept in the science textbooks as there can be political, financial, and social influences.

Autonomy is given to the authors of the textbooks while integrating the sustainable concept so that the main aims of science education are kept together. Our community has failed to fill the gap which exists in desiring for the achievement of sustainability and the steps required to be taken towards it. Therefore it is not an easy task to embed the sustainability concept as well as keep the essence of the subject intact. Sometimes the integration of the sustainability concept may not be as easy for the textbook authors as they may not know about sustainability. Several suggestions are given by experts for the way to embed sustainability in the science textbook. The textbook of science usually provides the information regarding the function of science and how to develop future scientists which are very essential to get the complete knowledge of the subject and pursue a science-based career but besides giving such knowledge it is also necessary to educate children about how the environment effects with the inventions of science and what steps as learners they can take to acquire both scientific knowledge and ethical information to play their role as active citizens. The books prepared may enable future learners to attain reflective thinking skills as well as become active citizens who can contribute towards environmental safety (Mochizuki2017 pp 67- 71).

2.26 Issues in the Attainment of Quality Education

For quality education, the biggest challenge facing the commonwealth countries today is the lack of access and justice. The children lack the basic knowledge and skills and are unable to read the text, neither computing nor comprehend. Various steps are required to be taken for the improvement of the present state. Steps, like firming up early childhood education, building the language base of children, training the teachers and giving both in-service and pre-service education, and designing appropriate curricula, are required. Developing a link between the market needs and education, providing education to all without discrimination. It is necessary to focus both on the

excellence and magnitude of education because whenever the investors plan to invest they see if they are going to reap the benefits of the money they are investing with the available skilled labor. The highly intelligent people have more opportunities to earn more and early childhood education plays a major role in the future education of the child. The stronger the base the more stability for future education. The more a person is educated the more income is generated and the satisfaction level rises. Hence it is needed to invest more in the beginning years of the children than their secondary, tertiary, and technical and vocational courses. The more people go for tertiary education the more is income growth of that country, as there are more technically skilled people available with more adjusting natures and they are the contributors to the sustainable societies. Emphasis is made on the research quality and the eminent teaching and curricula. Earlier the cognition was just to acquire factual knowledge which is now felt obsolete. There is an intricate relation between goal 4 and the other goals as they are all dependent upon the goal of quality education. Education at every level is essential beginning from early childhood to primary and tertiary levels including technical and vocational education (Secretariat's, 2019).

2.27 Endeavors to Attain Quality Education in Pakistan

After the 18th amendment education has become the provincial subject. Article 25-A guarantees the right to free and compulsory education to all children who are between the ages of 5 years to 16 years in all the provinces and federal capital of Pakistan. Pakistan was a signatory to various international commitments related to education like the 'Education for All' of the Millennium development goals and now the SDGs. Education is the only key to human resource development and economic prosperity. It makes individuals think independently and act prudently. It builds their personality and makes them responsible citizens. They gradually get enabled to

understand different democratic values and social justice. It enables them to develop peace, harmony, tolerance, and mutual respect for others. Universally education is recognized as the fundamental human right and is seen as the only means to attain sustainable socio-economic development. One cannot dream of prosperity in the presence of illiteracy. The human development index is calculated annually around the world to rank and rate literacy and children's participation in primary school. Education also has several other advantages like allowing the individuals to freely express their ideas and feel empowered and allowing the disadvantaged people to move upward. The reason for the low enrollment and illiteracy ratio in Pakistan is the high growth rate of the population. The results of a low literacy rate are seen in all spheres of life including the social, economic, and political spheres. For many years Pakistan has been rated as lowest in the human development index due to its falling literacy rates. Pakistan has also included in the constitution of 1973 the provision of free education up to secondary level and has expressed its commitment to eradicate illiteracy. According to Article 25A as per the fundamental rights, the state of Pakistan is committed to providing free and compulsory education to all children aged 5 to 16years. Students are also being provided with free textbooks. Despite these measures, there are millions of students who are either not enrolled or get dropped out and remain out of school. The reason may be that Article 25A is not elucidated. Moreover, there is a need to allocate sufficient funds for the true implementation of this article. The budget must be raised from 2% to at least 4% of the GDP. Education Policy 2009 speaks of allocating 7% of the GDP which is yet not materialized. Awareness campaigns on television, social media, and other channels can encourage the parents to send the children to school especially the female child. It is also the responsibility of political, public, and religious leaders to motivate the community to send their children to school. The federal and

provincial governments must see the implementation of Article 25A. Special financial assistance can be given for the out of school children. Access to school can be improved by opening schools near to the villages and households, especially for girls. The building of more schools with the inclusion of katchi can improve the present state of literacy. Both the federal and provincial governments need to initiate enrolment drives and introduce an incentive scheme for encouraging enrolment. State television must be utilized to promote the campaign of registration. A special channel can be started for informal education and later with the conduction of tests certificates can be given. All the above measures can bring some change in the present rates of literacy (UNESCO, 2011).

2.28 Global Monitoring Report 2018 and Sustainable Development

This education monitoring report has focused on :

(i)   Relevance: The implementation of SDG 4 started in 2015 and from that date till today the progress was taken to see how the stakeholders found SDGs relevant and their comprehension and the implementation. It had different meanings to different stakeholders according to the responsible position they held. Relevance gave separate meaning to the policymakers, to the curriculum planners, and the non-governmental agencies and it also meant differently for the teachers and the learners. The findings showed that the thematic indicators were extremely relevant but a few themes seem not very relevant to the concerned. But they provided a big geographical coverage.

(ii)   Effectiveness: This indicator is meant to say that how effectively the report has conveyed the message to the audience. How many of the stakeholders were able to receive the contents and were able to implement but the answer to the question seemed quite difficult as the audience were the policymakers, administrators, national and

global agencies, the mass media, teachers, and learners. They were not able to answer this query so appropriately.

(iii)   Impact: Regarding the effectiveness of the implementation of SDG 4 strategies. In this section, the outcomes are divided into immediate and long-term. The results showed that about 80% of the participants found it helpful regarding possessing the data about inclusiveness and equity. The academicians refereed mostly to the research articles and very few heard the media briefings.

The findings revealed that the thematic indicators are very relevant and empirical. They added worth to the report. Yet it was felt, some areas required clarity. The recommendations focused on the revisions of the reports so that the current developments can be seen and similarly the results can also be made efficient (Ipsos MORI, 2018).

2.29 Global Citizenship Education and its Critical Analysis

Global Citizenship Education (GCED) and the present century education intend, learners, to be able to think critically, solve their problems, work with others in a team, and possess the skills of communication. Both the MDGs and now the SDGs focus on the access and excellence of education. And the instructors must work for fostering the skills and competencies required in the 21st century. Whenever education philosophy reforms are made the same must be reflected in the curriculum, pedagogy, and assessment. The domains and the competencies required for 21st-century skills must include soft skills, digital and media skills, critical thinking, and the skills required for common humanity. Despite the stress on 21st-century skills, many countries are practicing 20th-century skills and assessment methods. To make a shift it is required that initially there must be a "Goal for Quality" and the same must be reflected in the curriculum, the teaching strategies, and the assessment methods. Alignment of all

above is essential as dealing with them separately will result in an awkward situation. The present curriculum must move from the subject and cognitive skill-based to the competency-based applicative curriculum. The pedagogies need a shift from teacher-centered to learner-centered using information-processing models and the constructivists' learning theories. And the assessment needs a shift from norm-referenced and content mastery to more descriptive and competency-based, well-designed as per the teaching and the learning goals (Care, Kim, Vista &Anderson, 2018). The concept of global citizenship education became known only after 2014 when the United Nations Secretary-General took the Global Education First Initiative. The same concept now has gained prominence and it is specially mentioned in the sustainable development goals and the target 4.7. Despite the global coining of the word, there seems no accord among the member states of the United Nations, and different concepts like international understanding, global education, and human rights education sort of terms are being used. The author regarding global citizenship education and the instructions taken from the present education policy of Columbia thoroughly investigated the usage of the term global citizenship in different documents and the context where this term was used. As per the investigator, the term is said to have three dimensions like intellectual, socio-emotional, and communicative dimension. The first deals with the knowledge concept of the word and the second relates to the applicability of the concept to the thinking of the individual and the third is related to the commitment in the application at local, national, and international levels. It is also noted that certain countries are influencing this term as per the challenges they are facing within their surroundings. The author has cited the example of the United States which added the anti-terrorism treatise to the world agenda. The author further states that the pedagogies according to some documents of UNESCO

states the word "transformative" and demand the learner to carry their learning life -

long and use the skills learned to critically solve the issues facing the person and the

community. And the word competencies is much more stressed whereas the citizenship

concept aims the pupil to know four pillars of learning. Deliberating more upon the

global citizenship concept the investigator brings to notice the three interlinked areas

of society, economy, and the environment and highlights upon the three levels of

learning which initially deals with knowing oneself and the others and then finding the

relationship with the larger community. Citing different studies it is further stressed

that the global citizen has to have understanding and consideration of others and

identify, respect, and value the law though it is not legally binding upon such citizens.

In the concluding remarks, the researcher identified that the education policy made for

their country holds the responsibility of the learner to follow the instructions given as

per the identified global citizenship norms without making any political accountability

(DePoorter & Aguilar-Forero, 2019).

2.30 Summary Chapter 2

The review of literature recapitulates that we live in an interconnected society and this

interlinked world requires the future learners to acquire a type of knowledge, skills, and

values that not only enables them to be good citizens locally but also contribute their

share as global citizens. Such learners require to develop in themselves the values of

peace, tolerance, justice so that they live in harmony and peace with each other.

Sustainable development goals are a global agenda that revolves around people, peace,

prosperity, and the planet which can be attained through partnership. Goal 4 is

specifically related to qualitative inclusive equitable education for all. This is a very

vital goal among all the seventeen sustainable goals as this is a standalone goal as well

as a goal that aids in the attainment of sixteen other goals. This goal has seven targets

and three implementation means. Among these targets, target 4.7 is of immense value as this intends the learners to attain such knowledge, skills, and attitudes which makes them develop international understanding and love for fellow human beings and give importance to multicultural societies and value living in peace and adopting sustainable living styles to attain education agenda 2030. Teachers play a vital role in imparting knowledge skills and competencies to the learner and the curriculum is the means to attain the educational aims. Therefore the curriculum of teacher education is of immense importance as it will groom the teacher for becoming a global citizen and also enable the learner to attain this aim. UNESCO urges the member states of the United Nations to design curricula of teachers which can prepare them to adopt sustainable lifestyles and peaceful behaviors. Target 4.7 revolves around six themes that were identified in the global monitoring report. They are human rights, education for sustainable development, peace and non-violence, gender equality, health education, and global citizenship. The curricula of teacher education in particular and other curricula, in general, must address these basic themes. These are the vital pillars that lead to the attainment of sustainable development goals. Human rights are the basic privileges that a human must be given and to get a quality education is the fundamental elementary right of every individual. Societies where individuals respect others' rights, justice, and opinions flourish and prosper. They give birth to democratic cultures where every individual has a say in matters related to common humanity. Besides we live on a common planet called Earth and rely on its resources for our survival. Prudent use of these resources is essential not only for the present generation but we need to save this treasure even for the coming generation so that they too live in peace and prosper. For that purpose, it is necessary to adopt sustainable consumption and production habits. Protection of the environment, the life in water and earth, saving the precious resource

water, having an uninterrupted supply of energy and avoiding to use fossil fuels and instead adopt renewable energy resources, working for preventing extreme climatic conditions will all enable us to save our planet and the precious living creatures. Moreover, every human must live in harmony. Nations with wars and conflict neither develop nor prosper, so our present learners must be given such education that makes them more tolerant, just, and patient. Teachers have a great role to inculcate peaceful attitudes in learners. No nation can progress when every single member of the society does not contribute to its progress therefore both genders must be given similar importance and rights. The education of women is extremely important as they can contribute to the prosperity and wellbeing of the family and community at large. Adopting healthy lifestyles makes life peaceful and contributes to prosperous societies. Youth is the backbone of any society and it is necessary to make them aware of the importance of other gender and tell them how they can safely coexist and work being aware of the dangers and diseases which are caused due to their negligence and reckless behaviors. Likewise, the present society is interlinked. We are all connected with information and communication technologies. There is more migration today for education, job or settlement and therefore the learners of the coming generations have to accept various cultures and lead peaceful lives. Their purpose of education must be to know and to make their lives purposeful and learn to work in teams. They are required not only to possess the content knowledge but also have to have such skills and knowledge which make them critical thinkers, problem solvers, creative learners, and collaborative workers. The teacher has to adopt such pedagogies which allow the learner to be the creator of knowledge instead of receivers of knowledge. Learners who are responsible local and global citizens can only create sustainable societies for the attainment of the education agenda 2030.

3   **CHAPTER 3**

RESEARCH METHODOLOGY

3.1 Introduction and Overview

This chapter deals with a detailed explanation of the research methodology and the research approaches adopted in the study. It will include the research design, population taken for the study, the sampling method, different variables of the study, the instrument used and the validation and pilot testing of instruments, the procedure adopted to collect the data, and the techniques adopted for the analysis of the data.

3.2 Research Design

The study under discussion adopted the 'Mixed method research approach'.

"Mixed method study is an approach where the researcher combines both the qualitative and the quantitative research, techniques, methods, approaches, concepts or languages into a single study" (Johnson, 2004 p. 17).

The present study adopted "QUAL+ quan simultaneous design" (Morse, 1991). But Teddlie and Tashakkori (2009) preferred to call this design "Parallel Mixed Design" as according to them is a more inclusive term than simultaneous. "This design is also called qualitatively driven concurrent design" Johnson and Christensen (2016, p. 478) as cited by (Schoonenboom & Johnson, 2017). Creswell (2014) called it as convergent design.

3.2.1 Convergent Parallel Mixed Method Design

The convergent parallel design provides a comprehensive understanding of the problem under study. The quantitative results provide general inclinations and associations which are sometimes required, while the qualitative results provide in-depth individual standpoints. Mutually they are useful and their blend not only provides more data but also gives a comprehensive understanding of the issue which would not have been possible with only a single databank. As a result, this design can corroborate, authenticate, or complement the database of one with another (Creswell, 2014).

This research design is used where both the qualitative and the quantitative strands are being implemented at the same time. This design includes two stages. One of the phases is the QUAL phase and the other phase is the QUAN phase or it can be QUAN and QUAL phase. The QUAL and the QUAN phase sometimes is carried out simultaneously or sometimes with a little interval of time between every phase. The two parallel stages are unrestricted by each other. Stage one includes QUAL (qualitative) separate data collection and separate data analysis and the other stage involves QUAN (quantitative) separate data collection and separate data analysis. Both the stages of QUAL and QUAN are prearranged and conceded to answer similar aspects of the basic research question. Each phase provides data to draw conclusions and inferences and then depending on the data of each phase conclusions are integrated from QUAL and QUAN and meta-inferences are made (Teddlie & Tashakkori, 2009). In this design the investigator probes research questions to endorse the existing thinking and to discover new thoughts. Morse's (1991) notation of designs can be either of equal orientation (QUAL+QUAN) or of the design where one phase dominates the other. If in the design the quantitative aspect dominates it is denoted as QUAN + qual and if the qualitative phase dominates it is written as QUAL+quan. In 'Parallel Design' the two

data analyses are conducted independently and the evidence of the phenomena is provided by connecting, combining, or integrating from both the qualitative and the quantitative analysis (Graff, 2016).

Morse (1991) explained several 'Simultaneous designs' like:

QUAL+ qual represents the qualitatively focused, qualitative simultaneous design

QUAN + quan denotes quantitatively focused quantitative simultaneous design.

QUAN+ qual indicates a quantitatively focused, quantitative and qualitative design.

QUAL+ quan signifies qualitatively focused, qualitative, and quantitative simultaneous design.

The present study adopted "QUAL+ quan simultaneous design" wherein:

QUAL (Content Analysis & Open-Ended Questions) + quan (Closed-Ended Questionnaire) is used (Morse, 1991).
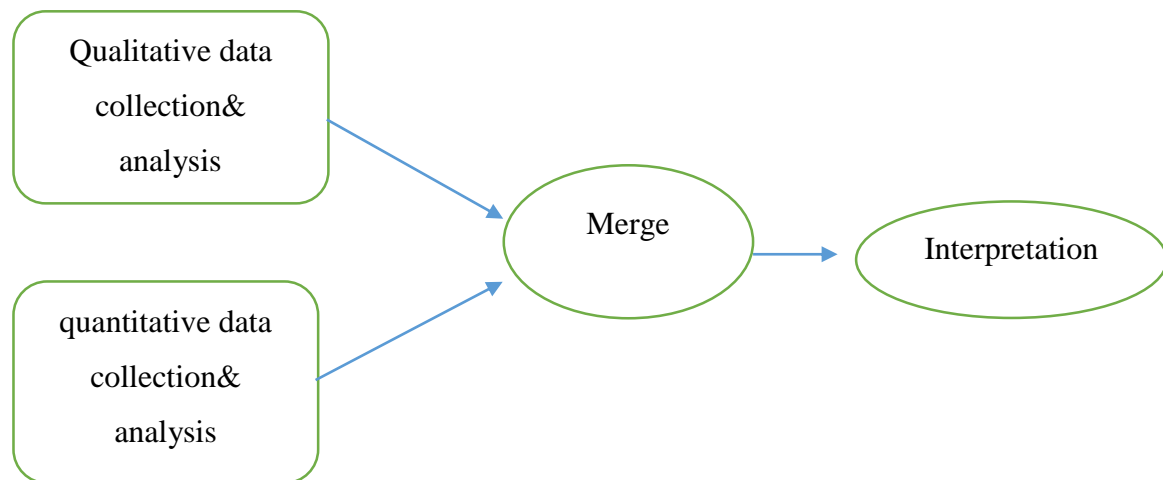
Figure 3.1 Convergent/Parallel Mixed Methods Design (Creswell, 2014)

3.2.2 Research Philosophy

Pragmatism is the philosophy adopted for mixed-method research. It enables to find a middle ground between different philosophies and offers a practical solution to the issue

considered under the study. For the pragmatist, knowledge can be constructed as well as can be grounded on the reality of the world we are surrounded in. The theories are refereed based on probability and appropriateness. Here, the quantitative research (closed-ended questionnaire) adopts a scientific approach to find out the objective reality regarding the views of the curriculum experts. In such a probe both the researcher and the phenomena do not interact with each other and objectively tries to find out the truth. Whereas on the other hand the qualitative research (content analysis and open-ended probing) believes in the fact that there can be more than one truth and it is grounded on the subjective and interpretive standard. Here there is an interaction between the researcher and the phenomena. Both of them are always together. There is an advantage of using both quantitative and qualitative research as quantitative data provides immediate and objective data while the qualitative data results give the in-depth analysis of the topic under study (Johnson & Onwekhuzie, 2004).

3.3 Study Procedure

A study procedure is a plan made by the researcher to answer the posed research question. In the present study, the researcher adopted a "mixed research approach" where she has used the qualitative component of content analysis for examining the curriculum of B.Ed. (Honors) and simultaneously used a survey questionnaire that had both closed and open-ended questions. The open-ended questions were analyzed qualitatively while the closed-ended questions were analyzed quantitatively. The qualitative design dominated the study. The results of qualitative and quantitative findings were ultimately intended to be combined merged and then interpreted. Rigorous comparison for qualitative and quantitative was not done because generalization was not the purpose of the study but to complement, supplement and validate the findings of content analysis mixed-method approach was adopted. The

reason for doing content analysis and also carrying out the survey questionnaire was to get in-depth information on the topic under study. Finally, the study proposed a 'Course outline of GCED and ESD' in the light of findings for future reference of the relevant stakeholders.

3.3.1 Part-1 Qualitative Component

3.3.1.1 *Content analysis:*

Content analysis is a pervasive method, especially popular in medicine and health studies. Despite the widespread usage absence of its appropriate definition and processes has posed certain limitations. There are three methods of content analysis. They are: conventional, directed, and summative. In a conventional technique, the researcher collects the information through consultations and open-ended questions and then attempts to read out the data thoroughly and attempts to develop codes and these codes are converted to categories and then to the meaningful groups and then to themes. The investigators then try to explore the meaning out of the data and finally appropriate theories or findings of the study are stated. In the directed method of content analysis, the existing theory which is not complete is explored to extend or validate the hypothetical framework or scheme. Here both the interviews and the specific subjective investigation are carried out. An analysis is can be done both deductively and inductively which depends on the type and purpose of the study. The third approach of content analysis is summative content analysis. Here the investigator attempts to find out the codes, categories, and themes from the texts or documents and the process adopt a manifest search of codes and categories which are predetermined or the latent meaning of the text can also be found. In the process of latent content analysis, the hidden meaning of the text is found whereas in the manifest search only the existence of the words is seen. In the present study summative approach was used with manifest

search and the codes, subthemes, and themes were identified from the document of B.Ed. (Elementary) curriculum (Hsieh & Shannon, 2005).

In the first part of the study, the researcher did the content analysis to measure themes and subthemes. Thematic analysis was done with a priori (pre-determined themes of GCED and ESD) given (Appendix-D) as provided by (IBE, 2016 p. 9). According to Chawla & Sondhi, (2011, p. 130) content analysis studies, the formerly documented or stated communication methodically and empirically break them into more practicable components that are associated with the subject under study. As the nature of this technique is exclusive and it deals with the creative investigation of data, therefore, it is considered under primary methods. Brough (2018, p. 211) states content analysis and thematic analysis are two noticeable approaches applied for the analysis of the communication content. They can be investigated both by humans as well as computer programs. Both these approaches try to investigate both the noticeable and the undiscernible concepts. They can be used only after deciding about the research questions or hypothesis so that the analysis is done but both methods are strenuous and time-consuming. Thematic analysis is done by using already identified groupings or the categories can be identified as the analysis proceeds (Fox, 2004). In the present study, the researcher used already identified categories or themes.

3.3.1.1.1 Coding Scheme

The present study utilized the coding scheme which was developed by the research group of the International Bureau of Education (IBE) and the Global Education Monitoring Report team (2016). During the development of this coding scheme IBE and UNESCO, passed this through numerous re-examinations and modifications. They, in the process of validating also, passed it through parallel coding with different coders so that the confusions and the vague terms get clarified and permit clear interpretation.

Henceforth this is a highly reliable instrument and it was administered for the present study with the formal permission acquired from UNESCO. Permission mail is attached (Appendices J-O). The coding was done with six categories related to GCED and ESD. Here Global Citizenship Education (GCED) includes collectively five themes of Human rights, Peace and Non-violence, Gender Equality, Health, and Well Being, and Global Citizenship Education, while Education for Sustainable Development (ESD) is treated separately. The a priori themes for coding for content analysis are as follows:

(i)   Human Rights

(ii)   Peace and Nonviolence

(iii)   Global Citizenship

(iv)   Gender Equality

(v)   Health Education

(vi)   Education for Sustainable development

(vii)   Competencies

(viii) Pedagogies (IBE, 2016 p. 9) (Appendix-A).

Besides this, the coding was also applied to "Competencies & Pedagogical approaches and methods". The above-stated coding was further distributed into sub-themes and they are grounded on the recommendations made by UNESCO in its various publications. They enabled the investigator to examine the curriculum on the features of 'Global Citizenship' and 'Education for Sustainable development. These two main categories of GCED and ESD themes are based on target 4.7.1 of the SDGs. The process of coding is applied not only to the content knowledge present in the curriculum of pre-service teacher education but also to investigate if the curriculum of B.Ed. (Honors) Elementary is imparting competencies and the pedagogical methods and practices in the light of GCED and ESD (IBE, 2016).

3.3.1.1.2 **Coding Procedure**

The curriculum document of B.Ed. Elementary (Honors) was coded by probing for the basic expressions or key terms or sub-codes linked to GCED and ESD themes and subthemes. Document analysis is a qualitative research where documents are analyzed and the themes of GCED and ESD if had all eight sub-themes it was assumed 100% presence and if 4 sub-themes were present it was assumed 50%, etc., as was done in curriculum analysis of 78 countries by IBE (2016)., and were qualitatively clarified with a descriptive explanation.

If the key term as per GCED and ESD was present it was coded as "1" and if the key term was not present as per the sub-theme of GCED and ESD it was denoted by "0".

a.   A sum count, expressing the number of sub-categories not found as '0' and

b.   A key count coded '1' if one or more sub-theme was found present (i.e. if the main theme was characterized in the same manner. The total index sum was also counted which a maximum of 8) "eight" represented 100 percent presence of the theme and "four" represented 50% and so on and in absence of any code, sub-code, subtheme it was denoted by "0" (Appendix-G, H & I).

The document search for the curriculum was kept as focused as possible. All possible efforts were made to avoid the omission of any essential information that was articulated in alternative methods or terms. The investigator searched for the key terms related to sub-themes of GCED and ESD in the outlines of the curricular document. As the outlines of courses cover the intended outcomes, class expectations and mention what materials they will be covering in the stipulated time frame, and include the tasks of students and the teacher. It has a clear and accurate course calendar, material that aids the teacher in evaluating the pupil, course and the program, pre and co-requisites of the course and in short all required important information (Parkay & Hass, 2002).

Therefore the outlines of the B.Ed. Elementary (Honors) curriculum was evaluated for the presence or absence of the GCED and ESD themes and sub-themes. According to Bowen (2009) in the social research method and while going through the analysis care must be taken to properly interpret the meaning of the document and the way it is contributing to the issues that are being researched. It is very much necessary to ascertain the genuineness, reliability, precision, and representativeness of the chosen document. The investigator must keep vigilance about the purpose for which the document is being assessed and how far the process is serving the purpose for which it is being investigated. It is not the number of documents that are being researched counts rather the purpose for which the research is being done matters. The researcher must focus on the neutrality and understanding of the topic being studied and strive to keep a balance between both. Keeping the same objective in mind the researcher carefully investigated the curricular document (Bowen, 2009).

Initially the investigator for "Content Analysis" of the curriculum of teacher education at B.Ed. (Honors) Elementary level used pre-determined (a priori) GCED and ESD themes of IBE (2016), to see if these themes existed in the B.Ed. curriculum or not. The curriculum has 39 subjects in all, which are prescribed by the HEC Pakistan and some other subjects are taught by the individual universities but are not part of the study. The investigator studied all these subject outlines along with their intended learning outcomes to find out if these themes exist or not in the subjects prescribed by HEC. As for the attainment of education agenda 2030, the teachers and learners must have the knowledge, skills, behaviors, and values related to GCED and ESD. The researcher explored the literature given regarding the global citizenship aspects and elaborated on what different experts have told about these key themes. For answering the first question 'Content Analysis' of the curriculum document was carried out which

highlighted, not upon the frequency of occurrence of the themes rather it focused upon the "presence" or "absence" of the themes. The data was collected in the first instance by searching for the keywords regarding the themes of GCED and ESD in the B.Ed. (Honors) curricular document and accordingly the same was entered on the excel sheet, and later it was illustrated with descriptive explanation, charts, and graphs drawn to show the inclusion of these themes. The themes for global citizenship education and education for sustainable development were explored by word search in the soft form. Then the themes were explored by manual search going through every word or phrase from the hardbound curriculum document outlines. Both computer word searches and the manual search aided to ensure the presence of the keywords or subthemes in all the 39 subject outlines of B.Ed.

3.3.2 Part-2 (A+B) Quantitative & Qualitative Components

3.3.2.1 Survey Questionnaire

The second part of the research was a survey questionnaire that had both qualitative and quantitative components. The quantitative part comprised closed-ended questions, while the qualitative part had open-ended questions. The second research question was answered by administering the questionnaire with the curriculum experts (NCRC) members and their co-opted members who developed the curriculum of B.Ed. The survey questionnaire was queried from the respondents regarding the inclusion of the themes of GCED and ESD.

3.3.2.1.1 **Closed-Ended Questionnaire (quantitative)**

The close-ended questionnaire was rated on a five-point Likert scale ranging from strongly agree to strongly disagree. The purpose of closed-ended questions was to get the precise and objective opinion of experts.

3.3.2.1.2 **Open-Ended Questionnaire (Qualitative)**

The qualitative open-ended questions allowed the experts to freely give their opinions regarding the subjects for the inclusion of the themes, the gaps they find in the curriculum, and the challenges they see in the inclusion of GCED and ESD themes. The rationale behind selecting a survey questionnaire instead of a semi-structured interview was because of the geographically dispersed experts' (sample of the study) which was situated throughout Pakistan, and the busy schedule of the participants who held key posts and were having hectic routines.

3.4 IBE-UNESCO (2016) Themes of Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) adopted for Survey

FIGURE 13:
Human rights is the most prevalent concept in national curricula
Percentage of countries including each of the key terms in their national curriculum frameworks, 2005–2015

Note: The analysis is based on a sample of 78 countries.
Source: IBE (2016).
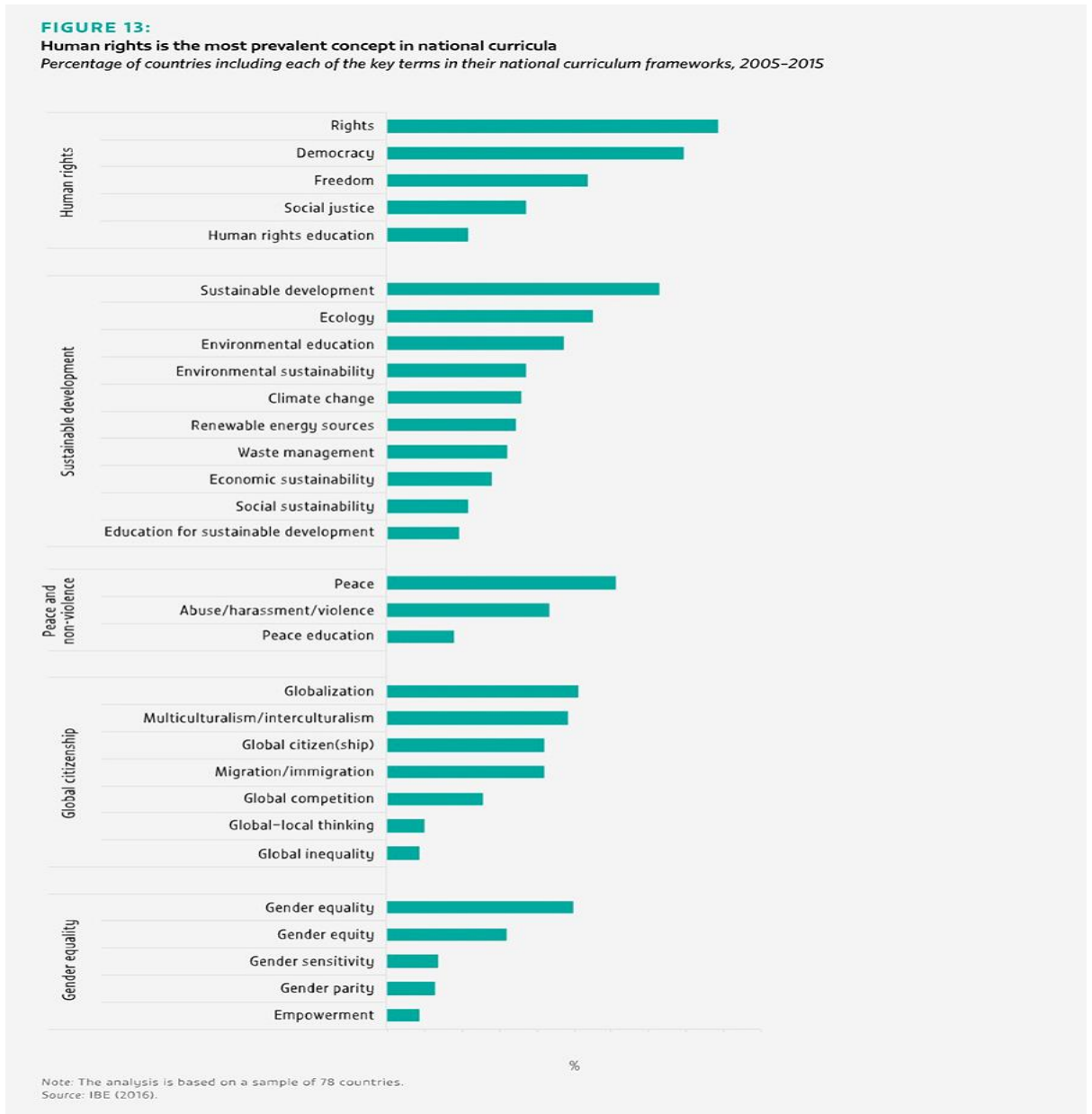
Figure 3.2 Themes of GCED&ESD Source: (UNESCO, 2016b p.293).

3.5 Participants of the study

A purposive sampling technique was adopted for the study. This is a non-probability sampling technique and is adopted to achieve the best possible evidence for the purposes set for the research. Experts are the respondents who are proficient and hold the experience and willingness to provide the required information from their field of expertise. Here they were the curriculum developers, who developed B.Ed. (Honors) Elementary curriculum. They were the most suitable participants and expressed their opinion in an eloquent, communicative, and insightful manner. They possess the features which are best suitable for the study undertaken (Etikan, Musa & Alkassim, 2016). The researcher tried to take the opinion of the people who were experts in the area of study and attempted to collect information from people or participants who are viewed as experts in the field (Etikan & Bala, 2017). Hence by adopting the expert purposive sampling technique, 107 curriculum developers, which includes NCRC members and their co-opted members taken as per the information available on the HEC website which has details of B.Ed. subjects and developers of course guides. Participants of the study are all curriculum developers including 29 NCRC members of the 2012 education curriculum and their co-opted members who aided them in developing the syllabi and course guides of B.Ed. (Honors) Elementary. They were selected from the HEC website. Accessible 107 curriculum experts which include 29 NCRC and their co-opted members were chosen for the study. But ultimately 70 participants gave the complete data required for the study.

3.6 Details of Research Participants

Table 3.1   *Details of Participants/Curriculum Experts*

S. No.	Total Sample	No of Responses
No. of NCRC members	29	22
No. of Co-opted members of NCRC	78	48
Total	107	70

Source:

https://hec.gov.pk/english/services/universities/RevisedCurricula/Pages/Education.aspx

3.7 Research Instruments for the study

(i)   Global Citizenship Education (GCED) collectively includes Human Rights, Peace, Gender Equality, Health, and Well-Being, and Global Citizenship, whereas Education for Sustainable Development (ESD) is mentioned separately but included within the other main themes. The instrument used for collecting the information for the content analysis was taken from (IBE, 2016, p. 38) with their formal permission (mails attached in appendices-J-O). Two separate questionnaires were used. In the first questionnaire of content analysis every subject of B.Ed., the curriculum was studied to search for the themes of GCED and ESD. The questionnaire for the coding scheme was initially developed by the International Bureau of Education (IBE, 2016) as there it was passed through various tests and re-test and numerous pilot studies and comparable coding was also done by them. There are six main themes and additionally, two themes of competencies and pedagogies of GCED and ESD were included. The total main themes for content analysis were eight.

(ii)   The other instrument was a survey questionnaire. This was adapted from the document of the Global Education Monitoring Report with slight modification, by only adding health theme to it (UNESCO, 2016 p.293). (Figure 3.2). Constructs were not changed. In the second questionnaire, there were both close-ended and open-ended questions. A closed-ended questionnaire was designed with a five-point Likert Scale ranging from "strongly agree" to "strongly disagree". It had six themes and subthemes. The subtheme for each main theme ranged from three to ten. And three open-ended questions were posed for the unbiased opinion of the curriculum experts.   The instrument was later validated for face and contents validity by three educational experts (Appendix-B).

3.8 Purpose of Survey Questionnaire

(i)   The purpose of the questionnaire is to collect information that is relevant and suitable for the study design.   To get the opinion of the respondents a 'closed-ended questionnaire was adapted based upon the scale given in the global education monitoring report (IBE-UNESCO, 2016, p. 293). It altogether had six broad themes which were further divided into several sub-themes ranging from three to ten sub-themes or sub-items. The competencies and pedagogies were not part of the close-ended questionnaire. Similarly for the detailed opinions of experts, as the second part of the questionnaire, an 'open-ended' questionnaire was used. It had three open-ended questions which were posed to ask for the gaps the experts find in the curriculum, their opinion regarding the inclusion of these themes and the subjects they feel these themes must be integrated, and the challenges if any they find in the integration of these themes. The questionnaire was designed as per the suggestions of the supervisor and three other experts who validated the questionnaire, for the themes taken from IBE-UNESCO (2016).   See (Appendix-R-T).

3.9 Pilot Study

 The success of any questionnaire depends upon the pilot test as the stage of pilot testing is very useful. It helps avoid huge data being mishandled and puts the whole research in doubt. The questionnaire was adapted by the researcher based upon the instrument taken from the global education monitoring report (IBE-UNESCO, 2016, p. 293) for the themes of GCED and ESD. No major changes were made except the 'Health and Well-Being' theme was added which was also taken from (IBE, 2016).   It was administered with 15 respondents from one university. These 15 respondents for the pilot study were the curriculum experts who also worked as co-opted members of NCRC members. They were not part of the main study. After the pilot study, the

questionnaire was administered and a few open-ended questions were re-phrased as required. But the close-ended questions were not changed as the reliability quotient was high. Pilot studies enable the suitability of the instrument, allow to gauge the feasibility of the instrument, permits to see the likelihood of success of the proposed approaches, enables to amend the research questions and research design, convince funding bodies that the investigative team is competent and knowledgeable (Teijlingen & Hundley, 2001). The results of the pilot study are given below (Table-3.2).

3.10 Inter and Intra scale reliability

Table 3.2   *Alpha Reliability Coefficient of Variable Inter theme-wise and Intra theme-wise*

S. No	Scale	N	Alpha Coefficient
1.	Human Rights	5	.86
2.	Education for Sustainable Development	10	.98
3.	Peace	03	.87
	Gender Equality	05	.97
4.			
5.	Health and Well-Being	06	.96
6.	Global Citizenship	07	.99
	All above six themes(Inter Reliability)	36	.97

Table 3.3	*Alpha Reliability of all themes of GCED and ESD*	
Cronbach's Alpha	Cronbach's Alpha Based on all above six Items	No. of Items
	0.97	36

3.11 Reliability

Chronbach's alpha coefficient is a specific measure of the degree to which items within the scale measure the same construct as other items in the scale. This is the most common measure of scale reliability (Cronbach, 1951). In the present study as the questionnaire used was a standardized one it had the highest reliability. There were five themes in the available scale which had 30 items (IBE-UNESCO, 2016). Later another theme of Health & Well Being was added and six more items (subthemes) were increased reaching a total of 36 items. The reliability for the human rights theme was .86, while the reliability for education for sustainable development was .98, for the theme of peace it was .87, whereas for the theme gender equality it was .97, for the theme of health and well-being it was .96, whereas for global citizenship it was .99 which was highly reliable. The inter-scale reliability of these 36 items was 0.97. The reliability less than .50 is called low reliability and .70 is the acceptable reliability. Hence the instrument was much reliable as it showed very high-reliability measures (Cruickshank, Pedersen, Cooley & Hill, 2018).

3.12 The validity of the Instrument

For an instrument to be administered with confidence it needs to be valid as well as reliable. Validity is established when an instrument measures what it intends to measure (Cohen, Manion & Morrison, 2013). The more discussed types of validity are construct validity, face validity, content validity, and criterion validity. The researcher used the instrument for content analysis from (IBE, 2016 p. 38), and the survey instrument was taken from (UNESCO, 2016 b p.293) by their formal permission (e-mails) attached (Appendices- J-O). According to the International Bureau of Education, this scale has high reliability and validity. In their own words regarding validity and reliability as scale authors say:

*A research team from the IBE and the Global Education Monitoring Report team developed the coding scheme. The process involved several pilots, with recommendations and revisions made accordingly. This development stage also included parallel coding, with different coders coding the same documents, which helped to highlight terms that were unclear or particularly subject to interpretation. The team then reconstructed these terms to increase coder reliability (*IBE, 2016 p.9).

The researcher still carried out the validity of the instrument with the help of experts in the field.

(i)   Construct Validity: It denotes the practicality of the idea, concept, or behavior, how the certain idea is translated into operational form (Cruickshank, Pedersen, Cooley & Hill, 2018). Constructs were already developed by (IBE-UNESCO, 2016). The constructs were not changed nor any new construct was developed.

(ii)   Face Validity: To ensure the face validity of the instrument, the questions were framed clearly according to the subthemes of every main theme of GCED and ESD. Readability and uniformity of style and formatting and clarity of language were ensured. The instrument was objectively structured and the subthemes were classified under the thematic category. The experts and the supervisor validated this part.

(iii)   Content Validity: This measure sufficiently covers the area it is intended to cover. Here the instrument is intended to cover global citizenship education and education for sustainable development. Therefore the content validity was ensured by getting it validated by the panel of judges who were experts in the field. They were the faculty members teaching at the university level. They were experts in the relevant field, especially in the subject of global citizenship and peace. They were requested to give their opinion about the clarity, simplicity, and relevance of the items. As per their suggestion, the acronyms of GCED and ESD were written in full form. Moreover, the

scale was a standardized instrument, therefore it was slightly adjusted by adding the health and well-being subthemes which were again taken from the International Bureau of Education (Cohen, Manion &Morrison, 2013). As the instrument was not prepared by the researcher but was prepared by the team of the International Bureau of Education and UNESCO, it was a highly valid scale. However, the instrument was administered only after getting endorsed by the experts here in Pakistan (Appendices- R-T).

3.13 Details of Items of Close Ended Survey Questionnaire

Table 3.4   *Details of Items of Close Ended Survey Questionnaire*

S. No	Themes/Names	Item Detail	No of Items
1.	Human Rights	1-5	05
2.	Education for Sustainable Development	6-15	10
3.	Peace	16-18	03
4.	Gender Equality	19-23	05
5.	Health Education	24-28	06
6.	Global Citizenship	29-36	07
7.	Total		36

The main themes of the survey questionnaire were six. Further, the main themes were divided into sub-themes. There were 05 items of Human rights, 10 items of Education for Sustainable Development, 03 items of Peace, 05 items of Gender Equality, 06 items of Health Education, 07 items of Global Citizenship and the total items were 36.

3.14 Data Collection Procedure

The researcher adopted different methods to collect the data. Initially, a formal letter for collecting the data was taken from the HOD Education. The same letter was vetted by the supervisor (See Appendix Q). Firstly, the researcher visited HEC to acquire the curriculum document of B.Ed. (Honors) Elementary education, so that the first part of the study i.e., content analysis can be carried out. The director curriculum wing was very supportive and provided the soft and hard copies of both the ADE curriculum and B.Ed. Honors curriculum document and also suggested taking the list of NCRC members and their co-opted members from the HEC website as well.

The data for the survey questionnaire was then taken by personally visiting the experts where feasible, it was also sent through courier and registered posts, through special messengers, and through surface mail with self-addressed stamped envelopes, to the respondents spread all over Pakistan. The experts who accepted to fill the questionnaire and send it back by surface mail were sent the questionnaires along with the stamped envelopes by post, some of the questionnaires were sent through special messengers. The questionnaire for Sindh was sent by a special messenger, for Baluchistan researcher sent her colleague who was a native of that province. Similarly, for KPK and Gilgit Baltistan, the questionnaires were sent by post. The researcher herself visited Punjab and the areas of Islamabad and Rawalpindi. The respondents were requested to fill the questionnaire and some of the experts who didn't respond on the first mail were again given soft reminders and again sent the questionnaire with stamped return address envelope but still, all responses couldn't reach. Some of them didn't fill the complete questionnaire. They left the open-ended part of the questionnaire. Therefore the questionnaires complete in all respects were picked for the study. They were in all seventy.

3.15 Data Analysis and Interpretation

For Content analysis, the documents of both ADE and B.Ed. Honors (Elementary) were searched for the presence of subthemes, it was denoted by "1" for presence and "0" for absence. The themes were summatively calculated (Appendix-I). Later the same was analyzed with descriptive statistics showing the results in percentages and with bar graphs, as explained in chapter 4. The data was entered for every subject in the excel sheet. Later all subjects were combined and every theme was measured individually. Next, all themes were again collectively analyzed to express them descriptively in percentages and displayed with graphs. Similarly, competencies and pedagogies were separately assessed and they were also interpreted descriptively in percentages and shown in graphs. For the survey questionnaire, the data of close-ended questionnaires were analyzed using SPSS 21 software package. It was analyzed by finding the means and standard deviation and the results were also presented in percentages with frequency tables and graphs and an explanatory description was given.

In the second part of open-ended questions, the analysis was done through Nvivo10. The data collected through the open-ended questions were then coded, interpreted, and analyzed through word trees, word clouds, and a descriptive explanation as required.

Finally, a 'Course outline of GCED and ESD' was to be developed as per the consensus and agreement of experts of the study for the future curriculum of B.Ed. in Pakistan to attain education agenda 2030.

The results of qualitative and quantitative findings ultimately were intended to be merged and interpreted. Creswell, Plano Clark, Gutmann &Hanson (2007) citing Hossler and Vesper (1993) deliberating about the features of mixing qualitative and quantitative research told the design "convergent parallel method" is used when the

data is separately collected, separately analyzed, and mixed only at the data interpretation or discussion stage of thesis writing. Moreover, the design sometimes gives priority to qualitative research, as is the case with the present study. But Tashakkori &Teddlie (1998) called this simultaneous design a parallel mixed model. The present study did not intend to generalize findings or perform rigorous comparison and only anticipated to get in-depth and rich information from both sources of data, so did not opt for stringent analysis rather tried to identify the specific differences and reported the same.

3.16 Ethical Aspect of Research

The data taken for document analysis is the content of the curriculum and any document or content is non-responsive. It was an unobtrusive search. Hence there is no fear of keeping confidentiality and privacy as the documents are in public reach always. The curriculum document was from HEC which is a reliable source. But the second part of the study was related to the experts of the curriculum, so it was ensured that the information shared by them including their names were kept confidential, and measures to avoid any type of conflict were taken. Respondents were asked to voluntarily participate in the study and measures to build and maintain trust were taken. All procedures were done in the written version. Their opinions were treated with dignity, honor, and confidentiality. Before the collection of data, a permission letter was taken from the university which mentioned the use of research data was only for academic purposes (Appendix-P).

3.17 Alignment of Research Objectives & Research Questions with Data Analysis

Table-3.5   *Alignment of Research Objectives & Research Questions with Data Analysis*

Objectives	Research Questions	Themes	Statistical treatment
Research objectives 1 To examine the curriculum of B.Ed. Honors. (Elementary) in the light of Education Agenda 2030 with special reference to Target 4.7 of SDGs.	Which themes and theme and subthemes are present in the course outline/curriculum of pre-service teacher education (B. Ed Honors, Elementary) related to GCED (Global Citizenship Education) & ESD (Education for Sustainable Development) of Sustainable Development Goal 4, Target 4.7, and Education Agenda 2030 and to what extent it is available?	1. Human Rights 2. Education for Sustainable Development 3. Peace 4. Gender Equality 5. Global Citizenship 6. Health Education 7. Competencies 8. Pedagogies	Content Analysis With a priori/pre-determined themes of GCED and ESD
		1. Human Rights	Content analysis

	2.Education for Sustainable Development	Content analysis
	3. Peace	Content analysis
	4.Gender Equality	Content analysis
	5.Health & Well-Being	Content analysis
	6.Global Citizenship Education	Content analysis
	7.Competencies	Content analysis
	8.Pedagogies	Content analysis

Research objectives 2	Q-2What are the	Part-2A (Close	Five-point
To investigate the perspectives of curriculum experts regarding the inclusion of content in B.Ed. Honors. (Elementary Curriculum) concerning GECD & ESD of Sustainable Development Goal 4 in Target 4.7 of Education Agenda 2030.	perspectives of curriculum experts regarding the inclusion of themes/contents related to GCED & ESD and gaps and challenges they find in the curriculum of B.Ed. Honors Elementary Pre-Service Teacher Education?	Ended Questionnaire) 1. Human Rights 2. Education for Sustainable Development 3. Peace 4. Gender Equality 5. Global Citizenship 6. Health Education	Likert Scale Descriptive Statistics with means and standard deviation, Frequency percentages, and descriptive explanation
		Part-2B (Open Ended Questionnaire)	NVivo 10 & Expressed in Word Trees, Word Clouds, and Descriptive Explanation.

Research objectives 3	Research Question-3	Suggested 'Course outline of GCED and ESD' for future B.Ed. Curriculum in Pakistan	'Course outline and resources Suggested'.
To suggest a 'Course outline of GCED and ESD' in the light of study along with resources for the future curriculum of B.Ed. in Pakistan.	What course objectives and topics can be included in the 'Course outline of 'GCED and ESD' in the upcoming curriculum to attain education Agenda 2030?		

4   CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

This chapter presents a detailed analysis of the data collection and its interpretations. Here in the present study contents of B.Ed. the curriculum was studied and the views of the curriculum developers are presented. Initially the analysis of the curriculum of B.Ed. Elementary (Honors) approved by HEC was studied subject by subject. There are 39 subjects which are categorized as compulsory courses, foundation courses, professional courses, content courses, teaching practice courses. The courses offered by HEC were taken for the study. Some content courses which are left at the discretion of universities were not part of the study sample. B.Ed. (Honors) Elementary has eight semesters and 17 credit hours are allocated for every semester. In the Initial semesters, compulsory courses are more focused and in the later stages, more stress is on professional courses. In between foundation/Content courses are undertaken by the students of B.Ed. (Appendix-D). For content analysis, the instrument taken was from (IBE, 2016). For survey questionnaire, it was taken from (IBE-UNESCO, 2016).

Simultaneously, with content analysis, the comments recorded by curriculum experts on the close-ended questionnaire are presented and finally, the views expressed in the open-ended survey questionnaire are discussed. UNESCO for the education agenda intends learners at all levels to have developed the knowledge, skills, and competencies of GCED and ESD by 2030.

Therefore it intends the curricula of 'Teacher Education' to include the themes related to GCED and ESD. The six main themes which include this are:

a. Human Rights

b. Sustainable Development

c. Peace and Non-Violence

d. Gender Equality

e. Global Citizenship

f. Health Education

The B.Ed., curriculum content was explored for the inclusion of cognitive skills, values, and attitudes. The main category here was the competencies which were further divided into various subcategories. Every theme was separately analyzed for every aspect of Content Knowledge, Competencies, and Pedagogical Approaches/Methods. The number of categories and the sub-categories were marked as included and not included and calculated graphically for the presence or absence of those thematic categories. The competencies and the pedagogies were separately analyzed for their subject-wise comparisons (IBE-UNESCO, 2016) as was done in Global Monitoring of Target 4.7: Themes in National Curriculum Frameworks).

4.1 Objective-1:

To examine curriculum course outlines for knowledge, skills, and competencies of B.Ed. Honors. (Elementary) regarding GECD & ESD themes of Sustainable Development Goal 4 in target 4.7.1 of education agenda 2030.

4.2 Research Question

Which themes and subthemes exist in the curriculum of pre-service teacher education (B. Ed Honors, Elementary) regarding knowledge, skills, and competencies related to GCED (Global Citizenship Education) & ESD (Education for Sustainable

Development) of Sustainable Development Goal 4, target 4.7, and to what extent it is available?

To answer the objective and the research question stated above, the contents of the curriculum of B.Ed. (Honors) Elementary was studied. The outlines for all the subjects were studied as per the given themes. Every theme has further sub-themes and the presence was denoted by "1" and absence was denoted by "0". Recurring themes were not counted frequently. One sub-theme was counted only once and its absence was denoted as zero. For the graphical representation, the themes were counted and mentioned as per their presence and absence.

4.3 Part-I Content Analysis

4.3.1 Graphical representation of content analysis for the sub-themes of Human Rights
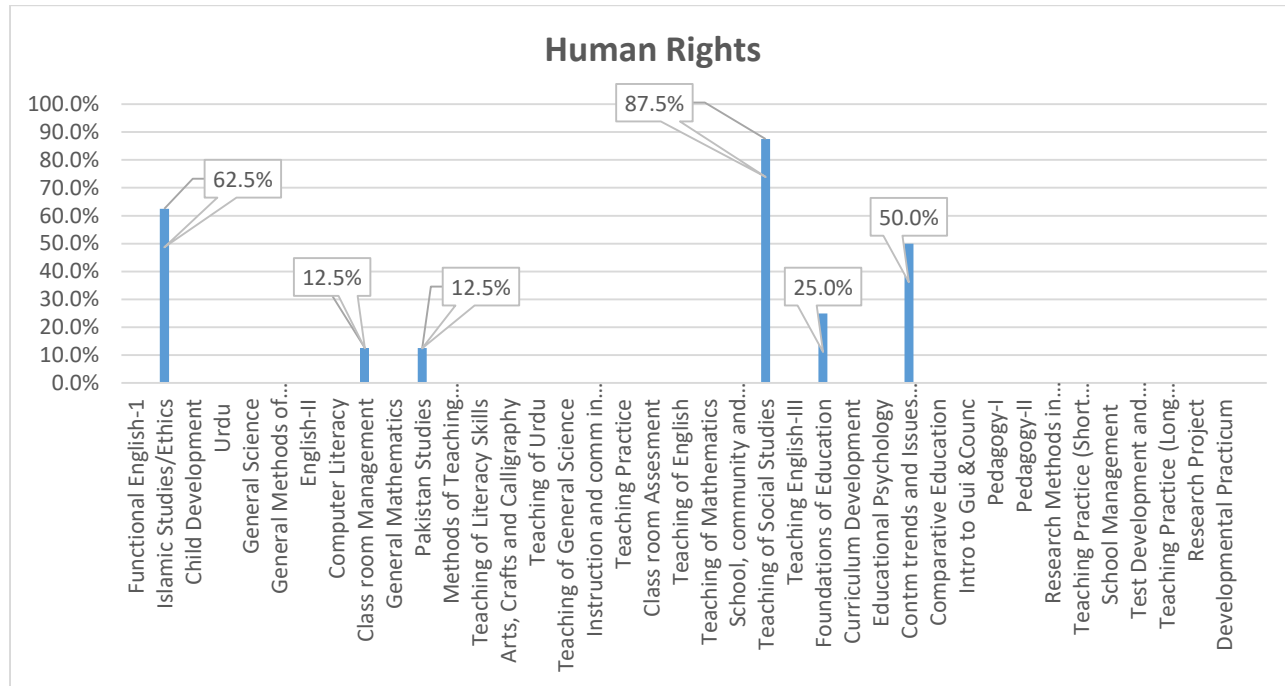
Figure 4.1 Human *Rights*

The Human Rights theme was abundantly included in the contents, with 62.5% in the subject of "Islamic studies", 87.5 % in the subject of "Teaching of Social Studies", 50% in the subject of "Contemporary Trends and Issues in Education" 25% in the subject of "Foundations of Education", 12.5% in the subject of "Class Room Management" 12.5% in Pakistan Studies. These themes were analyzed only for their content knowledge.

4.3.2 Graphical Representation of the subthemes of Education for Sustainable Development
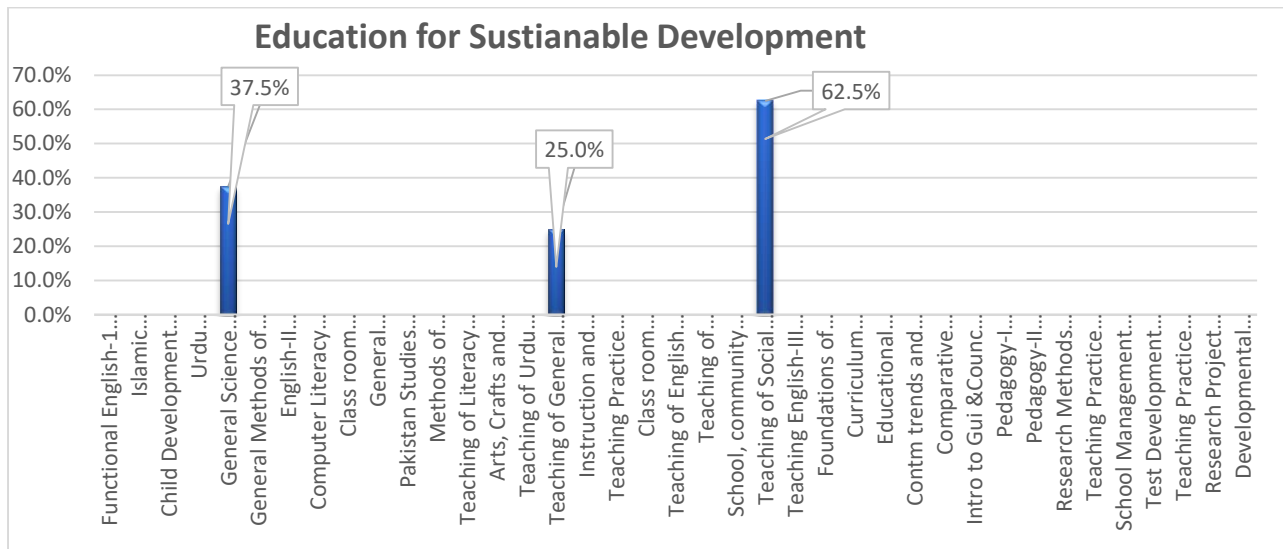
Figure 4.2 Education for Sustainable Development

The subject of "General Science" has 37.5% of the sub-themes of Education for sustainable development. The subject "Teaching of General Science" has 25% of the subthemes and the subject of "Teaching of social Studies had 62.5% of the subthemes.

4.3.3 Graphical Representation of the subthemes of Peace & Non-violence
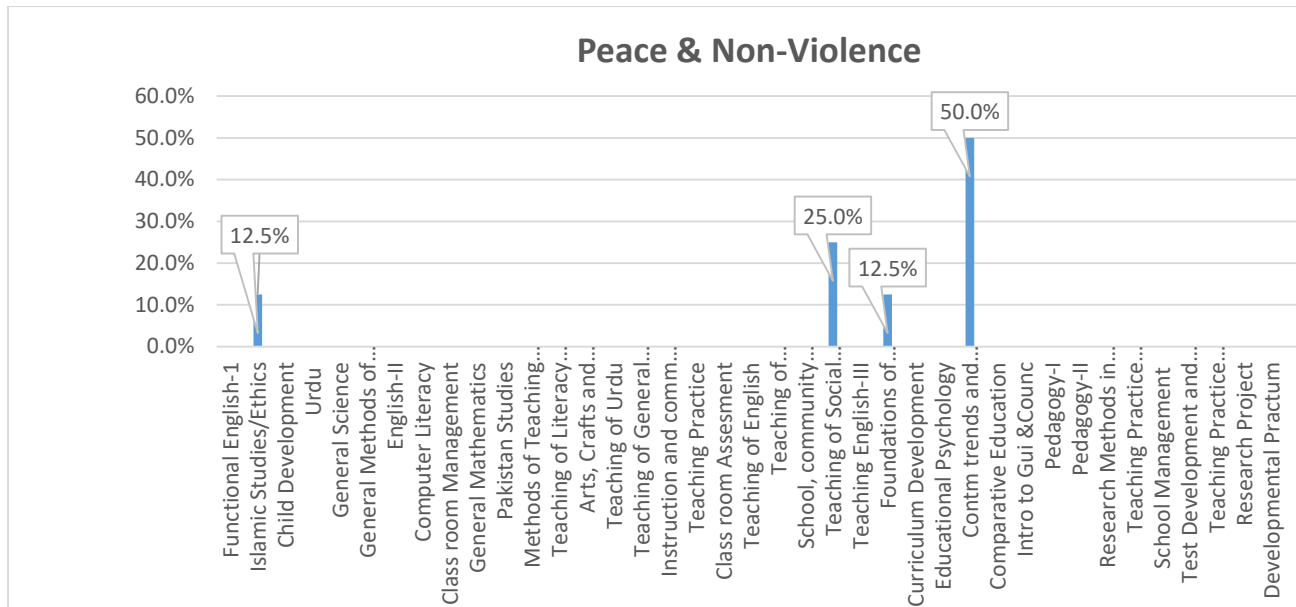
Figure 4.3 Peace and Non-Violence

The subject "Islamic Studies" has 12.5% of the content knowledge related to peace, "Teaching of Social Studies" subject has 25% of the subthemes, the subject "Foundations of Education" has 12.5% of the content knowledge, and 50% of content knowledge regarding the subthemes of peace was witnessed in the subject "Contemporary Trends and Issues in Education".

4.3.4 Graphical Representation of the subthemes of Gender Equality
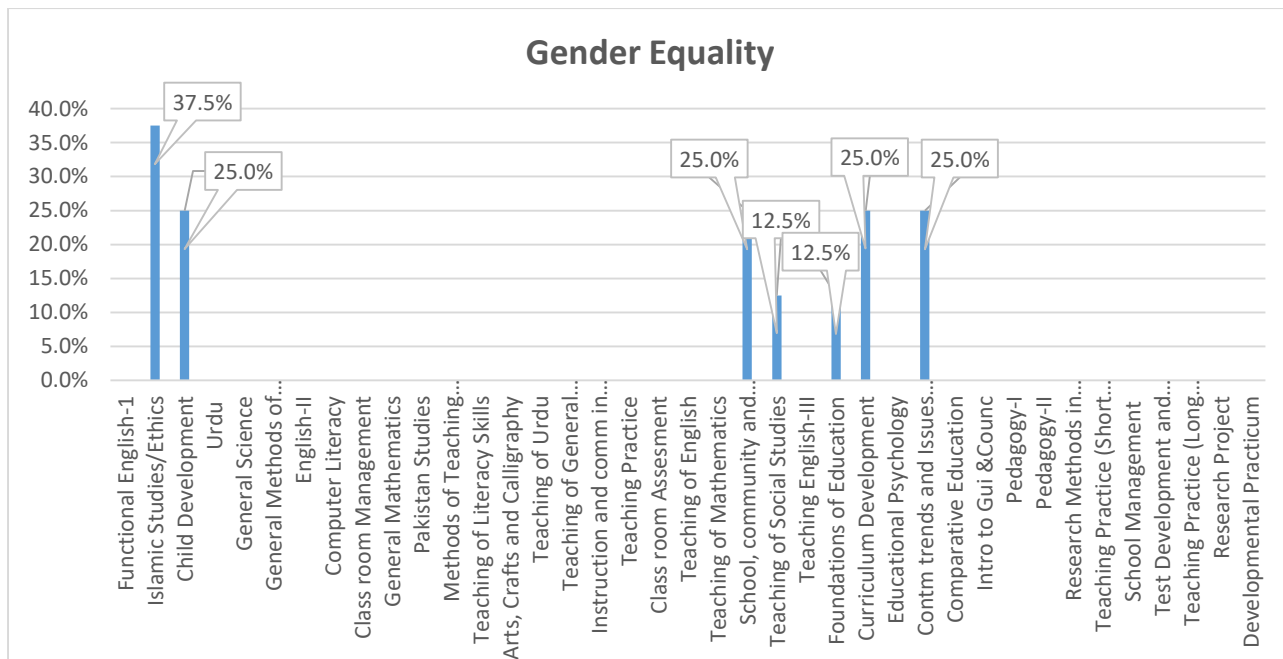
Figure 4.4 Gender Equality

"Islamic Studies" subject has 37.5% of the content knowledge regarding the subthemes of Gender Equality, 25% of content knowledge is seen in the subject of "Child Development", the subject "Curriculum Development has 25% of the content knowledge, the subject of "Contemporary Trends and Issues in Education" has 25%, School Community and Teacher has 25% of the content knowledge and "Teaching of Social Studies" has 12.5% of the subthemes and 12.5% content knowledge was in the subject of "Foundations of Education"

4.3.5 Graphical Representation of the subthemes of Health & Well Being
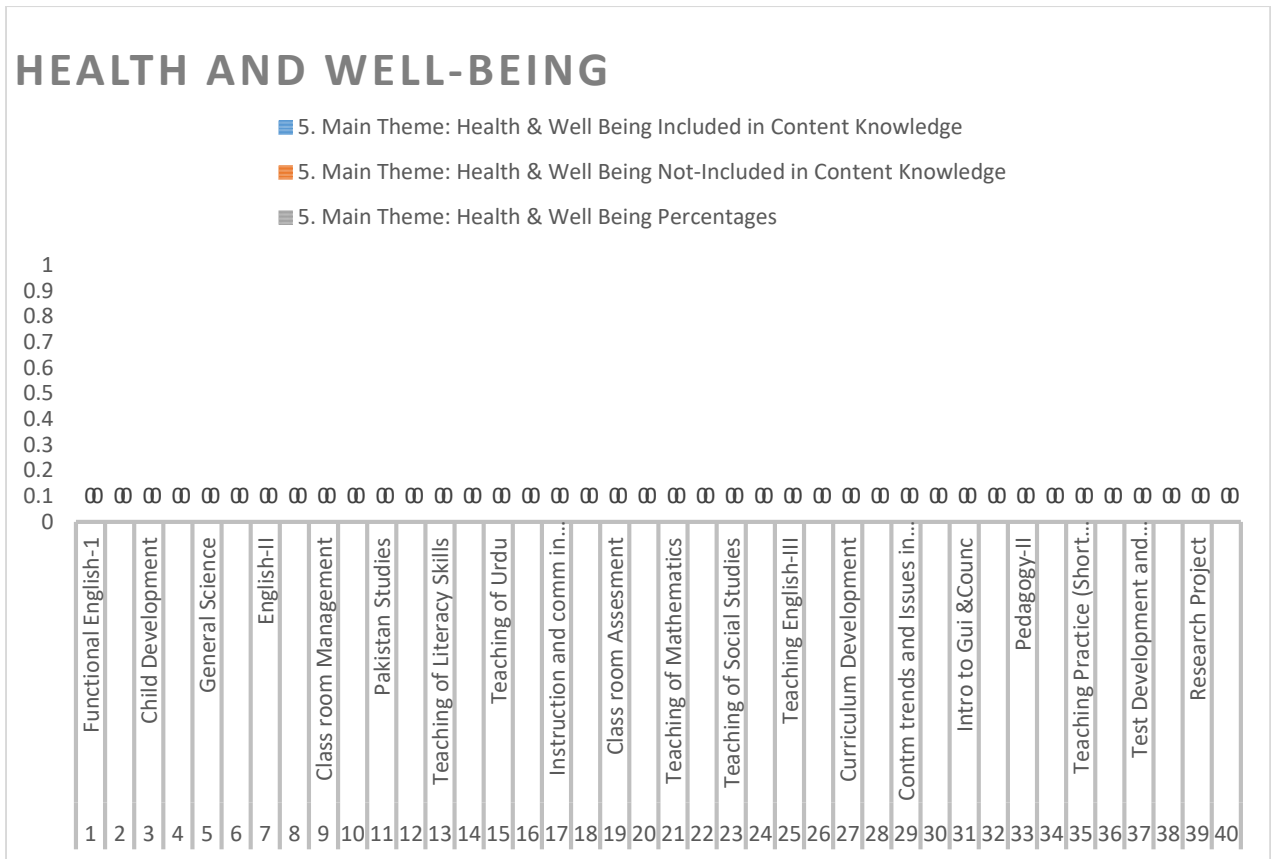
Figure 4.5 Health *& Well Being*

Health and Well-Being theme is not included in any subject of B.Ed. Pre-Service

Teacher Education Honors (Elementary).

4.3.6 Graphical Representation of the themes subthemes of Global Citizenship Education
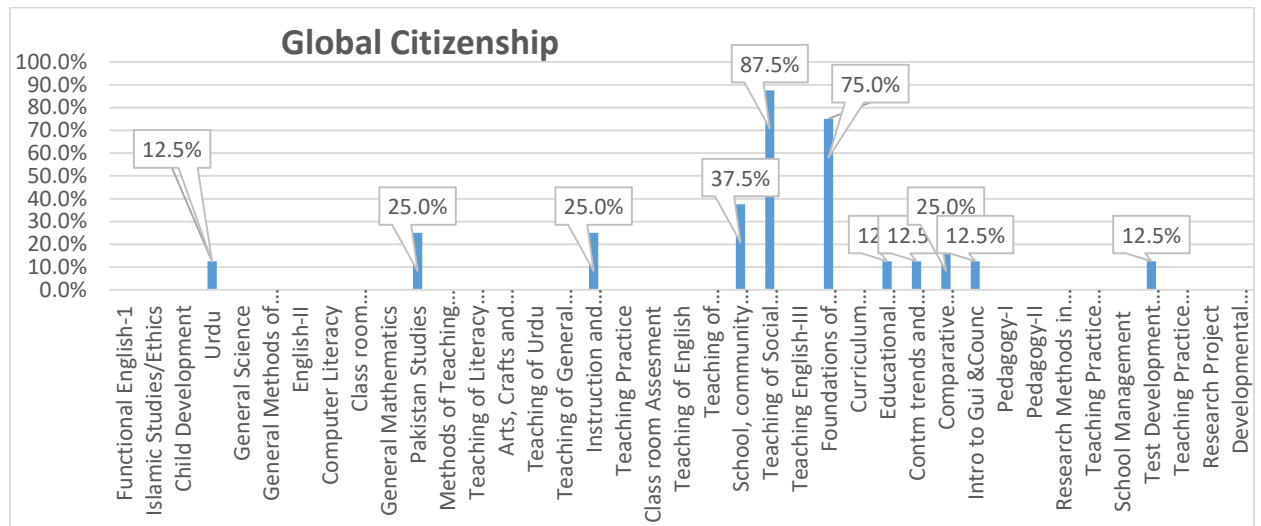
Figure 4.6 Global *Citizenship Education*

The subject of "Teaching of social Studies has 87.5% of the subthemes of "Global Citizenship Education", the subject "Foundations of Education" has 75% of the content knowledge, 37.5% of content knowledge was seen in the subject of "School, Community and Teacher", 25% of the content knowledge was found in the subject of "Pakistan Studies", the subject of "ICT in Education" has 25% content knowledge, the subject "Comparative Education" has 25%, "Urdu" has about 12.5% content knowledge, while 12.5% of content knowledge is witnessed in "Educational Psychology", the subject "Contemporary Trends and Issues in Education" has 12.5%, the subject "Introduction to Guidance and Counselling" has 12.5% of content knowledge and the subject "Test Development and Evaluation has 12.5% of content knowledge for subthemes of GCED.

4.3.7 Main Theme: Graphical Representation of comparative analysis of six themes for content knowledge
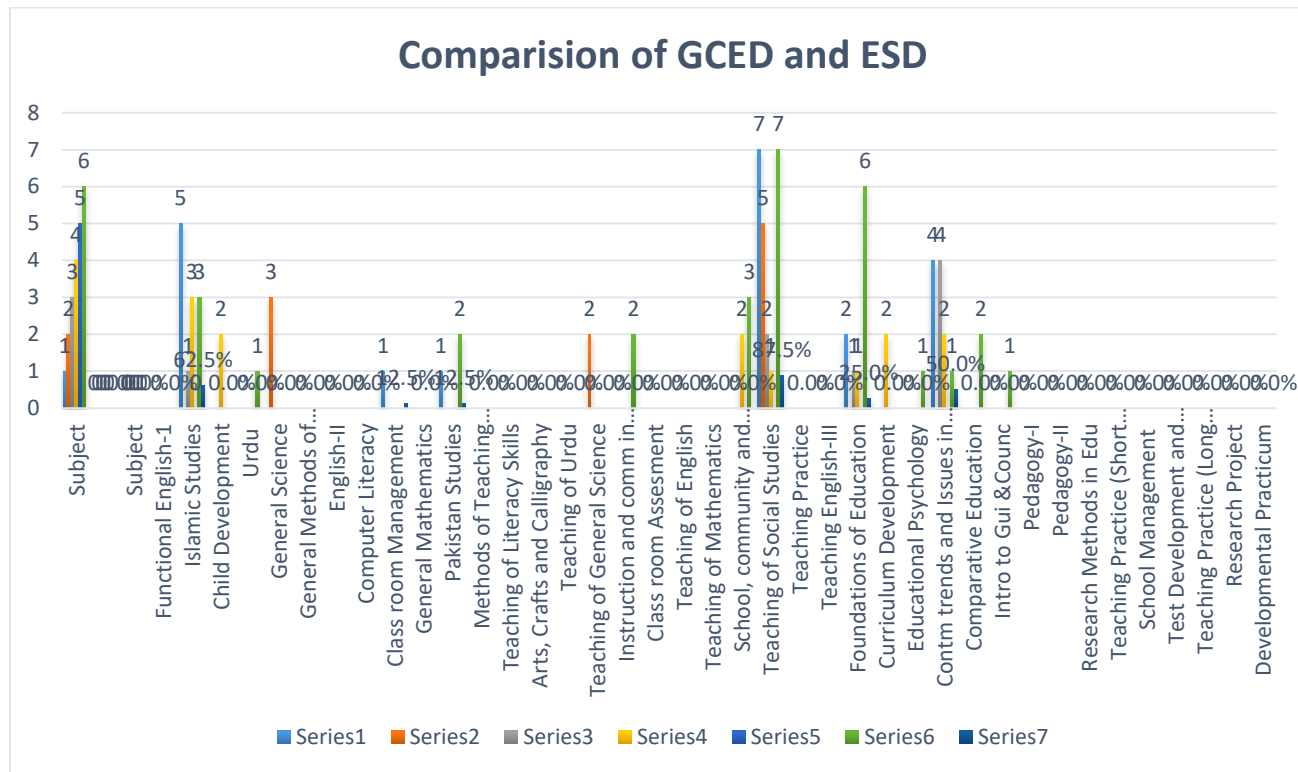
Figure 4.7 Comparative *analysis of all six themes for content knowledge*

For the inter comparison of themes for content knowledge according to the subject it was found, that the subject "Teaching of Social Studies had more domination of themes like it had 87.5% of the themes of 'Human Rights', 87.5% of 'Global Citizenship' theme, 63% of 'Education for Sustainable Development' theme followed by the subject of "Contemporary Trends and Issues in Education" with 50% of 'Human Rights' theme, 50% of 'Peace and Non-violence' theme and 25% of 'Gender Equality' theme. The subject of Islamic studies had 62.5% of 'Human Rights' theme, 25% of 'Gender Equality' theme, and 25% of 'Global Citizenship' theme. Remaining subjects of B.Ed. the curriculum had a very less percentage of themes. 'Human rights' theme was seen more dominated among all for the content knowledge. The theme 'global citizenship education' followed. Next was the theme of 'Peace' which was followed by 'education for sustainable development, the other three themes are found lesser as compared to the

above three themes. The theme of 'health education' was found nowhere in the curriculum which is very alarming in the situation where our youth and adults need to be more educated about healthy relationships with their peers and in the times like Covid 19, which we are facing these days.

4.3.8 Graphical Representation of B.Ed. (Competencies Pedagogies/Methods and Approaches)
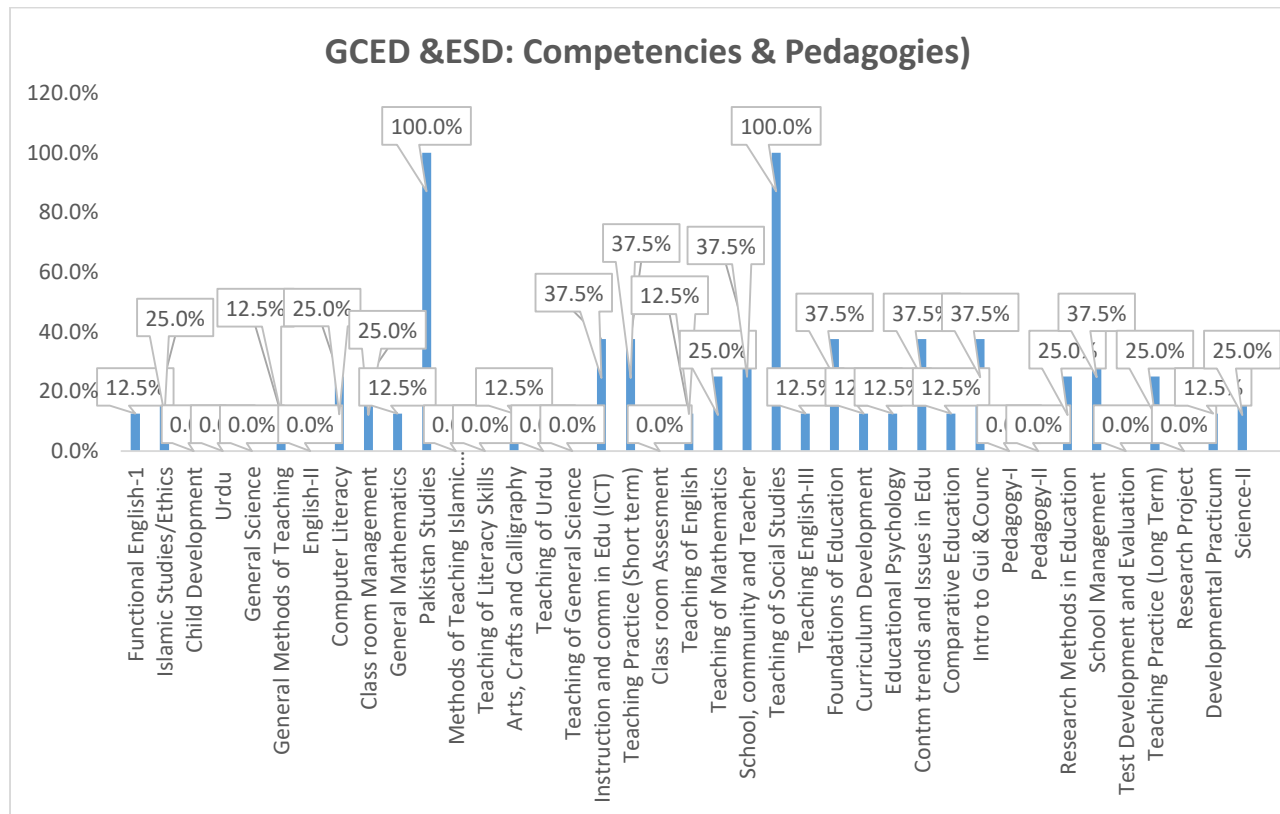
Figure 4. 8 B.Ed. GCED &ESD: Competencies & Pedagogies/Methods and Approaches

The subject of Pakistan studies predominated with Pedagogies and Methods, similarly the subject of 'Teaching of Social Studies' covered abundant pedagogies and competencies, followed by 'School, community and teacher', then the subject 'Contemporary Trends and Issues in Education' dominates the competencies and pedagogies, in the next place the subjects of 'ICT in Education, Teaching Practice, 'Introduction to Guidance and counseling' has the equal number of the subthemes, followed by the subjects of 'Teaching of Math, School, community and Teacher, Foundations of Education, Educational Psychology, comparative Education, Research Methods in Education, School Management and Developmental Practicum, next comes Classroom Assessment, Teaching of English, English-II, Islamic Studies and lastly with

few competencies and pedagogies related to GCED and ESD themes are the subjects of General Methods of Teaching, Teaching of Literacy skills, Arts, Crafts and Calligraphy and finally Teaching English-III in the Curriculum of B.Ed. (Honors) Elementary. Overall compared to content knowledge the competencies and pedagogies were abundantly found in the curriculum of B.Ed. (Honors) Elementary.

4.4   Part-II: Opinions of Curriculum Experts

Objective-2: To investigate the opinion of Curriculum experts regarding the inclusion of themes/contents in B.Ed. Honors. (Elementary Curriculum) regarding GECD & ESD of SDG Goal 4 in Target 4.7.1 of Education Agenda 2030.

Section-1

This part consists of two portions. The close-ended and the open-ended questions. The closed-ended questions were analyzed quantitatively through SPSS21. And explained with means, standard deviation along with graphical figures in percentages.   And the open-ended questions were analyzed using the software N-Vivo10 and the analysis was done with word trees and word clouds and an explanatory description was given.

Part- II (A) Close ended questionnaire (quantitative)

 The participants were asked about their opinions regarding the inclusion of the themes of GCED and ESD in the curriculum of B.Ed. Elementary curriculum.

Research Question: 2. Specify the objective opinion regarding the inclusion of GCED & ESD themes and subthemes related to Human Rights, Education for sustainable development, Peace and Non Violence, Gender Equality, Health, and Well-Being, and Global Citizenship in B.Ed. (Honors) Elementary curriculum?

Part-II (B) Open-ended questionnaire (Qualitative)

The participants were asked about their subjective opinion regarding the gaps they find in the curriculum of B.Ed., their opinions regarding the inclusion of these themes, and in which subjects and the challenges they find in the inclusion of these themes.

Research Question# 3-5 what are the opinions of curriculum experts regarding the inclusion of themes related to GCED & ESD and gaps and challenges they find in the curriculum of B.Ed. Honors Elementary Pre-Service Teacher Education?

4.4.1 Demographic variables of the participants

To answer the close-ended and open-ended questionnaire, the participants were the educational experts, most of them having Post Doctorate, Ph.D., qualification, some were M.Phil. and just one among was masters. They were both men and women in almost equal numbers from different universities in Pakistan. All four provinces were covered including Gilgit Baltistan. The chart below explains the number of women and men with their qualifications.

Table 4.1   Participants according to Gender

Gender	Frequency	Percentage
Male	34	49
Female	36	51
Total	70	100
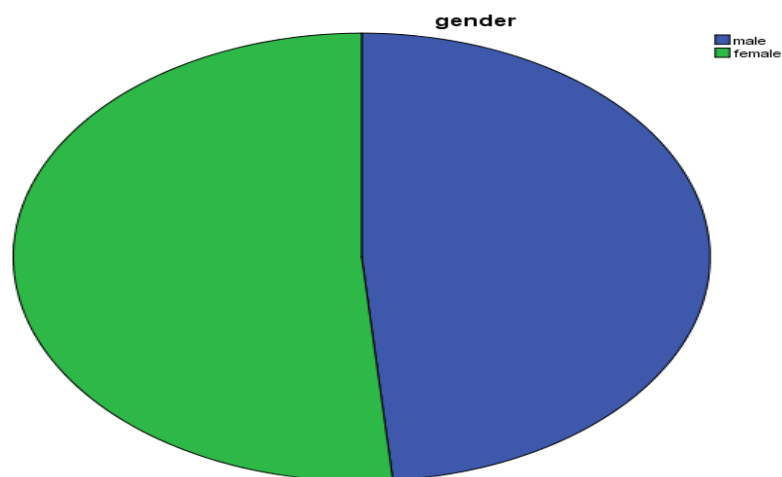
Figure 4.9 Participants according to Gender51% Females and 49% male

Table 4.2   *Academic Qualifications*

Academic Qualification		
	Frequency	percent
Masters	1	1.4
M.Phil.	20	28.6
Ph.D.	36	51.4
Post Doc	13	18.6
Total	70	100.0
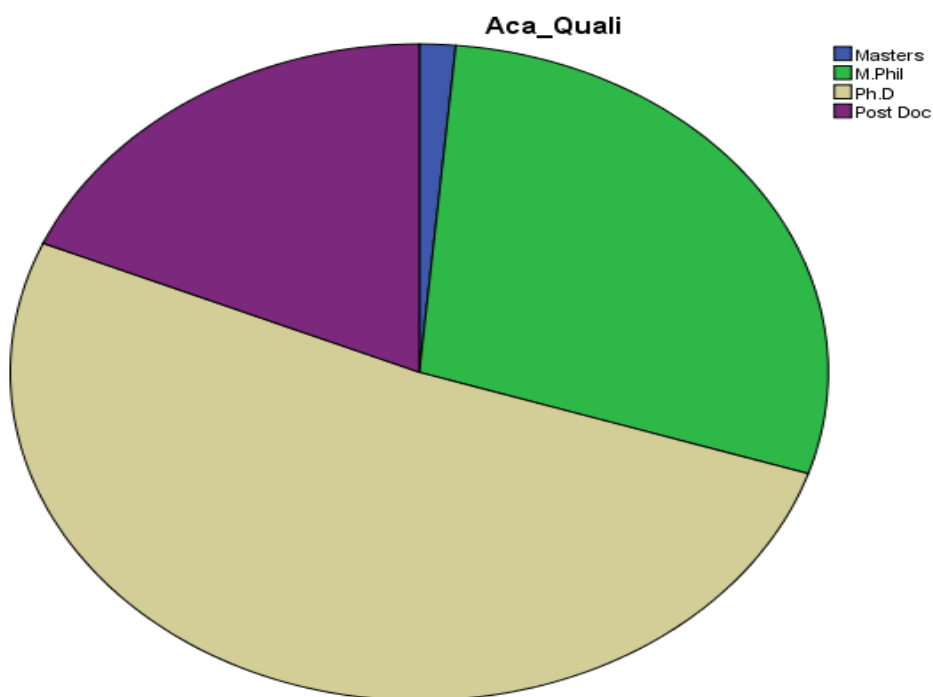
Figure 4.10 Academic qualifications
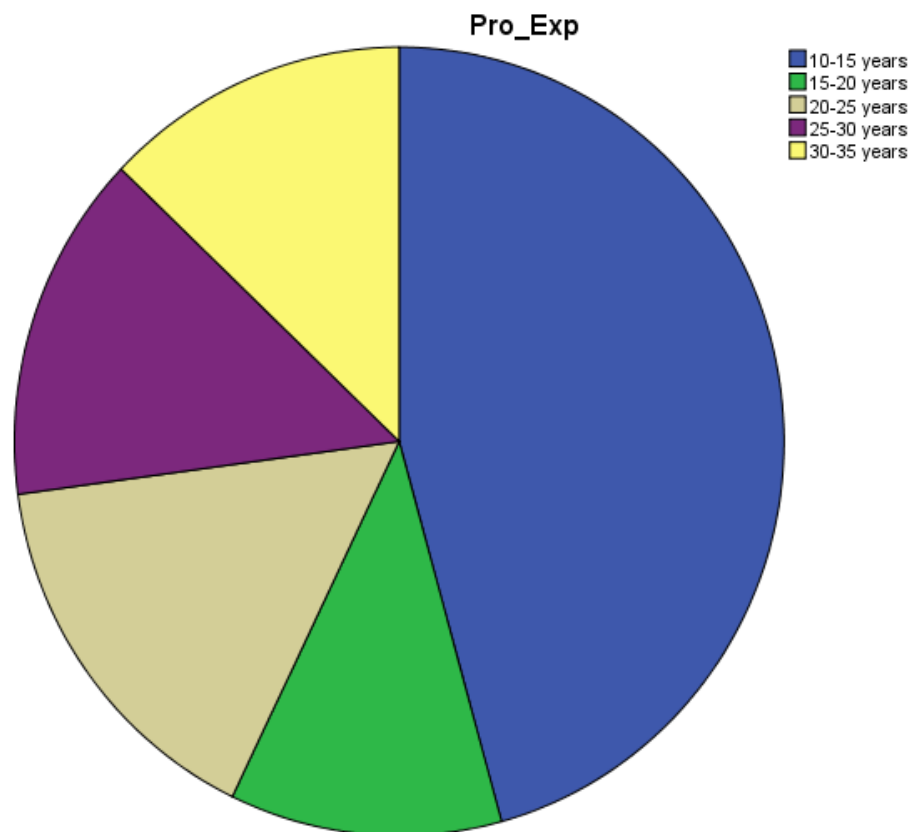
Figure 4.11 Professional Experience

The participants who possessed experience of (10-15 years) were 46%, those who possessed (15-20years) were 11%, while 16% possessed (20-25 years), about 14% possessed (25-30 years) and some 13% possessed (30-35years). The respondents were holding key positions like University Chancellors, Chair Persons, Deans, HODs, Professors and Lecturers, and professionals of the Curriculum department of Higher Education Commission.

4.5 Closed-Ended Questionnaire

Research Question: In your opinion regarding the inclusion of GCED & ESD themes and subthemes related to Human Rights, Education for sustainable development, Peace and Non Violence, Gender Equality, Health, and Well-Being, and Global Citizenship in B.Ed. (Elementary) curriculum can be helpful in the attainment of SDG education agenda 2030.

The Likert scale for mean score analysis was taken for its range values as given below:

Range value of Likert Scale for mean score analysis

1.0 - 1.5   strongly disagree

1.6 - 2.5   disagree

2.6 - 3.5   partially agree

3.6 - 4.5   agree

4.6 - 5.0   strongly agree

Table 4.3

Mean Scores on Major Themes of Sustainable Development
(N=70)

Major Themes	Mean	SD	Remarks
Human Rights	4.2	.69	agree
Peace and Non-violence	4.2	.75	agree
Sustainable Development	4.0	.66	agree
Global Citizenship	4.0	.85	agree
Gender Equality	3.8	.79	agree
Health and Wellbeing	3.8	.88	agree

Table 4.3 displays the mean scores of respondents on major themes included in the pre-service teacher education curriculum regarding sustainable development goals. It was noticed that the respondents agreed upon all six major themes with mean scores

including human rights (4.2), sustainable development (4.0), peace and non-violence (4.2), global citizenship (4.0), gender equality (3.8), and health and wellbeing (3.8). Human Rights was most preferable theme, followed by Sustainable Development and then by Gender Equality as their scores were close to mean score.

4.5.1 Main Theme: Human Rights

Q. No. 1) In your opinion inclusion of contents or themes of Human Rights and its sub-variables in B.Ed. curriculum can be helpful in the attainment of SDG Education Agenda 2030?

Table 4.4

Mean Scores on Subthemes of Human Rights
(N=70)

Subthemes of Human Rights	Mean	Std. Deviation	remarks
Social Justice	4.3	.83	agree
Democracy	4.2	.71	agree
Human Rights education	4.2	.88	agree
Freedom	4.1	.78	agree
Rights	4.1	1.00	agree

Table 4.4 shows the mean scores of participants on subthemes of human rights which are included in the curriculum for pre-service teachers' education for sustainable development goals. It was found that the participants were agreed on the subthemes of social justice by (4.3), democracy (4.2), human rights education (4.2), freedom (4.1), and rights (4.1). It was observed that there was agreement on the mean scores of the subthemes. Social justice was more preferable followed by democracy and then by human rights education. Below given is the graphical representation of agreement in percentages for all subthemes of human rights.

4.5.2 Graphical representation of sub-themes of human rights in percentage
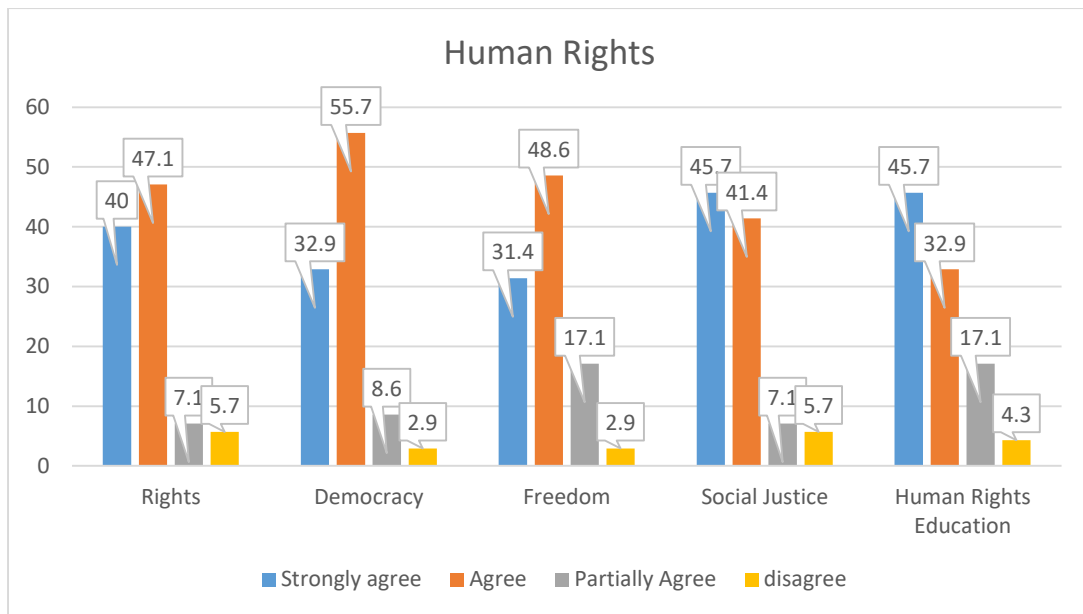
Figure 4.12 All Sub-themes of Human Rights

In the close-ended survey when all the subthemes of the main theme "Human Rights" were compared it was seen that the participants strongly agreed for 'rights' by 40% and disagreed by 6% and for 'democracy' the participants strongly agreed with 56% with only 3% disagreement, in the second place 'freedom' was agreed by 49% and disagreed by 3%, while the sub-theme 'social justice' was strongly agreed by 46% and it was disagreed by 6% and finally the subtheme 'human rights education" was strongly agreed by 45% whereas it was disagreed by 4%only. The highest agreement was seen for the subtheme of 'social justice'. Both the mean scores and the frequencies show the highest agreement for the inclusion of the theme of Human Rights.

4.5.3 Main Theme: Education for Sustainable Development

Q.2) In your opinion inclusion of contents or themes of Sustainable Development and its sub-variables in B.Ed. curriculum can be helpful in the attainment of SDG Education Agenda 2030

Table 4.5

Mean Scores on Subthemes of Sustainable Development
(N=70)

Subthemes of Sustainable Development	Mean	Std. Deviation	Remarks
Environmental Educat3on	4.2	.69	agree
Education for Sustainable Development	4.1	.83	agree
Sustainable Development	4.0	.77	agree
Social sustainability	4.0	.86	agree
Environmental Sustainability	4.0	.87	agree
Climate change	4.0	.89	agree
Waste Management	4.0	.91	agree
Renewable Energy Resources	4.0	.92	agree
Ecology	3.9	.78	agree
Economic Sustainability	3.9	1.00	agree

Table 4. 5 displays the average scores on the subthemes of sustainable development for pre-service teachers' education curriculum at B.Ed. level. It was revealed that the respondents agreed upon the subthemes including Environmental education (4.2), Education for sustainable development (4.1), Sustainable development (4.0), Environmental sustainability (4.0), Climate change (4.0), Renewable energy resources (4.0), Waste management (4.0), Social Sustainability (4.0) Ecology (3.9) and Economic Sustainability (3.9). The most favorable theme of the experts was environmental education followed by education for sustainability, next it supported environmental sustainability and the least favored was economic sustainability.

4.5.4 Graphical representation of all Sub-themes of Education for Sustainability in percentage
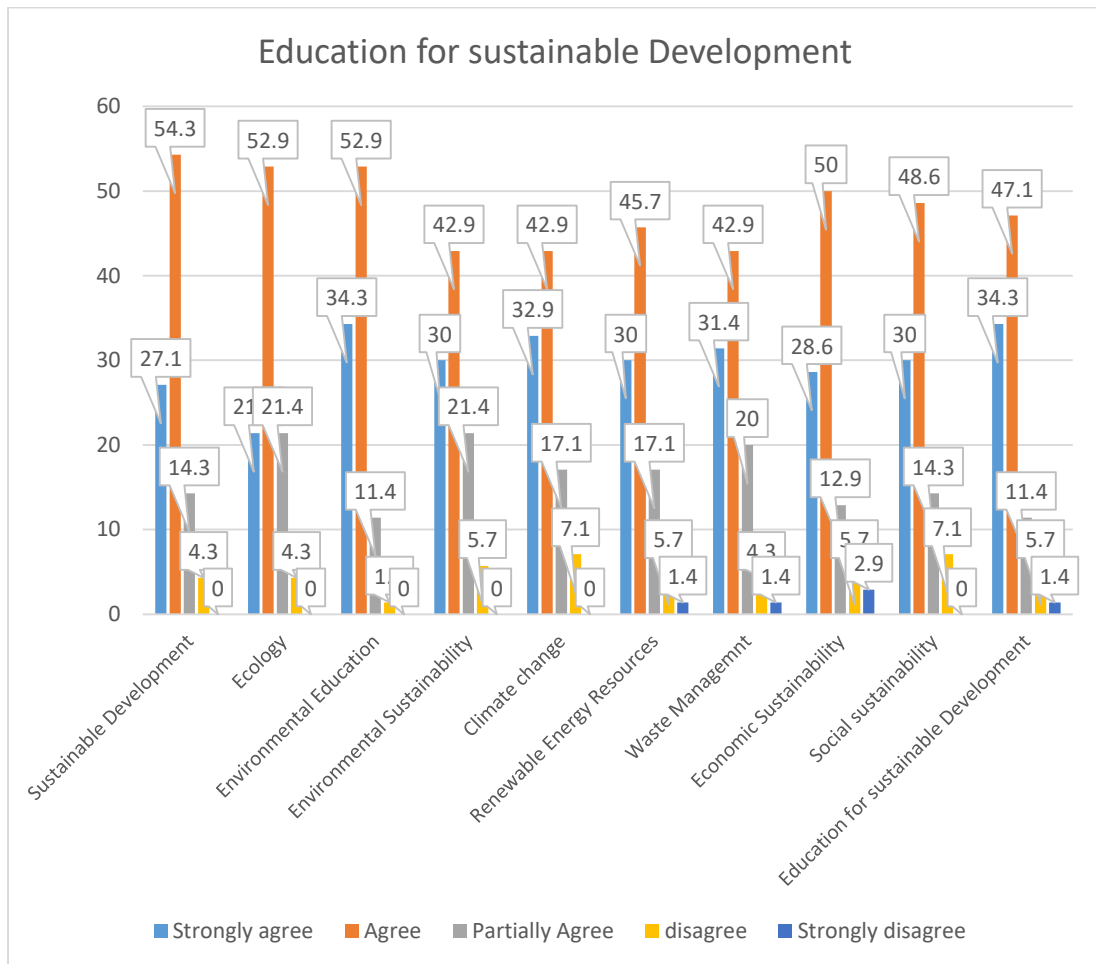
Figure 4.13 All Sub-themes of Education for Sustainable Development.

For the subthemes of the main theme "Education for Sustainable Development" participants agreed for subtheme 'sustainability' by 54% and there was only 4% disagreement, this was followed by the subtheme 'ecology' where the participants agreed by 53% and the disagreement was 4%, next was the subtheme 'environmental education, which was agreed by 53% respondents and only 1% disagreed, the following subtheme was 'environmental sustainability which was agreed by 43% while only 6% disagreed. The respondents for the subtheme 'climate change' were agreed by 43% and it was disagreed by 7% and the subtheme 'renewable energy' was agreed by the respondents 46% and disagreed by only 1%. The respondents for subtheme 'waste

management' agreed by 43% and disagreed by 1% and the participants for the subtheme 'economic sustainability' agreed by 50% and they disagreed by 3%, the 'Social sustainability' was agreed by 49% and it was strongly disagreed by 7%, the subtheme 'education for sustainable development was agreed by 48% participants while only 1% strongly disagreed. The agreement for the inclusion of the theme of environmental education, followed by education for sustainable development and then for sustainable development was seen as most favorable.

4.6 Main Theme: Peace Education

Q.3)   In your opinion inclusion of contents or themes of Peace and its sub-variables in B.Ed. curriculum can be helpful in the attainment of SDG Education Agenda 2030?

Table 4.6

Mean Scores on Subthemes of Peace and Non-Violence
(N=70)

Subthemes of Peace and Non-Violence	Mean	Std. Deviation	Remarks
Peace	4.3	.83	agree
Peace Education	4.2	.97	agree
Abuse/ Harassment/Violence	4.1	.97	agree

Table 4.6 disclosed the average scores on subthemes of peace and non-violence in pre-service teachers' education curriculum at B.Ed. level for sustainable development goals. It was observed that the participants agreed upon the subthemes of peace (4.3), peace education (4.2), and abuse/harassment/violence (4.1). The subtheme peace showed much agreement on the mean scores followed by peace education and then by abuse/harassment/violence.

4.6.1 Graphical representation of all Sub-themes of Peace in percentage
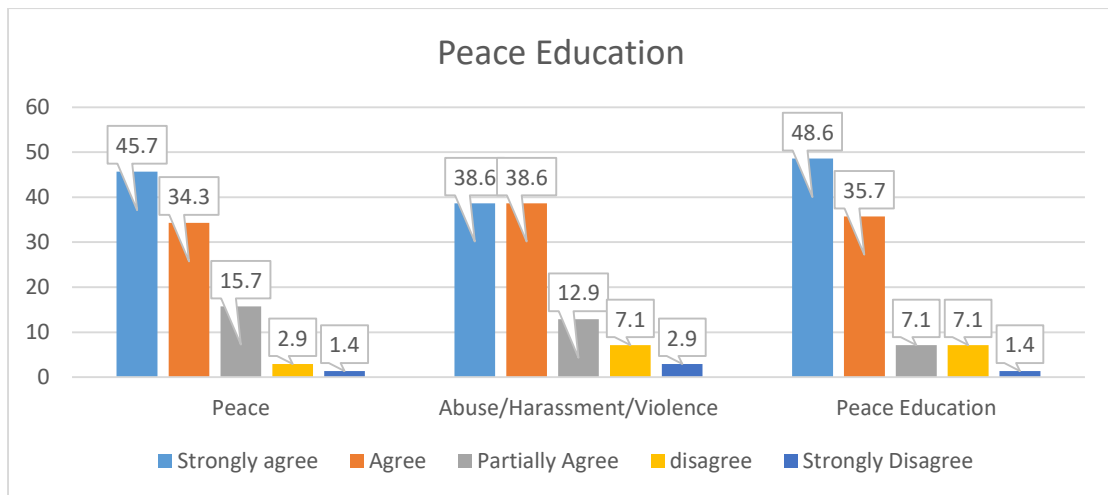
Figure 4.14 All Sub-themes of Peace

When the comparison of the main theme "Peace" and its subthemes 'peace' was strongly agreed by 46% of the respondents while only 1% strongly disagreed. The subtheme abuse/harassment/violence was strongly agreed by 38% of the respondents and only 3% disagreed. Finally, the subtheme of peace education was strongly agreed by 49% of the respondents whereas only 1% of respondents strongly disagreed. Overall peace education showed the highest frequency of agreement. There seems much consensus on mean scores and percentage of inclusion of the peace theme.

4.6.2 Main Theme: Gender Equality

Q.4) In your opinion inclusion of contents or themes of Gender Equality and its sub-variables in B.Ed. curriculum can be helpful in the attainment of SDG Education Agenda 2030?

Table 4.7

Mean Scores on Subthemes of Gender Equality   (*N=70*)

Subthemes of Gender Equality	Mean	Std. Deviation	Remarks
Gender Equality	4.0	.99	Agree
Gender Sensitivity	3.9	.83	Agree
Gender Equity	3.9	.85	Agree
Empowerments	3.8	1.04	Agree
Gender Parity	3.7	.96	Agree

Table 4.7 disclosed the mean scores of participants on the subthemes of gender equality in pre-service teachers' education curriculum for sustainable development goals at B.Ed. level. The participants agreed upon all subthemes including gender equality (4.0), gender sensitivity (3.9), gender equity (3.9), and empowerment (3.8), and gender parity (3.7). There was more consensus on gender equality as its scores were close to the mean score, followed by gender sensitivity and lastly by gender parity. It is observed that the gender equality subtheme showed greater agreement.

4.6.3 Graphical representation of all Sub-themes of Gender Equality in percentage
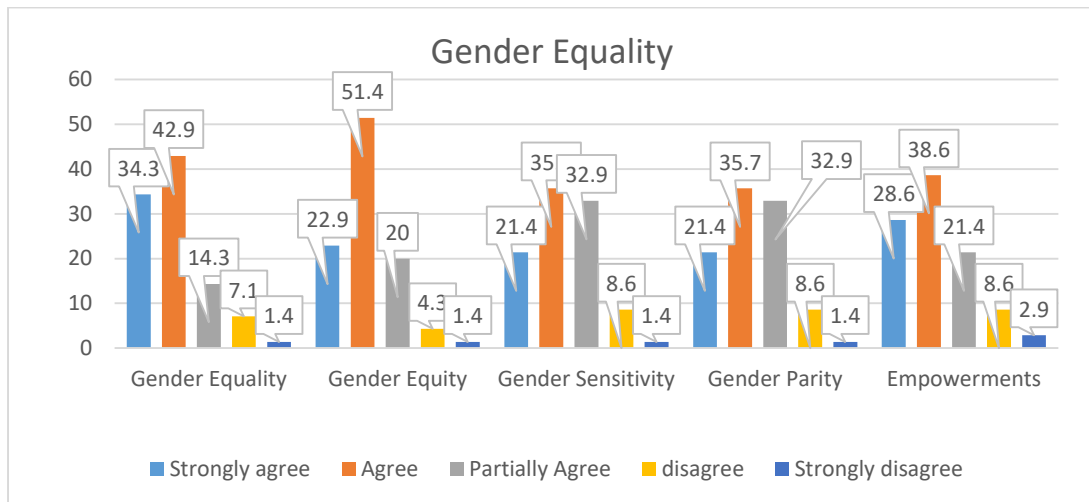
Figure 4.15 All Sub-themes of Gender Equality

For the participants for the main theme "Gender Equality," it was witnessed that 'gender equality was strongly disagreed by 43%, and strongly disagreed by 1%. The subtheme 'gender equity was strongly agreed by 52% and strongly disagreed by 1%, whereas the subtheme 'gender sensitivity was strongly agreed by 36% while disagreed by 1%, the subtheme of 'gender parity was agreed by 36% of participants and disagreed by 1% and finally the participants for the subtheme "empowerment' agreed by 39% and disagreed by 3%. Overall gender equality showed the highest percentage of agreement. More agreement was witnessed both on means scores and frequencies for the inclusion of the theme of Gender equality.

4.6.4 Main Theme: Global-Citizenship

Q.5) In your opinion inclusion of contents or themes of Global Citizenship and its sub-variables in B.Ed. curriculum can be helpful in the attainment of SDG Education Agenda 2030

Table 4.8

Mean Scores on Subthemes of Global Citizenship
(N=70)

Subthemes of Global Citizenship	Mean	Std. Deviation	Remarks
Global-Local thinking	4.0	.91	agree
Global Citizenship or International Citizenship	4.0	1.00	agree
Global competitiveness	4.0	1.03	agree
Cultural Heritage	4.0	1.03	agree
Global-Citizenship-Education	4.0	1.07	agree
Multiculturalism	3.9	.90	agree
Immigration	3.8	1.08	agree

Table 4.8 revealed the average scores on subthemes of global citizenship for pre-service teachers' education curriculum at B.Ed. level for sustainable development. It was noted that the respondents agreed on the subthemes of global-local thinking by (4.0), global citizenship or international citizenship (4.0), global competitiveness (4.0), cultural heritage (4.0), global citizenship education (4.0), multiculturalism (3.9), Immigration (3.8). It was observed that the most favorable theme for inclusion was global-local thinking and the least favorable was immigration.

4.6.5 Graphical representation of all Sub-themes of Global-Citizenship in percentages
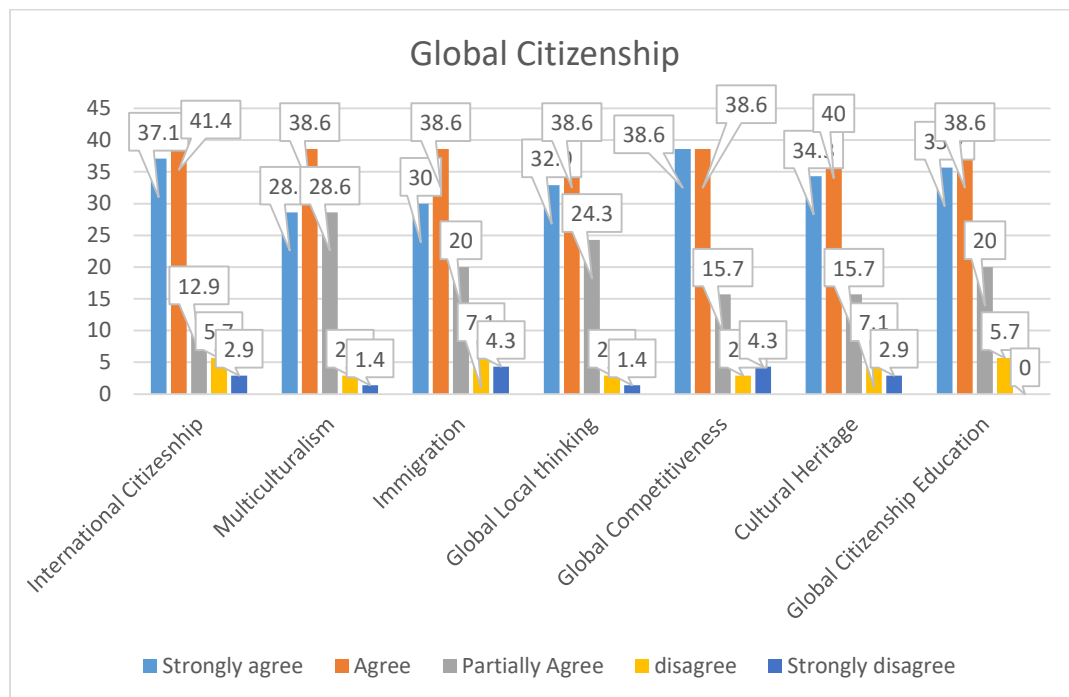
Figure 4.16 *All Sub-themes of Global Citizenship*

The respondents for the subtheme of 'international citizenship' strongly agreed by 37% they showed only 3% disagreement. 'multiculturalism' subtheme was agreed by 38% they disagreed by 1%. 'immigration' subtheme was strongly agreed by 39% and they showed 4% disagreement. The participants for the subtheme 'global-local thinking' by showing 33% strong agreement while they showed only 1% strong disagreement. 'global competitiveness subtheme was strongly agreed by the participants by 38% whereas they showed 4% strong disagreement. 'cultural heritage' subtheme was strongly agreed by the participants by 34% and strongly disagreed by 3%. For the subtheme ' global citizenship education, they showed strong agreement by 36% and they showed a 6% strong disagreement. Overall international citizenship showed the highest agreement. A favorable consensus was observed on the frequencies and mean scores for the inclusion of global citizenship.

4.6.6 Main Theme: Health & Well-Being

Q.6) In your opinion inclusion of contents or themes of Health and Well Being and its sub-variables in B.Ed. curriculum can be helpful in the attainment of SDG Education Agenda 2030?

Table 4.9

Mean Scores on Subthemes of Health and Wellbeing
(N=70)

Subthemes of Health and Wellbeing	Mean	Std. Deviation	Remarks
Mental Health	4.0	.96	agree
Awareness of addiction	4.0	1.03	agree
Healthy lifestyles	4.0	1.06	agree
Health Education	4.0	1.07	agree
Physical fitness	3.9	.99	agree
Sexuality Education	3.2	1.31	Agree

Table 4.9 presents the mean scores of respondents on subthemes of health and wellbeing in pre-service teachers' education curriculum at B.Ed. level for sustainable development goals. It was found that the respondents were agreed upon the subthemes of mental health (4.0), awareness of addiction (4.0), healthy lifestyles (4.0), health education (4.0), and physical fitness (3.9), and sexuality education (3.2). It was observed that the most favorable theme for inclusion was the physical fitness theme and the least favorable was sexuality education.

4.6.7 Graphical representation of all Sub-themes of Health & Well-Being in percentages
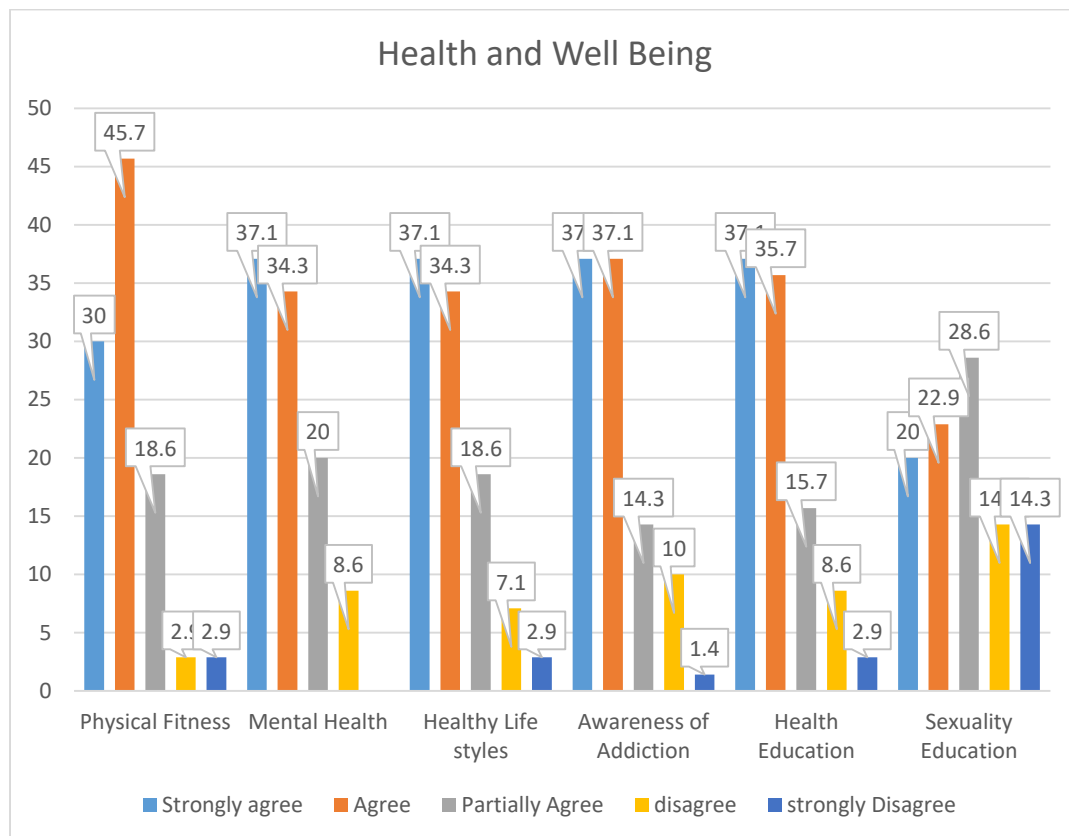
Figure 4.17 All Sub-themes of Health and Well Being

The participants strongly agreed by 30% for physical fitness and 3% of them disagreed, for the subtheme 'Healthy Lifestyles' they strongly agreed by 38% and only 8% disagreed. The healthy lifestyle' subtheme was strongly agreed by 37%, strongly disagreed by 3%. The respondents for the subtheme 'Awareness of Addiction 'strongly agreed by 37% and they disagreed by 1%. For the subtheme Health Education they strongly agreed by 37% and showed 3% disagreement. For the final subtheme 'Sexuality Education the agreement was seen less, only 20% strongly agreed, the disagreement was 14% more than for any subtheme witnessed so far. Physical fitness showed the highest percentage of agreement. A similar agreement was seen both on the frequency and the mean scores for the inclusion of Health and Wellbeing.

4.7 Part-II (B) Open-Ended Questions (Qualitative)

Section -2

This part consists of three open-ended questions which are dealing with the gaps in the curriculum, the views regarding the subject for inclusion of GCED and ESD, and the challenges in the inclusion of the themes of GCED and ESD in B.Ed.

Q1. Illustrate the gaps you find in B.Ed. Honors (Elementary) Curriculum regarding themes and subthemes of Human Rights, Sustainable Development, Peace and Non-violence, Global Citizenship, Gender Equality, and Health Education.

4.7.1 Gaps in Human Rights
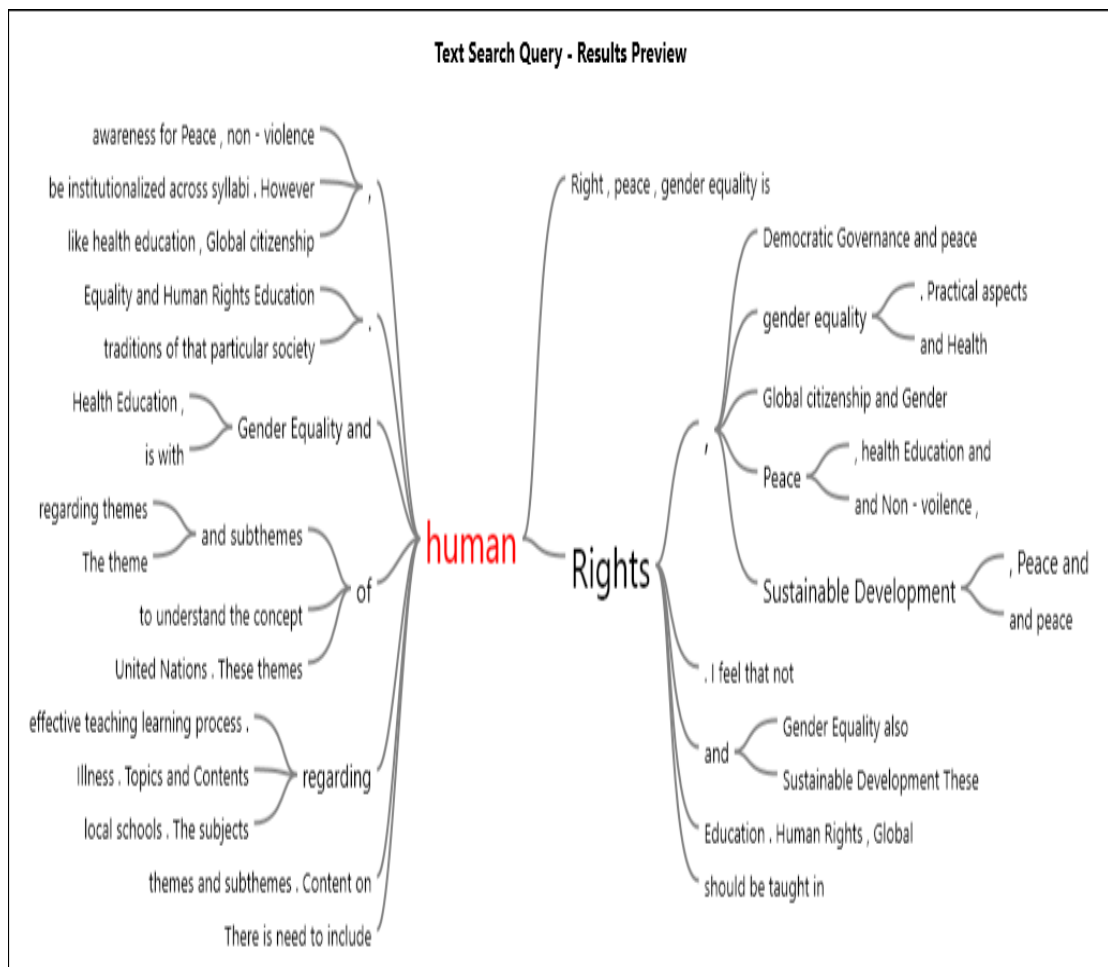
Figure 4. 18 Gaps in Human Rights

Some of the experts say that the theme of human rights is not explicitly included. Both human rights and democratic governance are partially included in the curriculum. They however favored the inclusion of this theme. The respondents expressed their desire that human rights may be taught in the light of Islam so that it can be easily and willingly implemented. As these topics are related to 'Civic Education' the society can benefit by developing civic sense in the learners as per the cultural traditions and norms of any particular country. There is a need for systematic integration in the curriculum. Some participants opined that less emphasis is laid on human rights. Creating awareness for fellow human rights, and contextualizing the local needs is necessary for the attainment of SDGs. Its inclusion in the early classes can be more beneficial than its inclusion in the later stages. The content-dominated syllabus is making the practical aspect coverage difficult. More focus is laid on theoretical knowledge and practice is ignored. Some respondents are of the view that 'Human Rights' may be taught as a separate subject. While others suggested its integration across the subjects.

4.7.2 Gaps in Sustainable Development in Education
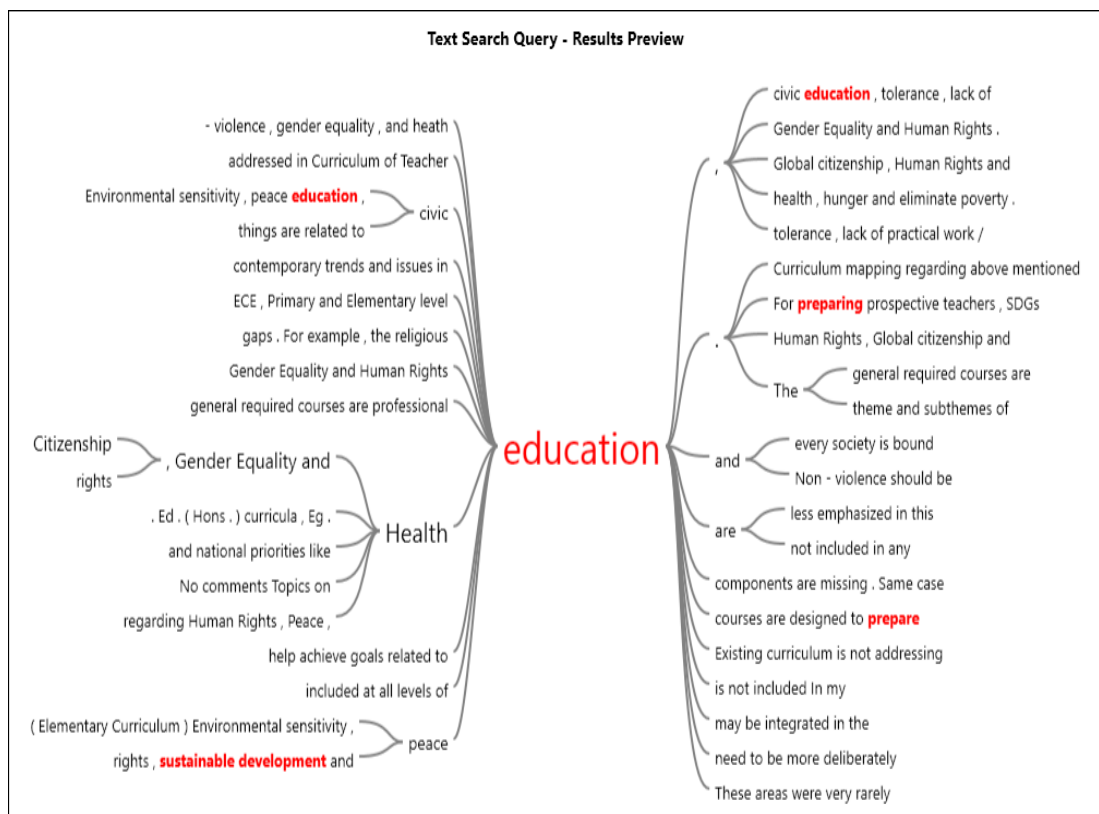
Figure 4.19 Gaps in Sustainable Development Education

According to experts education for sustainable development is not much emphasized in the teacher education curriculum. Environmental sensitivity is not included in the Elementary curriculum. If human rights, peace & non-violence, gender equality, and health education are included in the course it will help attain sustainable development. The existing curriculum is not addressing this issue. Sustainability content is not included in the curriculum. Whatever long-term and short-term goals are required to be achieved the same particular agenda must be included in the curriculum of ECE, Primary and Elementary level education. Such topics must be made our national priorities. Lack of practical work is seen and the curriculum is more theoretically focused. There is a need to include energy, water, and life on earth in sustainability education.

4.7.3 Gaps in Peace Education
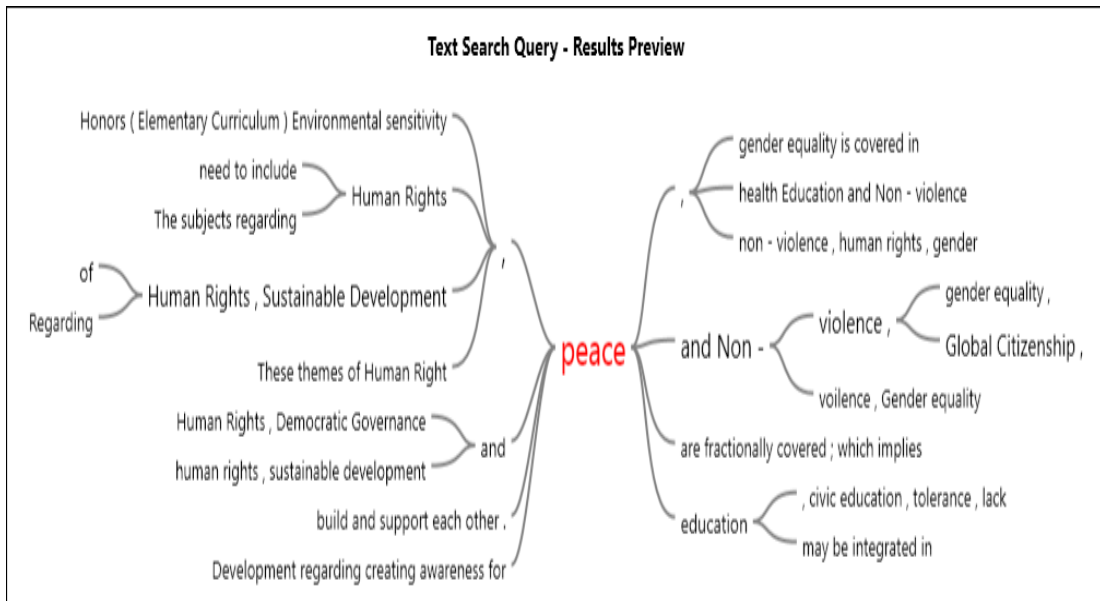
Figure 4.20 Gaps in Peace Education

The experts view that 'Peace Education' is marginally included in the curricula. Peace education is fractionally covered in the curriculum. If this topic/theme is introduced as a separate subject or topic or integrated with the B.Ed., curriculum it will help in developing peaceful attitudes in the learners. There is a need to more deliberately add the topics of peace and non-violence in the curriculum so that the learners practice peace. As per experts peace education is offered as an optional subject in some universities in Pakistan.

4.7.4 Gaps in Gender Equality
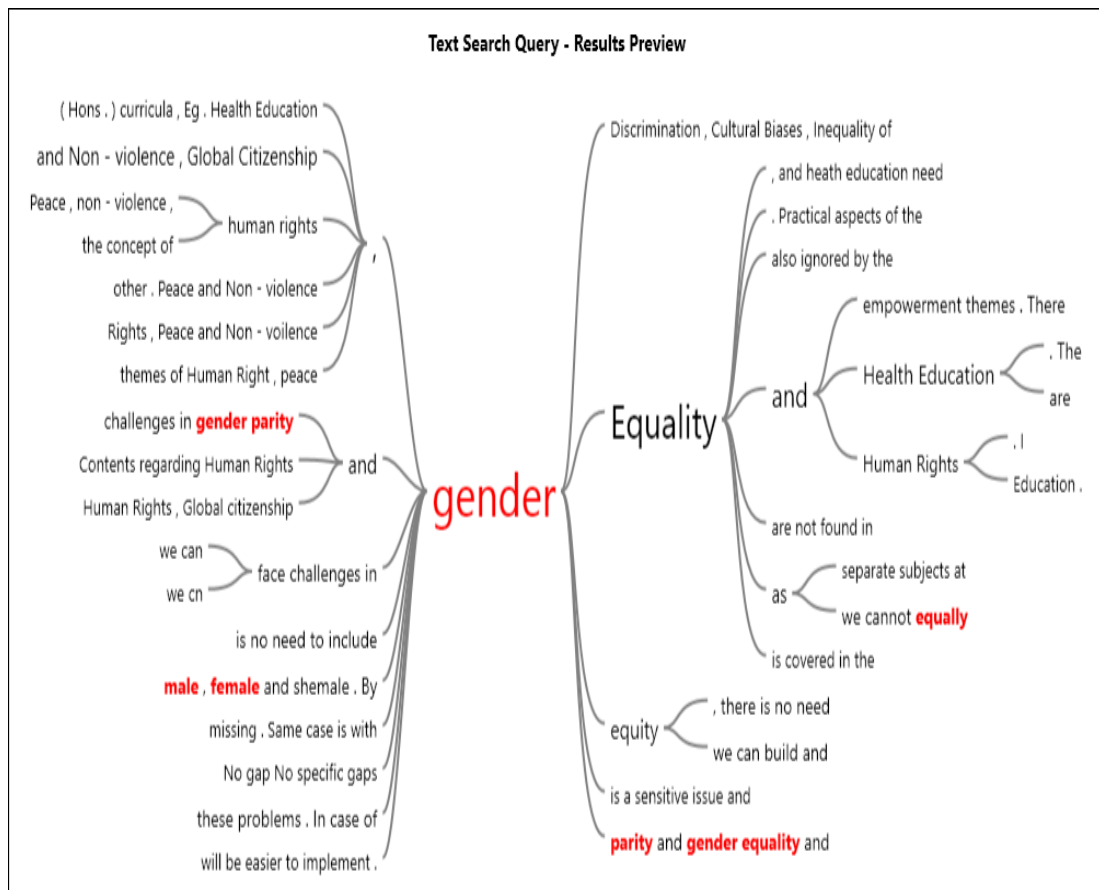
Figure 4.21 Gaps in Gender Equality

According to participants 'Gender Equality is a sensitive issue. Through gender equity, we can build and support each other. Therefore this subject can also be taught as a separate subject. As per experts, it is being presently taught at Bachelors and Masters Level in some universities. In 2017 HEC with the support of experts designed this course. The inclusion of gender parity and empowerment can show some resistance from some quarters.   Whereas some of the respondents opposed the inclusion of gender equality and contended that male, female, and She-Male all cannot be the same. Some respondents told that there seem to be some gaps regarding gender discrimination and gender equality. In some universities, women's development course is taught which covers gender equality.

4.7.5 Gaps in Health and Well-Being
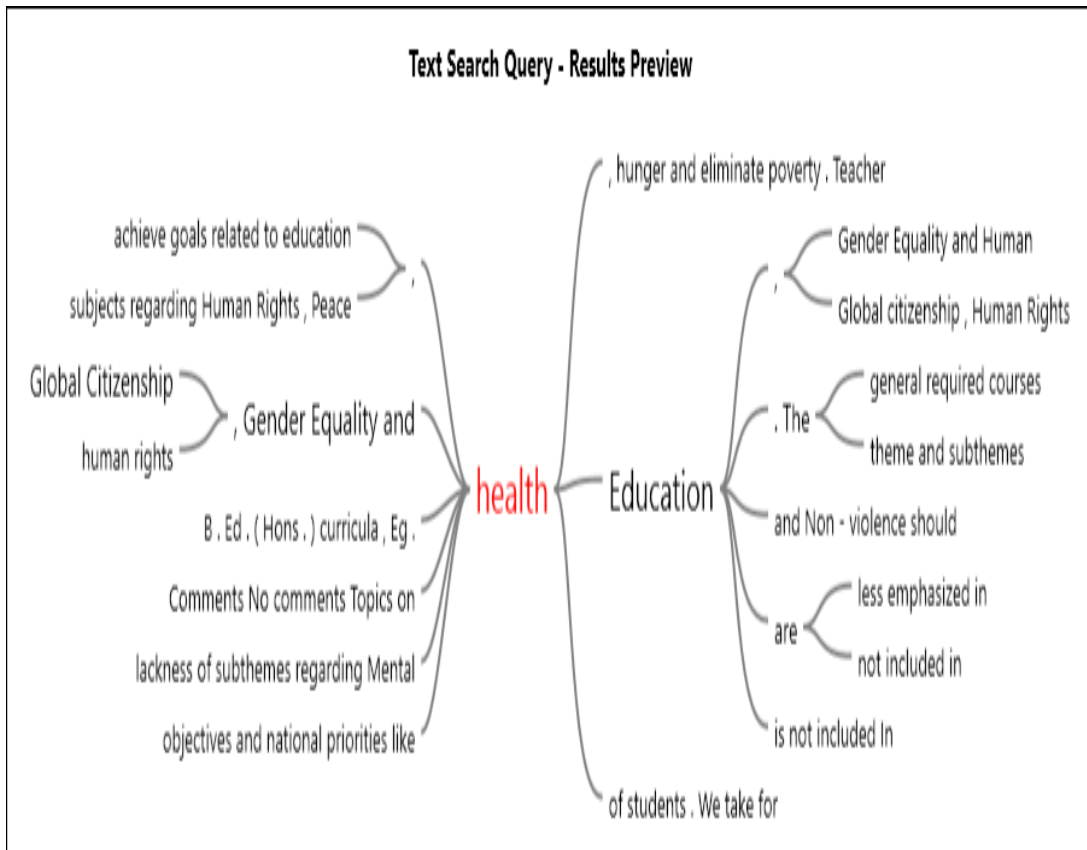
Figure 4.22 Gaps in Health and Well-Being

Regarding 'Health Education and Healthy Life Styles' experts say this is the need of the hour. Topics on health education are not included in the curriculum. We see our national priorities have no focus in this area. Our curriculum is more theoretical or content-focused. There is a need to deliberately include the health component in the curriculum. The experts believe that a healthy lifestyle and healthy ways of living are lacking in the curriculum. Mental health must be prioritized and similarly physical fitness.

4.7.6 Gaps in Global Citizenship
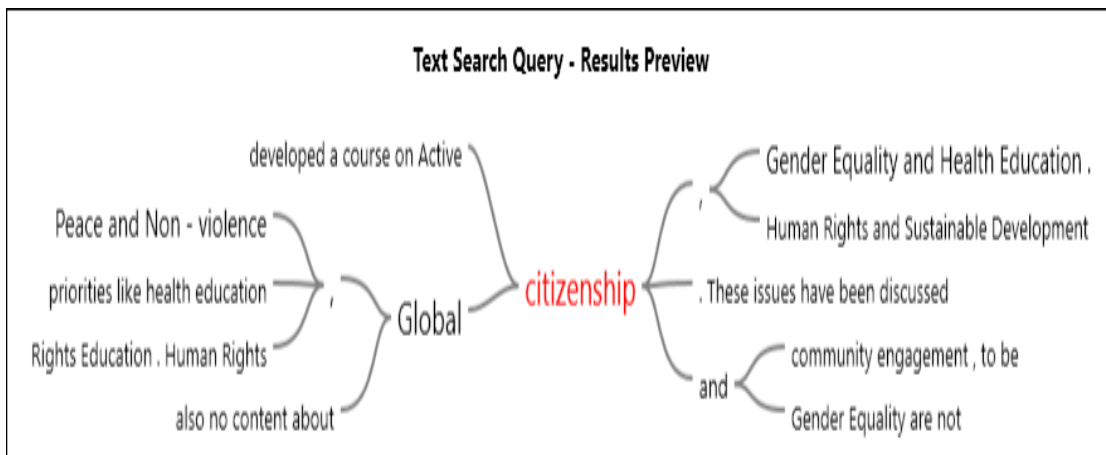
Figure 4.23 Gaps in Global Citizenship

The respondents told that a course has been developed by HEC on the subject 'Active Citizenship and Community Engagement' and is taught at the level of under graduation. It covers all the themes comprehensively. Inclusion of the global citizenship theme is important as it will prepare future teachers compatible with the global trends and they acquire knowledge and skills to promote sustainable development. There is a need to make learners aware of multiculturalism in the classrooms. Immigration is a delicate issue. It is necessary to develop a sense of international understanding in our citizens and the spirit of serving humanity without having a bias for any cultural or other boundaries. Inequality in society, religious group differences, and bringing harmony between all are also missing in the curriculum.

4.7.7 Word Cloud for gaps

Figure 4.24 Word *Cloud for gaps*

Experts say the topics of Human Rights, Peace, Gender Equality are implicitly included in the compulsory subjects of Islamic Studies and Pakistan Studies. The subjects like General Science, Islamiat, Social Studies, Urdu, English, and other elective subjects include the above topics implicitly. The curriculum developed for education in Pakistan seem to have been developed for meeting the local school needs therefore no theme related to the global agenda is included. They suggested the curriculum be updated regularly. It must at least be updated once in five years and all new developments locally, regionally, and internationally may be made part of the curriculum. The bigger problem seems not of including them in the curriculum but how the prospective teachers implement them in the classroom is an issue to be addressed, and more emphasis must

be on the application side. Integration is better but these themes can also be introduced as separate subjects. More training and seminars may be organized to teach these concepts. The integration of ICT is also very much obligatory. A wide gap is witnessed regarding the inclusion of these themes in the curriculum of teacher education. Pakistan being a signatory to SDG goals, we must include these themes. Sometimes the themes are explicitly and implicitly included but the role of teacher educators here comes to play in implementing it in the classroom as teachers are the role models for the learners. They can compensate for any concept which is lacking in the curriculum if they are aware of such notions. The participants were of the view that teacher educator who is familiar with SDGs agenda can fill any gaps that exist in the curriculum.

Q2. Briefly elucidate your views regarding inclusion or non-inclusion of SDGs goal 4.7 broad themes Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) in the curriculum of Pre-Service B. Ed? Honors (Elementary) Curriculum and in which subject?

4.7.8 Opinions for Inclusion of GCED
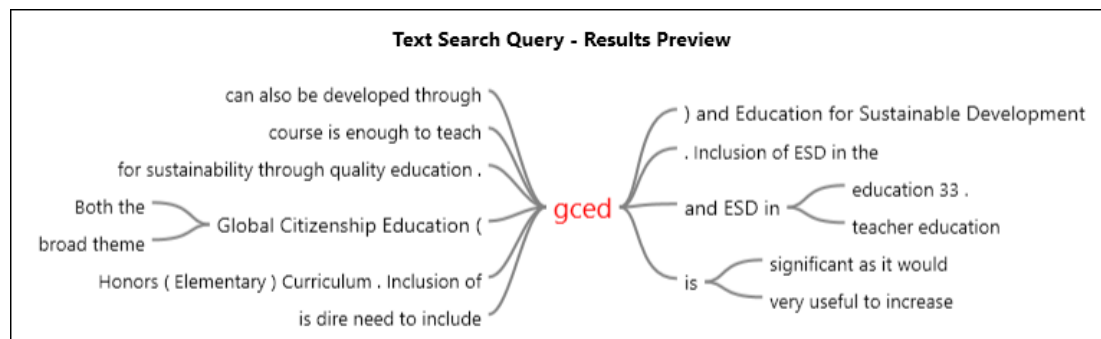
Figure 4.25 Opinions for Inclusion of GCED

The experts for the inclusion of GCED themes were of the view that there is no second thought for the inclusion of these themes and there is a dire need of its inclusion as it will enable the student teachers to build their critical thinking, collaborative thinking, and team working skills regarding the local, national and global issues. Cross-cultural communication skills can also be developed through GCED. Their inclusion will promote international understanding and avoid regionalism. It can also bridge the gulf between the developing and the developed countries. It will also help them to know about the bilateral and multilateral relations that are existing between the countries. It will enable them to know regarding their rights and privileges and also the rights of others. It will provide an opportunity to accept the cultures and environments of others. GCED inclusion will build awareness and understanding for the rapidly changing local and global scenario and the people's participation as citizens. Peace education is a proactive strategy to counter extremism. Inclusion of the themes will make learners

responsible local and global citizens. It can be included in the subject of History, Geography, and Civic Education particularly and can be integrated into all subjects.

4.7.9 Opinions for Inclusion of ESD
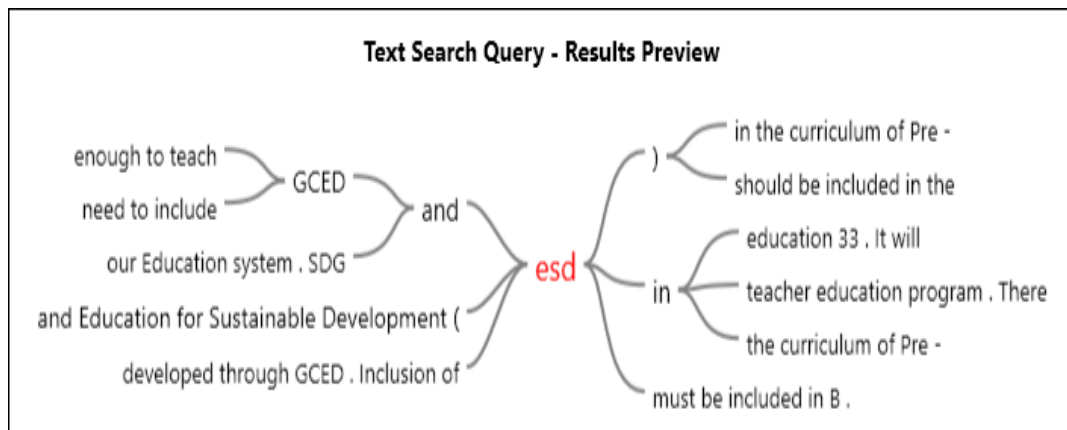
Figure 4.26 Opinions for Inclusion of ESD

Regarding the inclusion of ESD, experts hold the opinion that this will develop problem-solving, critical, and creative thinking skills in the pre-service teachers. If these themes are included in the curriculum they will enable the prospective teachers to solve the issues related to the environment and the atmosphere. Problems related to environment and the society can be addressed by the inclusion of ESD. They will be more aware of the relationship between society, culture, environment, and economy. Learners will be able to develop communication skills to address people of different cultural backgrounds. Allocation of some additional credit hours can be sufficient to teach the ESD theme. Not only their inclusion in the curriculum but the assessment strategies are also required to see if the same is implemented in thorough letter and spirit. Both formative and summative assessments are required and they must be at all levels of education. The above theme can be included either in the elective or in the general courses. They also can be introduced in an integrated form. This theme and its subthemes can be included in Environmental education, Biology, Chemistry keeping the context, content, and nature we need to integrate.

4.7.10 Word Cloud for opinions related to the inclusion of GCED and ESD in B.Ed. curriculum.

Figure 4.27 Word Cloud for opinions related to the inclusion of GCED and ESD in B.Ed. curriculum.

Regarding the inclusion of GCED and ESD in the curriculum, as far as the inclusion of these themes is concerned, in some universities of Pakistan, they are offered as optional subjects. It is very essential to include these themes and there is no second opinion regarding their inclusion. The themes like Peace are taught as "Peace Education" and Gender Equality is taught under the subject of "Women Development". Certain issues are not openly discussed. But "Women's Hygiene" and mensuration issues must also be included. The inclusion of these themes enables the learners to become critical

thinkers and problem solvers and will enable Pakistan to progress and prosper. It will make Pakistan competitive and be in tune with the world community, failing which we may be left behind. It will enable learners to develop an international understanding and avoid regional conflicts. The inclusion of the themes can reduce the gulf between the developing and the developed world. They are the vital tools and path towards 'Quality Education. The trickledown effect must be seen in the practices of prospective teachers in their elementary-level classrooms. It will develop International Understanding and help avoid regionalism. Their implementation can improve the global view of learners and prospective teachers. Positivity and open-mindedness will be developed with the inclusion of these themes. Only better citizens can make Pakistan a better place to live. These concepts need careful integration keeping our cultural, religious, and ideological constraints and these concepts can be included in the subjects of 'Contemporary Trends and Issues in Education, 'Professionalism in teaching' and 'School, Community, and Teacher'. The experts suggested that these themes may be explicitly included so that the youth can become ethically responsible, progressive, and prosperous citizens.

4.7.11 Challenges in the inclusion of these themes:

Q-3 What challenges as per our cultural background do you feel can be faced in integrating Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) in the B.Ed. Honors (Elementary) Curriculum and in which subject?
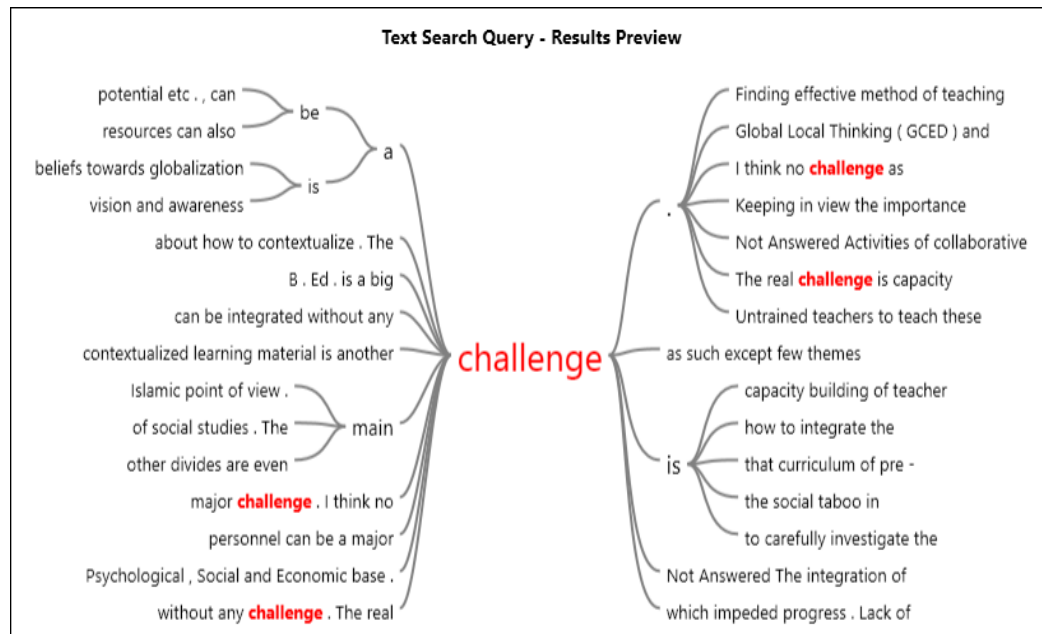
Figure 4.28 Challenges for inclusion in Human rights

The experts believe that there must not be any confusion regarding the inclusion of these themes as human beings are the same everywhere biologically. But as we hold Islamic cultural backgrounds certain subjects may be introduced according to the Islamic viewpoint. For example, Civic Education may be introduced with an Islamic perspective and this must be added in the subject of Social Studies. For Pakistan, our major challenge is the defense of our country from enemies and democracy. The themes of 'Human Rights' and especially the sub-theme 'Freedom' needs careful consideration before its inclusion. Finding competent and visionary people who can predict the long terms benefits of the themes can be a challenge.

4.7.12 Challenges in the inclusion of Education for Sustainable Development as per our culture
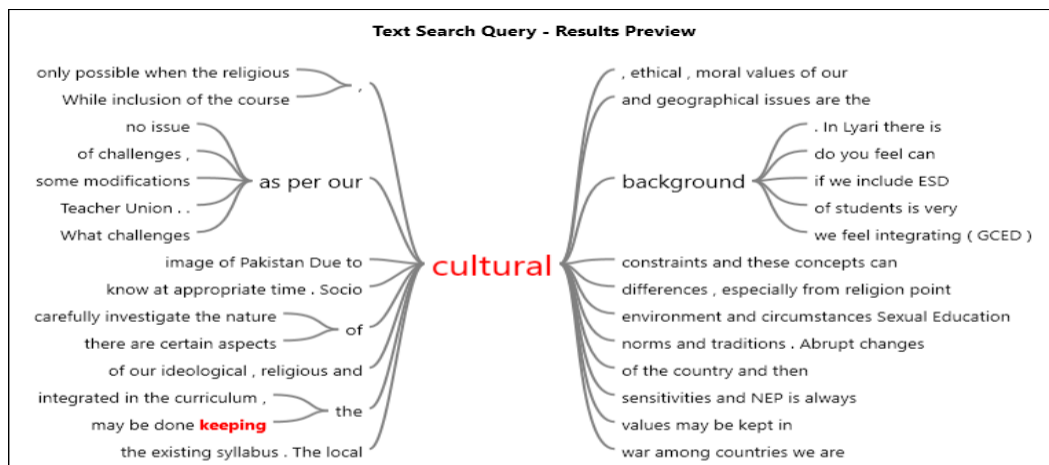
Figure 4.29 Sustainable Development as per our Culture

The inclusion of Sustainable development can be very beneficial for Pakistan as it can enable us to develop awareness about our environment. But it must be included keeping our cultural traditions and norms as we may face hurdles if this is abruptly included.   We may face challenges like lack of coordination and policy implementation but if our cultural scenario is taken care of it can be included. The topics related to ESD may be included keeping our cultural, ideological, and religious background in mind. Developing learners ethically strong and morally sound is also required. Environmental aspects also require our attention. Hence the integration of these features needs careful consideration.

4.7.13 Challenges in the inclusion of Peace

Text Search Query - Results Preview

values like honesty , truth , tolerance , ———— peace ———— etc . Norms , values and beliefs
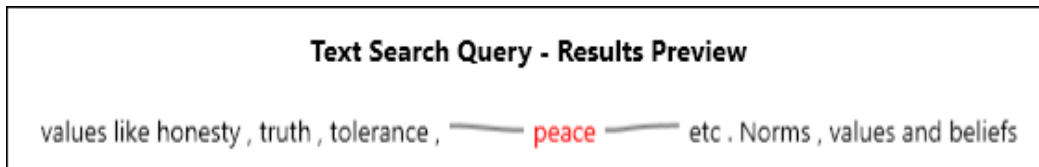
Figure 4.30 Peace

If we develop a sense of tolerance, patience, honesty, and speaking truth in children and inculcate the values, norms, and beliefs to practice acceptance, peace can be easily established. Respect for diversity is very essential and education related to peace can change the norms, beliefs, and values of learners regarding tolerance and peaceful conflict resolution. Teaching Peace and tolerance can help develop the soft image of Pakistan. The curriculum must be designed on universal values like honesty, truth, tolerance, and peace.

4.7.14 Challenges in the inclusion of Security

Text Search Query - Results Preview

- traditional **threat** to country's national

There may be political and

security

. If these targets are too

issues in the above themes
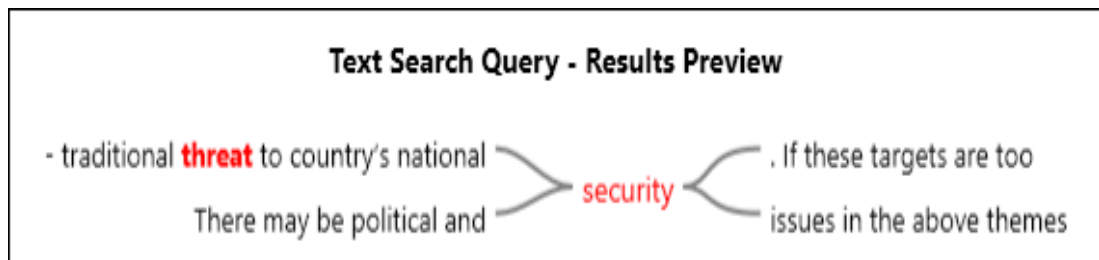
Figure 4.31 Security

There were not many comments on security. Though this has been a key issue to Pakistan especially due to the threat we face from our internal and external extremist forces. The learners need to know how to defend themselves in the situation of threat to themselves and the nation at large. There are threats like terrorism, social justice, and gender inequality. In Pakistan, regionalism and provincialism can be major challenges in the inclusion of these themes.

4.7.15 Challenges in the inclusion of Gender Equality
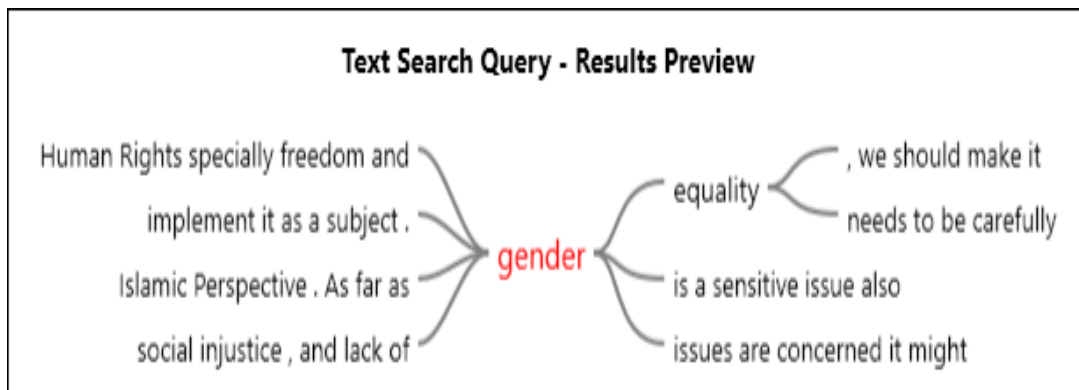
Figure 4.32 *Gender Equality*

In some of the provinces Gender equality still is a sensitive issue and needs care in its inclusion. Gender equality cannot be ensured and the fear of parents that sending girls to schools and colleges cannot be safe. They prefer their girl child to remain home and help in the domestic chores instead of going to school and getting exposed to the threats. Therefore consideration may be given for its inclusion keeping our cultural values and the social taboo people hold regarding this topic. In our male-dominated society gender is a sensitive issue and it may be difficult to implement gender equality. Gender equality, gender parity, and empowerment issues can be challenging as there is limited acceptance of the theme. Some respondents expressed the opinion saying, males, females, and she-male all are different and they cannot be given equal rights. There is a need for regular sensitization of these topics. Careful integration of gender equality is needed as its real concepts can easily be misunderstood.

4.7.16 Challenges in the inclusion of Youth/Adult Health (Sexuality Education)
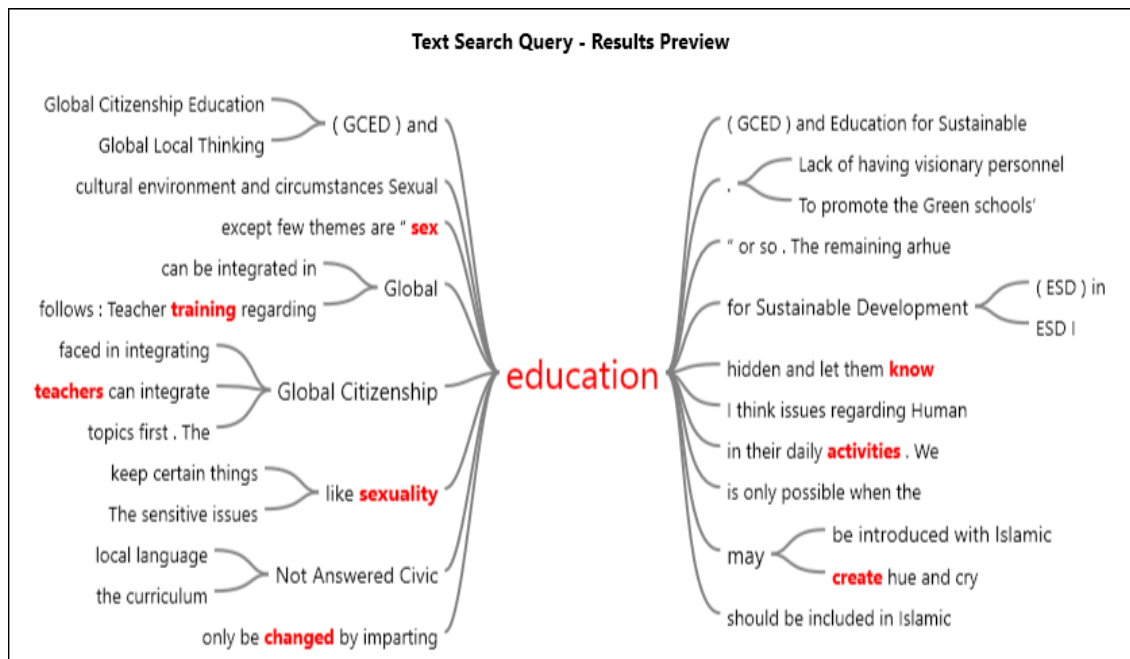
Figure 4.33 Sexuality Education challenge

Youth/Adult Health (Sexuality Education) cannot be openly included in the curriculum as this word itself does not give a positive feeling to the parents and the learners, moreover there are many misconceptions of people regarding such education. Lack of acceptability can be a big challenge because of social taboos and this may develop hurdles in its implementation. But as it is a very important topic keeping in mind the growing age of both genders for maintaining social norms and well knowing their biological needs. Introducing such education keeping the quotes from Quran and Hadith can to a great extend develop acceptance for learners, parents, and teachers. Some of the experts were of the view that sex education must not be taught and learners may be allowed to know about it at the appropriate time.

4.7.17 Challenges in the inclusion of Global Citizenship
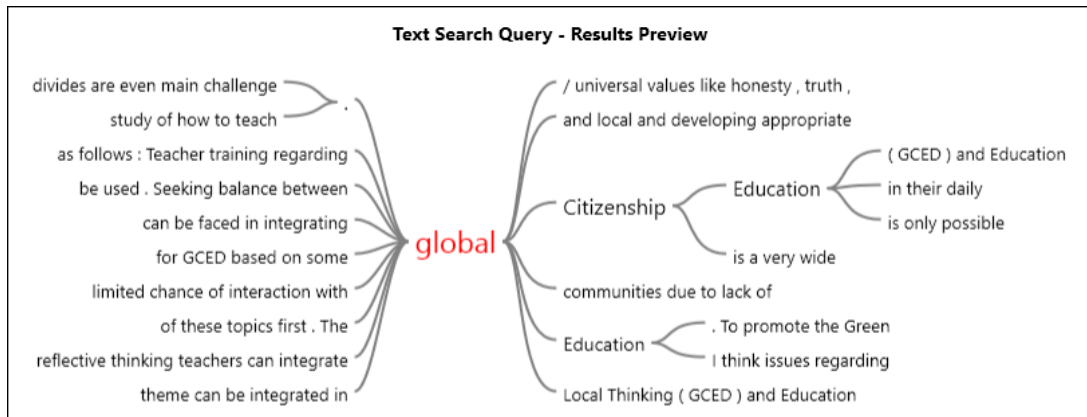
Figure 4.34 Global Citizenship

This theme must be included with some Global Universal values like truth, honesty, tolerance, peace, etc. Education for Global Citizenship theme must be included after ensuring that the religious, cultural, ethical, and moral values of our society are not being put at risk. For this sake the experts from Islamic studies, Pakistan Studies may sit together and carefully design with a balanced mix. Inclusion of ESD is not a big threat but GCED inclusion requires modifications based on our cultural and environmental circumstances. GCED is a complex theme and B.Ed. is about how to teach. It will help our prospective teachers if we include GCED in the teacher education curriculum. But it may be included in keeping the cultural norms. Lack of awareness for the themes in the teacher educators is the challenge and they need training regarding SDGs and Education Agenda 2030.

4.7.18 Overall challenges in the Global Citizenship Education and Education for Sustainable Development
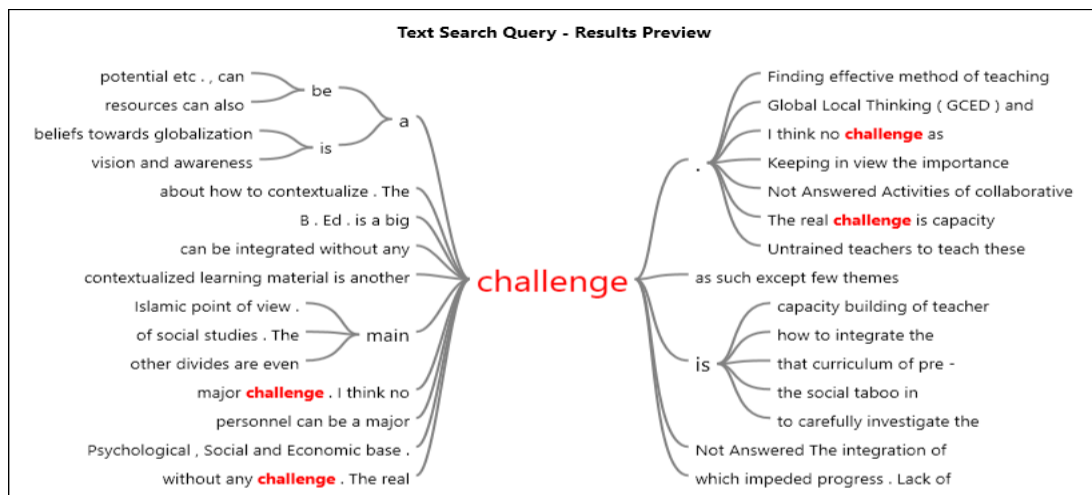
Figure 4.35 Over All challenges for inclusion of themes of GCED and ESD

To bring something new or to include any cross-cutting theme initially can be difficult. We may face the challenge of a narrow vision. Contextualization of the themes can be an issue and its integration into the curriculum can be a challenge.   People have social taboos which make them resist change. Many of the teacher educators may be unaware of these themes and may require awareness therefore capacity building and expert trainers can be a challenge. Finding an effective method of teaching can be a challenge. Defining and contextualizing global citizenship with local citizenship can also be difficult. The integration of the same in the curriculum with compromising the cultural aspects can be a major challenge. Global citizenship education can be possible only when the religious, cultural, ethical, and moral values of our society are not threatened. The course contents may be carefully designed having a balanced mix of experts from Islamic studies, Pakistan Studies, and the thematic subjects of GCED and ESD. Sexual education must be taught keeping Islamic point of view. The pre-service curriculum is already overloaded and introducing any new material will require eliminating of few already existing courses. The need for trained teachers in this area can be a challenge. As Pakistan faces the challenges of terrorism, social injustice, and lack of gender

equality, we should make it a top priority to give or develop the sense according to the age group regarding these subjects. In the long run, such steps can lead to betterment in our economy and will enhance the soft image of Pakistan. Lack of trained and well-equipped resource persons to be involved in curriculum development can be a challenge.

4.7.19 Word Cloud for opinions related to challenges in the inclusion of GCED and ESD in B.Ed. curriculum.

Figure 4.36 Word *Cloud-3 for the challenges of including the themes related to GCED and ESD*

GCED is a newly appeared concept, and the world is still trying to give meaning to this term asking nations to contextualize to their local environment. Some concepts and themes of GCED and ESD are abstract and confusing, so expert guidance may be required to teach the same to prospective teachers. Though earlier many of the subthemes were included in the ESD, therefore developing a proper understanding of the teacher educators regarding this concept can be a challenge. Their integration in the subjects all across or deciding to keep them separate can be a challenge. The addition of new subjects to the existing curriculum may be a challenge as the curriculum is already overburdened and the class size is also large. Changing the beliefs of people to accommodate these themes can face resistance. There may be some teachers holding rigid views and they may not accept any new change in the curriculum. The abrupt change in the curriculum may not be an advisable strategy, so bringing gradual change and reaching the targets can be a challenge. They were also of the view that certain sensitive issues like sexuality education may create hues and cry in the media and public

therefore culturally acceptable language or terminology like 'Health & Hygiene' may be used. Seeking a balance between global and local and developing appropriate contextualized material can be a challenge. As per experts' regionalism, provincialism and other divides in the society can be a challenge. Some of them held the view that most of the concepts can be integrated without any challenge while others argued that such emerging trends require careful integration as these may create conflicts in different segments of the society. Whenever anything is integrated into the curriculum, the cultural sensitivities and the National Education Policy must be kept in mind and we need to keep our limitations in mind. It was also feared that though GCED and ESD have a reformative scope yet their integration would require careful consideration when it comes to liberal moral integration and culturally sensitive scenario. Some of them were of the view that lack of awareness, coordination, and vision can be a challenge. Lack of policy backing can be a challenge and also the funds required for building awareness can be a challenge in its implementation. Ignorance and delays by the officials in the inclusion of the themes can be a challenge. Experts' believed that curriculum development is a continuous work and it must have a philosophical, psychological, social, and economic base. The main challenge in its inclusion is to carefully investigate the cultural background of the country and then plan for integration. Reflective thinking teachers can integrate global citizenship education into their daily life activities. Some of them foresaw the challenge that our teacher educators are themselves not well-versed in these topics, they initially need the training to build the understanding of these topics before their implementation in the class. Experts told that the 17 SD goals and 169 targets if realized as an integrated policy package can lead to long-term economic policy, human and environmental development but external threats, poor planning can hinder meeting these targets and may pose a serious non-

traditional threat to our country's national security. The major challenges we see are awareness of teacher educators with the SDG 2030, training of teachers regarding SDGs, non-inclusion of agenda in content curriculum, and passive attitude of teacher education institutions regarding preparing to SDG agenda. Financial resources can be a challenge. The resistance of the community to change their beliefs towards globalization can be a challenge. Ultimately untrained teachers to teach these subjects can be a challenge.

4.8   Objective-3

Finally, a course outline of GCED and ESD' as suggested by IBE-UNESCO (2016) was developed as per the consensus and agreement of experts of the study for the future curriculum of B.Ed. in Pakistan. This is developed as a separate (stand-alone) course of 'GCED and ESD' in light of the findings of the present study. The objectives of this course outline and topics can also be integrated into different subjects with the help of different subject experts in the field when the curriculum is updated or reviewed. The suggested 'Course Outline for GCED and ESD' as recommended by IBE-UNESCO (2016) for future National Curriculum of B.Ed. in Pakistan is initially shown as a model Page (229-230) and further in detail explained (Appendix-E).

Table 4.10

4.9 Alignment of Research Objectives and Research Questions with Data

Analysis

Objectives	Research Questions	Themes	Statistical Treatment	Findings
Research objectives 1 Examine the curriculum of B.Ed. Honors. (Elementary) in the light of Education Agenda 2030 with special reference to Target 4.7 of SDGs.	Q-1 Which theme and subtheme exist in the course outline/curriculum of pre-service teacher education (B. Ed. Honors, Elementary) related to GCED (Global Citizenship Education) & ESD (Education for Sustainable Development) of Sustainable Development Goal 4, Target 4.7, and Education Agenda 2030 and to what extent it is available?	1. Human Rights 2. Education for sustainable Development 3. Peace 4. Gender Equality 5. Global Citizenship 6. Health Education 7. Competencies 8. Pedagogies	Content Analysis (Expressed in) Descriptive statistics and Percentages	See page#136-144

Themes	Findings for (Knowledge/Contents)
1. Human Rights	(i) Islamic Studies-62%
	(ii) The teaching of Social Studies-88%
	(iii)Contemporary Trends and Issues in Education-50%
	(iv)Foundations of Education-25%
	(v) Classroom Management-13%
	(vi)Pakistan Studies-13%
2. Education for Sustainable Development	(i) General Science- 40%
	(ii)Teaching of General Science-25%
	(iii)Teaching of Social Studies - 63%
3. Peace	(i) The teaching of Social Studies-25%
	(ii) Foundations of Education-13%
	(iii)Contemporary Trends and Issues in Education-50%
4. Gender Equality	(i) Islamic Studies-38%
	(ii) Child development-25%
	(iii)Contemporary Trends and Issues in Education-25%
	(iv)School, Community, and Teacher-25%
	(v) The teaching of Social Studies-13%

	(vi)Curriculum Development-25%
	(vii) Foundations of Education-13%
5. Health and Well-Being	(i) 0%
6. Global Citizenship Education	(i) The teaching of Social studies- 88%
	(ii) Foundations of Education-75%
	(iii)School, Community, and Teacher-38%
	(iv)Pakistan Studies- 25%
	(v) ICT in Education -25%
	(vi)Comparative Education-25%
	(vii) Urdu-13%
	(viii) Education Psychology-13%
	(ix)Instructional Guidance and Counselling- 13%
	(x) Test Development and Evaluation-13%
	(xi)Contemporary Trends and Issues in Education -13%

Themes	Findings (For skills, competencies & pedagogies)
7&8 Skills/Competencies	All (8) Eight GCED and ESD themes are abundantly found in the competencies and pedagogies of B.Ed. Teacher education curriculum

Research Objective-2	Research Question No.2	Themes	Statistical treatment	Findings

Research objectives 2 To investigate the perspectives of curriculum experts objectively regarding the inclusion of Themes/Contents in B.Ed. Honors. (Elementary Curriculum) concerning GECD & ESD of Sustainable Development Goal 4 in Target 4.7 of Education Agenda 2030.	Q-2 What are the perspectives of curriculum experts regarding the inclusion of themes/contents related to GCED & ESD and what gaps and challenges they find in the curriculum of B.Ed. Honors Elementary Pre-Service Teacher Education?	Part-2A (Close Ended Questionnaire) 1. Human Rights 2. Education for sustainable Development 3. Peace 4. Gender Equality 5. Global Citizenship 6. Health Education	Five-point Likert Scale Descriptive Statistics Mean, Standard deviation and Percentages	See page# 149-161

Themes	(Close Ended Questions) Part-2 A (Findings)
1. Human Rights	(i) Sub-Theme "Rights" strongly agreed-40%; Agreed -47% and disagreement-6%
	(ii) Sub-Theme "Democracy" Strongly agrred-33%; Agreed- 56% and disagreed 3%
	(iii)Sub-Theme "Freedom" strongly agreed- 32%; Agreed 49% and disagreed 3%
	(iv)Sub-Theme "Social Justice" strongly agreed- 46%, Agreed- 41% and disagreed 6%
	(v) Sub-Theme "Human rights" strongly agreed- 46%, agreed- 33%; disagreed 4%
	The participants agreed to the inclusion of Human Rights
2. Education for Sustainable Development	(i) Sub-Theme "Sustainable Development "strongly agreed- 27%; agreed-54% disagreed 4%
	(ii) Sub-Theme "Ecology" strongly agreed -21%; agreed- 53% ; disagreed- 4%
	(iii)Sub-Theme "Environmental Education" strongly agreed- 34%; agreed-53%; disagree- 1%
	(iv)Sub-Theme "Environmental Sustainability" strongly agreed- 30%; agreed-50%; disagreed-6%
	(v) Sub-Theme "Climate change" strongly agreed-33%; agreed- 43% and disagreed- 7%
	(vi)Sub-Theme "Renewable Energy Resources" strongly agreed- 30%; agreed-46%; disagreed-1%
	(vii) Sub-Theme "Waste Management" strongly agreed-31%; agreed-43%; disagreed-1
	(viii) Sub-Theme "Economic Sustainability" strongly agreed- 28%; agreed-50%; strongly disagreed-3%
	(ix)Sub-Theme "Social Sustainability" strongly agreed-30%; agreed-49%; disagreed-7%
	(x) Sub-Theme "Education for Sustainable Development" strongly agreed-34%; agreed-47%; disagreed-1

	The mean score shows the participants agreed to the inclusion of ESD.
Peace	(i) Sub-Theme "Peace" strongly agreed-46%; agreed-34%; strongly disagreed-1 (ii) Sub-Theme "Abuse/Harassment/Violence" strongly agreed-38%; agreed-38%; disagreed-3% (iii)Sub-Theme "Peace Education" strongly agreed-48%; agreed-36%; disagreed-1 The mean score shows the participants agreed to the inclusion of Peace
Gender Equality	(i) Sub-Theme "Gender Equality" strongly agreed-34%; agreed-43%; disagreed-1 (ii) Sub-Theme "Gender Equity" strongly agreed-23%; agreed-51%; strongly disagreed-1% (iii)Sub-Theme "Gender Sensitivity" strongly agreed-21%; agreed-36%; disagreed-1% (iv)Sub-Theme "Gender Parity" strongly agreed-21%; agreed-36%; strongly disagreed-1% (v) Sub-Theme "Empowerments" strongly agreed-28%; agreed-39%; strongly disagreed-3% The mean score shows the participants agreed for Gender Equality
Health & Well-Being	(i) Sub-Theme "Physical fitness" strongly agreed-30%; agreed-46%; disagreed-3% (ii) Sub-Theme "Mental Health" strongly agreed-37%; agreed-34%; disagreed-9% (iii)Sub-Theme "Healthy Lifestyles" strongly agreed-37%; agreed-34%; disagreed-3% (iv)Sub-Theme "Awareness" strongly agreed-37%; agreed-37%; disagreed-1% (v) Sub-Theme "Health Education" strongly agreed-37%; agreed-35%; Strongly disagreed-3%

	Sub-Theme "Sexuality Education" strongly agreed-20%; agreed-23%; disagreed-14%
	The participants agreed for Health and Wellbeing inclusion
Global Citizenship Education	(i) Sub-Theme "International Citizenship" strongly agreed-37%; agreed-41%; strongly disagreed-3%
	(ii) Sub-Theme "Multiculturalism" strongly agreed-29%; agreed-39%; strongly disagreed-1%
	(iii) Sub-Theme "Immigration" strongly agreed-30%; agreed-39%; strongly disagreed-4%
	(iv) Sub-Theme "Global-Local Thinking" strongly agreed-33%; agreed-39%; strongly disagreed-1%
	(v) Sub-Theme "Global Competitiveness" strongly agreed-39%; agreed-39%; strongly disagreed-4%
	(vi) Sub-Theme "Cultural Heritage" strongly agreed-34%; agreed-40%; strongly disagreed-3%
	Sub-Theme "Global Citizenship Education" strongly agreed-36%; agreed-39%; strongly disagreed-6%
	The participants agreed to the inclusion of Global Citizenship.

Research Objective-2	**Research Question-2** Same as above	**Part-2B Open-Ended Questions:**	**N Vivo 10** (i) Word Trees; (ii) Word Cloud; (iii) Descriptive Explanation and (iv) Quotes	**Findings** See page#163 -185

Research Question-2	Q-1 (Open Ended) Illustrate the gaps you find in B.Ed. Honors (Elementary) Curriculum regarding themes and subthemes of Human Rights, Sustainable Development, Peace and Non-violence, Global Citizenship, Gender Equality, and Health Education
1. Gaps in Human Rights	1. The experts say that the theme of Human Rights is not explicitly included. 2. Both Human rights and Democratic Governance are marginally included. 3. Human Rights may be taught in the light of Islam so that they can be easily and willingly implemented. 4. As these topics are related to Civic Education the society can benefit by developing civic sense in the learners as per the cultural traditions and norms of any particular country. 5. There is a need for systematic integration in the curriculum as less emphasis is laid on human rights. 6. Creating awareness for fellow human rights, and contextualizing the local needs is necessary for the attainment of SDGs. 7. Its inclusion in the early/beginner classes can be more beneficial than its inclusion in the later stages. 8. The content-dominated syllabus is making the practical aspect coverage difficult. 9. More focus is laid on theoretical knowledge and practice is ignored. 10. Some respondents are of the view that this must be taught as a separate subject.
2. Gaps in Education for Sustainable Development	1. According to experts ESD is not included in the teacher education curriculum. 2. Environmental Sustainability content also does not exist. 3. There is a need to institutionalize sustainability issues across the syllabi. 4. There is a lack of understanding regarding this topic in both the teacher educators and the learners.

	5. For a better understanding of the theme, it is essential to include these topics from an early age. For the students of B.Ed., it must be included with practical methodology.
3. Gaps in Peace Education	1. The experts view that 'Peace Education' is slightly included in the curricula.
	2. If this topic/theme is developed as a separate subject or topic or integrated with the B.Ed., curriculum it will help in developing peaceful attitudes in the learners.
	3. There is a need to more deliberately add the topics of Peace and Non-violence in the curriculum
4. Gaps in Gender Equality	1. According to participants Gender Equality is a sensitive issue.
	2. Through Gender equity, we can build and support each other.
	3. This subject can also be taught as a separate subject.
	4. It is being presently taught at Bachelors and Masters Level.
	5. In 2017 HEC with the support of experts designed this course.
	6. The inclusion of Gender parity and Empowerment can show some resistance from some quarters. Whereas some of the respondents opposed the inclusion of Gender equality and contended that male, female, and She-Male all cannot be the same.
	7. There seem to be gaps regarding Gender discrimination and gender equality.
5. Gaps in Health & Well Being	1. Regarding 'Health Education and Healthy Life Styles' experts say this is the need of the hour.
	2. We see our national priorities have no focus in this area.
	3. Our curriculum is more theoretical or content-focused.
	4. There is a need to deliberately include the health component in the curriculum.
	5. The experts believe that a healthy lifestyle and healthy ways of living are lacking in the curriculum.

6. Gaps in Global Citizenship	1. A course has been developed by HEC on the subject 'Active Citizenship and Community Engagement' and is taught at the level of under graduation.
	2. It covers all the themes comprehensively.
	3. There is a need to make learners aware of multiculturalism in the classrooms.
	4. Immigration is a delicate issue. It is necessary to develop a sense of international understanding in our citizens and the spirit of serving humanity without having a bias for any cultural or other boundaries.
	5. Inequality in society, religious group differences, and bringing harmony between all are also missing in the curriculum.
Research Question-2	**Q-2** Briefly elucidate the views regarding inclusion or non-inclusion of SDGs Target 4.7 broad themes Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) in the curriculum of Pre-Service B. Ed? Honors (Elementary) Curriculum and in which subject? Elaborate
Opinions for Inclusion of **GCED** and subjects in which to be included	1. The experts for the inclusion of GCED themes were of the view that there is no second thought for the inclusion of these themes and there is a dire need of its inclusion as it will enable the student teachers to build their critical thinking, collaborative thinking, and team working skills regarding the local, national and global issues.
	2. It will also help them to know about the bilateral and multilateral relations that are existing between the countries.
	3. It will enable them to know regarding their rights and privileges and also the rights of others.
	4. It will provide an opportunity to accept the cultures and environments of others. Peace education is a proactive strategy to counter extremism.

	5. It can be included in the subject of History, geography, and Civic Education particularly and can be integrated into all subjects.
Opinions for Inclusion of **ESD** and subjects in which to be included	1. Regarding the inclusion of ESD, experts hold the opinion that this will develop problem-solving, critical, and creative thinking skills in the Pre-Service teachers.
	2. If these themes are included in the curriculum they will enable the prospective teachers to solve the issues related to the environment and the atmosphere.
	3. They will be more aware of the relationship between society, culture, environment, and economy.
	4. Learners will be able to develop communication skills to address people of different cultural backgrounds.
	5. Allocation of some additional credit hours can be sufficient to teach the ESD theme.
	6. Not only their inclusion in the curriculum but the assessment strategies are also required to see if the same is implemented in thorough letter and spirit.
	7. Both Formative and Summative assessments are required at they must be at all levels of education.
	8. The above theme can be included either in the elective or in the general courses. They also can be introduced in an integrated form.
	9. This theme and its subthemes can be included in Environmental Education, Biology, and Chemistry.
	10. Keeping the context, content, and nature we need to integrate.

Research Question#2	**Q-3** List the challenges as per our cultural background do you feel can be faced in integrating Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) in the B.Ed. Honors (Elementary) Curriculum?
Challenges in the inclusion of **Human Rights Theme**	1. The experts believe that there must not be any confusion regarding the inclusion of these themes as human beings are the same everywhere biologically. 2. But as we hold Islamic cultural backgrounds certain subjects may be introduced according to the Islamic viewpoint. For example, Civic Education may be introduced with an Islamic perspective and this must be added in the subject of Social Studies. 3. For Pakistan, our major challenge is the defense of our country from enemies and democracy. The themes of Human Rights and especially the sub-theme 'Freedom' needs careful consideration before its inclusion 4. Finding competent and visionary people who can predict the long terms benefits of the themes can be a challenging task.
Challenges in the inclusion: **ESD Theme**	1. The inclusion of Sustainable development can be very beneficial for Pakistan as it can enable us to develop awareness about our environment but it must be included in keeping our cultural traditions and norms as we may face hurdles if this is abruptly included. 2. We may face challenges like a lack of coordination and policy implementation.

Challenges in the inclusion: **Peace Theme**	1. There are threats like terrorism, social justice, and gender inequality. 2. In Pakistan, regionalism and provincialism can be major challenges in the inclusion of these themes. 3. If we develop a sense of tolerance, patience, honesty, and speaking truth in children peace can be easily established. 4. Respect for diversity is very essential and education related to peace can change the norms, beliefs, and values of learners regarding tolerance and peaceful conflict resolution 5. Teaching Peace and tolerance can help develop the soft image of Pakistan.
Challenges in the inclusion: **Gender Equality Theme**	1. In some of the provinces Gender equality still cannot be ensured and the fear of parents that sending girls to schools and colleges cannot be safe. 2. They prefer their girl child to remain home instead of getting exposed to threats. Therefore careful consideration may be given for its inclusion keeping our cultural values and the social taboo people hold regarding this topic. 3. Gender equality, gender parity, and empowerment issues can be challenging as there is limited acceptance of the theme. 4. Some respondents expressed the opinion saying, males, females, and she-male all are different and they cannot be given equal rights.
Challenges in the inclusion: **Youth/Adult Health Education(Sexuality Education) Theme**	1. Youth/Adult Health Education (Sexuality Education) cannot be openly included in the curriculum as this word itself does not give a positive feeling to the parents and the learners, moreover there are many misconceptions of people regarding such education. 2. Lack of acceptability can be a big challenge because of social taboos and this may develop hurdles in its implementation. But as it is a very important topic keeping in mind the growing age

	of both genders for maintaining social norms and well knowing their biological needs.
	3. Introducing such education keeping the quotes from Quran and Hadith can to a great extend develop acceptance for learners, parents, and teachers.
Challenges in the inclusion: **Theme Global Citizenship**	1. This theme must be included with some Global Universal Values like truth, honesty, tolerance, peace, etc. Education for Global Citizenship theme must be included after ensuring that the religious, cultural, ethical, and moral values of our society are being put at risk. For this sake the experts from Islamic studies, Pakistan Studies may sit together and carefully design with a balanced mix. Inclusion of ESD is not a big threat but GCED inclusion requires modifications based on our cultural and environmental circumstances so, can be challenging.
	2. GCED is a complex theme and B.Ed. is about how to teach. It will help our prospective teachers if we include GCED in the teacher education curriculum.
	3. Lack of awareness for the themes in the teacher educators is the challenge and they need training regarding SDGs and Education Agenda 2030.

Research Objectives 3	**Research Question-3**	**Suggested course objectives and topics for future 'Course outline of GCED and ESD'.**	**Resources Suggested**	**Suggested**
To suggest 'Course outline of GCED and ESD' for the upcoming B.Ed. curriculum in Pakistan.	What course objectives and topics can be included in the 'Course outline of GCED and ESD themes to attain education Agenda 2030?			'Course outline of GCED and ESD' for the upcoming curriculum of B.Ed. in Pakistan

Research Question-3	What topics as per Target 4.7 can be included in the curriculum to attain education Agenda 2030

What course objectives and topics can be included in the 'Course outline of GCED and ESD' for the upcoming curriculum of B.Ed. Honors in Pakistan to attain education Agenda 2030?	The 'Course outline of GCED and ESD' suggested for future B.Ed. curriculum in Pakistan **(Appendix-D, E &F).**

4.10 Subject wise major findings for Content Analysis as per highest percentages

Table 4.11

S. No	Theme	Subject	Percentage
1.	Human Rights	The teaching of Social Studies	88%
2.	Global Citizenship	The teaching of Social Studies Foundations of Education	88% 75%
3.	Education for Sustainable Development	The teaching of Social Studies	63%
4.	Peace and Nonviolence	Contemporary Trends and Issues in Education	50%
5.	Gender Equality	Islamic Studies	38%
6.	Health and Well Being	No Subject	0%
7.	Competencies	collectively	Abundant
8.	Pedagogies	collectively	Abundant

5   **CHAPTER 5**

SUMMARY, FINDING, CONCLUSIONS, DISCUSSIONS, AND RECOMMENDATIONS

5.1   SUMMARY

In the present interlinked world, it is necessary to impart global citizenship education (GCED) and education for sustainable development (ESD), so that the learners build peaceful, tolerant, and just societies where people of different religions, cultures, opinions, castes and creeds live in peace and harmony with each other and have the respect of other rights and know their rights. For this purpose the curricula of B.Ed. (Honors) Elementary curriculum was studied to see the inclusion of the themes and subthemes of global citizenship and education for sustainable development. Later curriculum experts' opinions were taken. There were six main themes and several subthemes as suggested by IBE – UNESCO (2016) in GCED and ESD. Content analysis was initially done. It included eight themes that were investigated in 39 subjects offered by HEC to every university.

A convergent parallel mixed-method approach was adopted. Morse's (1991) notation of QUAL+quan simultaneous design was used. The qualitative component was given priority and emphasized more as it covered the content analysis and the open-ended questions of the survey questionnaire. For the objective opinions, the survey questionnaire was administered which had closed-ended questions. The instruments were highly valid and reliable as they were developed by the International Bureau of Education and Global Education Monitoring Report, 2016 team. Participants of the study were the curriculum experts who were chosen by adopting purposive sampling.

The results of the qualitative and the quantitative findings were related combined, integrated, and interpreted.   Both content analysis and the opinions of experts supplemented and complemented the study findings and also enabled the development of a course outline of GCED and ESD for the future curriculum of Pakistan.

The researcher attempted to study the contents present in the Pre-Service Teacher Education Curriculum. The objectives of the study were:

(i)   To examine the curriculum course outlines of B.Ed. (Honors) for knowledge, skills, competencies, and pedagogies for the inclusion of the themes of GCED (Global Citizenship) and ESD (Education for Sustainable Development) of target 4.7 in SDG 4 of education agenda 2030.

(ii)   To investigate the perspectives of curriculum experts regarding the inclusion of themes of global citizenship education (GCED) and education for sustainable development (ESD) in B.Ed. Honors. (Elementary) curriculum as per Sustainable Development Goal 4 in Target 4.7.1 of education agenda 2030.

(iii)   To suggest a 'Course outline of GCED and ESD' in the light of the findings along with the teaching-learning resources for the future curriculum of B.Ed. in Pakistan to attain education agenda 2030.

The total number of participants selected as the sample for the survey of the study was 107, out of which 70 fully complete responses were considered for their inclusion. They were the members of the National Curriculum Review Committee (NCRC) and their co-opted members who aided the development of course guides and syllabi for the teacher curriculum subjects of Associate Diploma in Education (ADE) and B.Ed. (Elementary) curricula. The sampling method adopted for the study was purposive sampling. Opinions of curriculum experts were taken.   For expert opinions, a questionnaire was developed which included both the open and the closed-ended

questions. There were six main themes in the questionnaire. They included Human Rights, Education for Sustainable Development, Peace, Gender Equality, Health &Well-Being, and Global Citizenship Education. These themes further included sub-themes. The themes suggested in the global education monitoring report of (UNESCO, 2016 p.293) were taken with their proper permission. The participants were asked to respond to a survey questionnaire for closed-ended questions on a five-point Likert scale ranging from strongly agree to strongly disagree. The open-ended questions were three which allowed the respondents to freely express their opinions regarding the gaps they find in the curriculum, their opinion regarding the inclusion of these themes, the subjects in which to be included, and the challenges they see in incorporating these themes in the teacher education curriculum. For the content analysis, similar eight themes were used. They had extended words and subthemes to every main theme.

For content analysis, the themes and the subthemes were analyzed through content analysis. They were descriptively explained and expressed in the form of percentages and bar graphs. For the closed-ended survey questionnaire, the analysis was done using SPSS 21 and the same was expressed through means and standard deviation and then descriptively explained and presented in the form of percentages and graphical form. Finally, the open-ended questionnaire was analyzed using Nvivo 10 and the themes were expressed in descriptive explanation, word tress, and word clouds. Both the qualitative and the quantitative data were separately analyzed later they were combined, merged, and interpreted.

The results showed that the "Teaching of Social Studies" had most of the themes, followed by "Foundations of Education" and then followed by the subject of "Contemporary Trends and Issues in Education". The theme of "Health &Well Being"

did not exist in any of the subjects. And in the survey questionnaire, the opinions of participants strongly recommended the inclusion of these themes, and the open-ended views (detailed opinions) also strongly favored the inclusion of the themes of GCED and ESD and were of the view that inclusion of these themes in the curriculum of 'Education' will help achieve education agenda 2030. The integration and combining of both the qualitative and qualitative results are discussed in (5.4) and then a course outline for GCED and ESD is developed in the light of study findings for the future national curriculum of B.Ed. in Pakistan.

5.2   FINDINGS

5.2.1 Objective: 1: Qualitative- Part-I Content Analysis

There are overall 39 subjects in the curriculum of B.Ed. (Honors) Elementary, prescribed by HEC. There are six main themes of GCED and ESD. They are 'Human rights, Education for Sustainable Development, Peace, Gender Equality, Health Well Being, and Global Citizenship' and two other themes 'Competencies and Pedagogies' reaching the themes to eight.

a. The content knowledge of the main theme of "Human Rights" was found by 62% in the subject of 'Islamic Studies', followed by 88% inclusion in the subject of 'Teaching of Social Studies' and 50% in the subject of 'Contemporary Trends and Issues in Education'. The 'Teaching of Social Studies' had the maximum number of sub-themes.

b. The content knowledge of the main theme 'Education for Sustainable Development' was found by 38% in the subject of 'General Science', and 'Teaching of General Science' had 25% and 'Teaching of Social Studies' had 62% of content knowledge for the themes. The subject of 'Teaching of Social Studies' had the maximum number of themes related to the theme of 'Education for Sustainable Development'.

c. For the main theme of "Peace and Non-Violence" the subjects which had the content knowledge are 'Teaching of Social Studies' by 25% and 'Foundations of Education' had 12% and 'Contemporary Trends and Issues in Education' had 50% of subthemes. The 'Contemporary trends and issues in education' witnessed more number of themes.

d. The content knowledge for the theme of "Gender Equality" was in the subject of 'Islamic Studies' by 38%, 'Child Development' had 25% of the themes, 'Contemporary Trends and Issues in Education' had 25%, 'School Community and Teacher' had 25% and 'Teaching of social Studies' had 12% and the 'Foundations of Education' had 12% in the subject outlines.

e. The content knowledge for the main theme of "Health and Well Being" was not found in any subject. There was not a single subject that had the theme of "Health and Wellbeing" in the content knowledge

f. For the main theme "Global Citizenship" the content knowledge was found by 88% in the subject of 'Teaching of social Studies', followed by 75% in the subject of 'Foundations of Education'. In the subject 'School, community and Teacher' it was found by 38% and 12% each in the subjects of 'Education Psychology', 'Contemporary Trends and Issues in Education' and 'Introduction to guidance and counseling'. The subject of 'Teaching of social studies' followed by the subject of 'Foundations of education' had an adequate number of themes. This theme covered many of the subjects of B.Ed. curriculum.

g. On the inter comparison of subjects for all the main themes, it was found that the subject of 'Teaching of Social Studies' had the maximum number of GCED and ESD themes, followed by the subject 'Contemporary Trends and Issues in Education' and then the subject of 'Foundations of Education'. Some other subjects had very few themes. Overall it was observed that the main theme of "Human Rights" dominates

among all themes when percent wise themes are observed, followed by the main theme of "Global Citizenship". The themes of "Education Sustainable Development", "Peace and Non-Violence" and "Gender Equality" were found less incorporated in the subjects of B.Ed., and the main theme of "Health and Well Being" was not seen in any of the subjects.

h. The outlines of the subject 'Teaching of Social Studies' have covered the competencies and pedagogies abundantly. Almost all subjects except a few have profoundly covered the competencies and pedagogies. Compared to the knowledge content of GCED and ESD, the curriculum of B.Ed. (Honors) Elementary focuses more on the competencies and pedagogies, methods, and approaches regarding all the themes and their subthemes.

i. From the results of the study, it was concluded that the curriculum of B.Ed. (Honors) Elementary has marginal inclusion of sub-themes related to "Human Rights" and most of them are covered in the subject of 'Teaching of Social Studies'.

j. "Education for sustainable development" must be in the subject of 'General Science' and 'Teaching of General Science' but it was not so profoundly found as was supposed to be. Even this main theme and its subthemes for content knowledge were commonly seen in the 'Teaching of Social Studies' subject.

k. Similarly for the content knowledge of "Peace and Non-violence" sub-themes were abundantly found in the subject of 'Contemporary Trends and Issues in Education'.

l. The content knowledge for the theme of "Gender Equality" was found more in the subject of 'Islamic Studies' compared to other subjects.

m. The study established that there was not a single subtheme related to "Health and Well Being" in any of the subjects of B.Ed. (Honors) Elementary.

n. The results found that the theme of "Global Citizenship Education" was profoundly infused in the subject of 'Teaching of Social Studies' for its content knowledge.

o. The conclusions for the presence of content knowledge regarding all themes showed that all six themes were mostly found in the subject of 'Teaching of Social studies', followed by the subject of 'Foundations of Education' and 'Contemporary Trends and Issues in Education'.

p. The competencies and pedagogies related to the above six themes showed that the curriculum of B.Ed. (Honors) Elementary had a large number of them in all subjects and yet again the subject of 'Teaching of Social Studies' dominated for the inclusion of skills and competencies in the curriculum.

q. The curriculum is most stressed for 'inquiry-based learning' and the development of "Creative thinking skills'.

5.2.2 Objective-2: Part-II-A- Quantitative Findings: Perspectives of Curriculum Experts

The second part of the study was to take the opinions and views of curriculum experts. Initially, they were 107 but some of the responses were not complete. The responses complete in all respects both closed and open-ended were considered. They were 70 in number. The responses were of National Curriculum Review Committee (NCRC) members and their co-opted members. All the participants of the sample population held key posts of vice-chancellors, deans, heads of departments, directors, associate professors, assistant professors, etc., and were highly qualified and some had experience of more than 30 years and were represented all the four provinces of Pakistan including Gilgit Baltistan. In the findings for expert opinions only the highest and the lowest percentages are mentioned below along with their mean score agreement:

a. The participants for the main theme of "Human Rights" supported strongly its subtheme 'Social justice' with 87% of agreement. Overall they showed good agreement for social justice with a mean score of 4.3 and a standard deviation of 0.83

b. For the main theme of "Education for Sustainable Development," it was noted that 87% of the participants agreed for its subtheme 'Environmental Education' with the mean scores as 4.2 and the standard deviation of 0.66 showing considerable agreement was seen for the inclusion of this subtheme with its special focus on environmental education in the subjects of B.Ed. curriculum.

c. The participants regarding the main theme of "Peace and Non-Violence" strongly favored the subtheme 'Peace' with 79% of agreement and the mean score was 4.3 and the standard deviation was 0.83 which is the highest, compared to other subthemes.

d. For the main theme "Gender Equality" the participants favored the subtheme 'Gender equality' by 77% of agreement and its mean scores were 4.0 and the standard deviation was 0.99.

e. The participants for the main theme of "Global Citizenship" found the agreement for the subtheme 'global-local thinking' by 77% with the mean score of 4.0 and its standard deviation as 0.91.

f. For the sub-theme "Health and Well Being" the participants favored the subtheme 'Physical fitness' with 97% of agreement with the mean score of 3.9, and the standard deviation of 0.99.

5.2.3 Objective-2 Part-II (B) Open-Ended Qualitative: Perspectives of Curriculum Experts

The open-ended questions are in detail discussed in chapter 4 with the word trees and word clouds. The summarized version is stated here:

Q.1 According to your expert opinion what are the existing gaps for GCED and ESD in the pre-service curriculum of B.Ed. (Honors) Elementary?

a. The experts believed that the main theme "human rights" and subtheme 'democratic governance' is moderately included in the curriculum.

b. As per experts, "education for sustainable development" is not sufficiently included in the curriculum. The contents related to the subtheme 'environmental sustainability are also not adequately included in the curriculum.

c. Practical component or hands-on training is missing in the curriculum. It can be better if we teach GCED and ESD practically instead of a more theoretical focus.

d. "Peace Education" is also moderately included in the curriculum. It can either be integrated or taught as a separate subject in the future.

e. "Gender Equality" is also not sufficiently included in the curriculum of B.Ed. Honors. But is being taught as a course for Bachelors and Masters Level.

f. "Health and Well-Being" is also missing in the curriculum. Therefore its inclusion is highly recommended. The subtheme 'Mental health' is a complex issue and needs careful study for its inclusion. Similarly, the term 'Sexuality Education' can be resisted by the community and this needs to call by the name of 'Youth Health Education'.

g. As per experts, wide gaps are seen regarding the inclusion of these themes and their subthemes in the curriculum.

h. The themes of GCED and ESD may be included keeping our cultural background in mind with an Islamic perspective.

i. Formative and summative assessment strategies may be devised to see the implementation of GCED and ESD.

j. Global citizenship education is very important to be imparted so that we prepare future teachers compatible with the global trends and acquire knowledge and skills to promote sustainable development. The inclusion of these themes can help attain education agenda 2030. Therefore experts may be hired for teaching these topics to teacher educators.

Q.2 what is your opinion regarding the inclusion or non-inclusion of the themes and which subjects you feel are suitable for their inclusion, so that prospective teachers are aided in attaining education agenda 2030?

a. The inclusion of GCED and ESD will promote the 'critical thinking skills of the learners regarding composite global problems and enable them to identify different cultures and make them aware of fellow human beings' rights and their rights and duties. They will be able to link themselves and the environment and it will enable them to solve the issues related to 'sustainability.

b. 'Quality Education' has its various paradigm factors and there is no second opinion about the inclusion of these themes. The inclusion of these themes in the curriculum can promote 'international acceptance' to avoid decentralization.

c. The inclusion of these themes must have a trickledown effect and it must also be seen in the practical application at the school level. Greens schools may be promoted.

d. The teachers are the real implementers of the curriculum in the classroom hence teachers need to be trained to have positive perspectives regarding these themes. So that they become 'critical and reflective thinkers, 'problem solvers, and be 'creative', 'progressive', and 'ethically responsible individuals'.

e. The themes of GCED and ESD may be included keeping our cultural background in mind with Islamic perspective.

f. Competencies and skills for collaboration, citizenship, open-mindedness, creativity, problem-solving, empathy and character-building may be developed in the learners and for this purpose resources and expert teachers may be deputed so that mindset of the learners can be changed.

g. The inclusion of the themes can be made either in the 'Foundational', 'General', or 'Elective courses'. The 'interdisciplinary approach can be highly suitable for the inclusion of these themes.

h. For the attainment of any short-term or long-term program, the agenda must be included in the ECE, Primary, and Elementary curriculum.

i. Education for sustainable development may be included in the subjects of 'Chemistry', 'Environmental Sciences', and 'Biology'. They suggested the inclusion of these themes in an early-age curriculum to be more beneficial.

j. The theme of "Peace" may be included in the subjects of History, Geography, and 'Civics Education' and it must be deliberately included in the curriculum.

k. The topics of GCED and ESD are the cross-cutting themes and these may be included in the subjects of History, Geography, Trends, and Issues in Education, Gender Development, and Civic education as well as in the subjects of Environmental Education, Biology, and Chemistry.

l. Sustainable development goals have social, economic, cultural, and environmental dimensions therefore the curriculum prepared must have linkages between the subjects. An integrated approach can be adopted to include the themes of GCED and ESD in the subject of the pre-service teacher education curriculum.

m. Pre-service teachers may be allowed to give feedback on their existing and their preferred skills while designing the curriculum.

Q.3 what challenges do the experts find in the inclusion of the themes of "GCED and ESD in the pre-service curriculum?

The challenge can be in incorporating gender equity, gender equality, and empowerment themes, as according to some experts both males and females cannot be equal at any cost.

a. Inclusion of the 'sex education' topic or subject can be a challenge because it may not be acceptable to the parents or teachers due to the cultural background of our country. 'Social taboo' can be a challenge. There is a need to mold the opinion of the people for the inclusion of these themes.

b. Challenges can be seen in the form of coordination and implementation both from the stakeholder's and the implementers' point of view. To contextualize can be a challenge, as the curriculum already is overburdened. For introducing new themes, we will have to eliminate a few already existing courses.

c. Untrained teachers can be a challenge as many of the teachers may not be aware of these themes, arranging training for the teachers can be a challenge. Taking initiative and responsibility can be a challenge.

d. Financial and material resources for training, teaching, and incorporating these themes in all important documents can be a challenge.

5.3 Part III

Objective-3: A 'Course outline of GCED and ESD' was ultimately developed in the light of the findings of the study and as per the consensus and agreement of experts of the study for the future national curriculum of B.Ed. in Pakistan. This is developed as a separate (stand-alone) course of GCED and ESD. The objectives of these themes in the future can also be integrated into different subjects with the help of different subject

experts in the field. A 'Course outline for GCED and ESD' is suggested along with their web resources for incorporation in the future (Appendix-D, E &F).

5.4 Integrating and combining both Qualitative and quantitative data:

5.4.1 Human rights:

The findings of content analysis show the 'human rights' theme included in six of the subjects of B.Ed., with the subject of 'Social Studies' having more percentage of human rights subthemes. The experts also positively favored subthemes rights, social justice, democracy, freedom, and human rights education. The content analysis showed that this theme is explicitly included in six subjects, while deliberating in detail the experts were of the view that this theme, in reality, is also implicitly included in most of the subjects in the curriculum. Some of the experts were of the view that this theme must be systematically integrated because it develops awareness about one's rights and the rights of others. They voiced that a content-dominated syllabus is making the practical aspect coverage difficult. Human Rights are well explained in Islam and therefore it must be taught in the light of Islam.

5.4.2 Education for Sustainable Development:

Regarding 'Education for Sustainable Development' the contents showed that it is not included in many of the subjects except a few subthemes were found in 'Teaching of Science' subject and compulsory 'Science' subject and 'Social studies'. The objective opinion of experts showed favorable agreement for the inclusion of this theme. In their comprehensive discussion, the experts expressed similar views and told this theme is not much included and they suggested this topic be included in the subjects of 'Environmental studies', 'Biology' and 'Chemistry' as they were of the view that this

will develop an awareness of the relationship between the society and environment. The experts further stressed that for better understanding and implementation of this topic it must be included in the curriculum from the early stages of the school. They also suggested introducing green schools.

5.4.3 Peace & Non-Violence:

Peace was found in three subjects of B.Ed. curriculum. About integrating, the experts highly favored the inclusion of this theme and suggested its thoughtful addition, so that peaceful attitudes are fostered and terrorism is eliminated. The inclusion of the 'Peace' theme according to them is necessary for developing tolerance and patience in learners. The deliberate inclusion of this topic was emphasized by them. They recommended including this theme in subjects of History, Civics, and Geography.

5.4.4 Gender Equality:

As far as 'Gender Equality is concerned it was included in seven subjects of B.Ed. But the percentage of their inclusion was low. However very least disagreement was seen in the objective analysis and the subjective comments articulated that both genders cannot be equal and told that this is a sensitive issue as per our cultural background hence it must be included carefully. There was disagreement seen on the term of empowerment of women, which depicts the cultural background of our country where the male gender is given more importance compared to females.

5.4.5 Health Education:

Regarding 'Health Education' no sub-theme was explicitly found in the curriculum. The objective opinion of experts showed different opinions regarding this theme especially for the inclusion of the theme of sexuality education. In their extensive opinion, the experts favored the inclusion of sub-theme 'Mental Health' particularly

and also the subtheme of 'Physical fitness'. They expressed the desire that the health theme must be purposely included as adopting healthy lifestyles, is the need of the hour. Sensitive issues like sexuality education may create hues and cries in public and media so culturally appropriate language and terminology may be used like "Health and Hygiene". They also suggested renaming sexuality education as 'Youth Health Education'.

5.4.6 Global Citizenship Education:

The contents for 'Global Citizenship Education' were witnessed in eight of the B.Ed. subjects. Two subjects have more than 50 percent of the subthemes related to global citizenship education. Few other subjects had a small percentage of the subthemes. Again the objective opinions highly favored the inclusion of this theme. While the comprehensive opinions of the experts expressed the view that this will develop an understanding of different cultures. It was told by experts that intercontinental understanding will be developed with the inclusion of this theme and there will be harmony and peace. They suggested the inclusion of additional subthemes like religious harmony and indiscrimination towards religious groups. They commented that the present curriculum is more focused on meeting the local needs therefore the future curriculum must be made keeping in view the regional and the global aspirations.

5.4.7 Competencies and Pedagogies:

The competencies and pedagogical methods for student-centered learning were abundant in B.Ed. curriculum which experts felt that the course was developed focusing more on 'how to teach rather than what to teach'. The content analysis showed profuse inclusion and the experts emphasized their inclusion to enable problem-solving and critical thinking skills in learners. The competencies like critical

thinking, problem-solving, creative learning, and inquiry-based learning were more witnessed in many of the subjects. Whereas the pedagogies like child-centered, student-centered, cooperative learning, active learning methods were also found in the curriculum. The curriculum had more focus on the development of the skills and teaching methodologies.

5.5 Discussion

This study examined the curriculum of B.Ed. (Honors) in the light of GCED and ESD and for the purpose contents of the curriculum were analyzed. Simultaneously opinions for the inclusion of GCED and B.Ed. were taken. As global citizenship education GCED is a new term and was introduced only after 2012, hence many of the studies did not mention the term GCED specifically but we can see the term ESD mentioned. Though outside Pakistan there are some studies carried out on GCED and ESD, in Pakistan, there are very few studies that mention GCED. The results of the present study are discussed in light of the literature reviewed. It was revealed that there was more consensus of the present study with the previous relevant studies.

The agreement of the present study was noticed with the study of Kalsoom et al., (2019) who studied the documents related to (National Professional Standards for Teachers) NPST, Accreditation documents, and B.Ed. curricula for the inclusion of sustainability concepts, and were of the view that least preference was given by the experts to the international initiatives and the global agendas while designing the curriculum. The authors found that all three documents lacked the concept of ESD and the curriculum included only 5% of the sustainability content. They contended that the non-inclusion of sustainability themes in the curriculum can even be due to the ignorance of the UNESCO team working in Pakistan and the dominance of the United States in the

designing of curricula. The present study also noticed only three subjects included the sustainability concept and the ratio of inclusion was also very low.

The present study found that only three subjects of B.Ed. (Honors) the curriculum included the ESD concept and even those were partially covered. And the participants of the present study proposed to update the curriculum. Hence consensus of this study was seen with the results of Durrani, Malik, and Jumani (2019) who investigated the B.Ed. Elementary curriculum for the inclusion of ESD and its components the society, culture, economics, and environment and expressed their concern that B.Ed., curriculum did not incorporate the ESD concept and all topics related to social, cultural, and environmental were ignored. The authors were of the view that the curriculum lacked more than 80% of the social, cultural, economic, and environmental components. They also expressed their displeasure that the curriculum has also not been updated despite the passage of a decade. They were of the view that peace and tolerance will be improved if the student teachers know about protecting their cultural heritage. Similar opinions were expressed by the present study participants who mentioned huge gaps in the curricula and asked for updating of curricula for the inclusion of these themes.

The present study found that the concepts of GCED and ESD were missing in the curriculum and the findings were also in accord with the findings of Jumani & Abbasi (2015) who examined the pre-service teacher education curriculum to see if the documents have the objectives related to sustainability and if the trainee teacher had the knowledge related to sustainability, after investigation, they expressed their concern that even the objectives, of the curriculum, were not aligned for sustainability study, the curriculum also lacked the sustainability concept while the trainee teachers

could not comprehend the concepts as their instructors were not much aware of the concept.

Reimers (2020) claimed that the purpose of education must be to develop a sense of determination, build intellectual and emotional independence but unfortunately, this goal is not being pursued by many. Though the concept of global citizenship is not new still many schools are not preparing learners as global citizens. Present study participants expressed similar views that there are gaps related to global citizenship in the curriculum, neither the teacher educators are cognizant of these concepts nor the learners.

Rind (2020) claims that the curriculum of Pakistan is content-centered and the learners simply receive the knowledge. The curriculum standards are also not achieved properly and the teachers focus more on transferring knowledge. They neither adopt the constructivist approach nor bother to clear the concepts of the learners. Hence there is a need to review the curriculum for making it more relevant. The present study participants expressed their views that the curriculum is more content-centered and the theoretical base of the curriculum is not permitting practical outcomes of the study. They showed unanimity with the views of the author and urged the curriculum to be reviewed.

Robinson, Phillips & Quennerstedt (2020) expressed their disappointment regarding the role of a teacher in the imparting of human rights education. They also highlighted the issue of policy coverage which was not given in many of the countries. Despite the focus on imparting human rights education by the United Nations, the authors pointed out that very little response was witnessed. Through curricular analysis, we can see knowledge about the extent to which human rights education is imparted. The

present study was not found in consensus with the above study as on content analysis it was witnessed that human rights themes was included in the teacher education curriculum and particularly in the subject of 'Teaching of social studies'.

About Peace education (Khan, Khurram & Tahir, 2020) propose that not only the peace-related objectives be integrated into the policy documents and the curriculum but practical approaches and implementation strategies be adopted especially as the teachers act as role models for inculcating peaceful behaviors, attitudes, and values in learners, the study participants also agreed upon the similar suggestion of not making the curriculum more activity-focused. They wished to see it more practical and implementable. Similarly, for the implementation of sustainable behaviors, the study participants also demanded the deliberate inclusion of peace & non-violence components in the curriculum. The present study participants feared that if the cultural, ideological, and religious background is not considered, integrating ESD and GCED can become a challenge.

The study of DePoorter & Aguilar-Forero (2019) also seems in accord with the present study where it was witnessed that there is no clarity and consensus on the term global citizenship as it is still in the evolutionary stage. The investigators in their study have in detail deliberated about the concept of global citizenship and how the term was used in different documents and empirical studies and it also discussed how the knowledge, skills, and behaviors are expressed as per GCED and what different authors told about the soft and critical global citizenship. The present study participants suggested hiring experts on the subject to get clarity and impart training.

There seems unanimity with the study findings regarding the development of cultural harmony and international understanding in the learners as the foreign learners

studying in Pakistan have expressed their disappointment that they face difficulty in cultural adjustments especially the language barrier sometimes which greatly affects their academic achievement (Dishad & Malik, 2019). The participants of this study also asked to promote multiculturalism in the classroom and at all levels of education. In a content analysis study of Urdu and Pakistan Studies textbooks carried out for gender equality depiction, Noreen & Sumaira (2020) noted that women in Pakistan are not given equal status and opportunities as desired by UNESCO in its target 4.7., and recommended to take appropriate steps for its inclusion in the curriculum and the textbooks. Similar findings were seen in the present study where the contents related to gender equality remained less than 50% and this theme was found only in seven subjects. Besides this, the participants of the study also voiced this concept missing in the curriculum and asked to include this topic with care as according to them in the male-dominated society of Pakistan we may face a challenge in including the topics of empowerment, gender parity, and gender equality.

There seems no consensus with the study of Mochizuki (2017) which focuses on the mainstreaming of sustainability concepts in almost all areas of school education. It focuses on including the sustainability concept in the vision, mission, curricula, teacher training, and assessment programs. As per the author the subject of Math, language, Science and Geography can be specially designed to develop the critical skills of the learners for the most pressing problems facing the globe. The results of the present study do not show unanimity with this study as there are very few concepts of ESD and GCED in the subjects of Math, Science, and languages which means that the concept of ESD was ignored while designing the curriculum of Pre-Service teacher education. Pasha (2015) claims that there is a need to develop a resilient state identity in the students so that they depict the positive image of their country because only then

the learners will be able to have a positive portrayal as global citizens.   There is a need to have a deep-rooted 'citizenship' understanding to grasp the concept of Global Citizenship.   The author says before designing the global citizenship programs it is necessary to keep our local context in mind. A similar opinion was given by the experts of the current study where they told that it is necessary to contextualize and keep the local aspects in mind before making any change in the curriculum for the inclusion of GCED and ESD as, if such steps are not taken, there may be a possibility of our local aims conflicting with the global aims.

The current study contradicted with the study of Denby & Richards (2016) who studied four undergraduate programs which includes Bachelor of Media, Human Sciences, Mechanical Engineering, and Business Administration, and found that there was maximum coverage of the concepts related to sustainability in the curriculum included at the university level. The study agrees with Mishra & Kumar (2014) and Columbus (2015) who studied the concept of various languages people speak, the different religions they believe, and living styles and cultures they follow.   Regarding the inclusion of multiculturalism and as per experts of the present study, they too believe that it promotes international understanding and brotherhood in this interconnected world.   Hence the present study favored developing multiculturalism in the classrooms.

The agreement was also seen with Nnokam & Suleii (2017) who enunciates that for the progress of any nation it is necessary to have a competent teacher who possesses critical, analytical, and entrepreneur skills. They emphasized the training of both pre-service and in-service teachers for sustainable development saying that it is an investment that can improve their performance, increase their salaries, raise their self-image, and boost their morale. Participants of the present study also showed consensus

with the authors and suggested training and capacity building of the teacher educators through workshops and seminars, so that they can properly teach the concept of sustainable practices. They also deliberated about the different challenges faced in the way of attaining quality education and found that the teachers lack the knowledge, skills, and attitudes to transform the civilization into a knowledgeable society and identified similar challenges as were pointed out by experts in the pursuit of quality education in the present study. Similarly, the study showed unanimity with Longhurst (2014) and expressed similar views that education for sustainability will develop a love for their discipline in the student teachers and allow them to comprehend the concept of ecological care and grooms both their personal and professional lives and will finally help them in adopting sustainable behaviors and lifestyles.

The study was also in accord with Jaiyesimi (2016) who investigated the challenges in implementing the sustainability concepts and found that financing and the cost of implementation were the major challenges besides he also identified lack of skilled personal and monitoring as the major challenge in the incorporation of GCED in curriculum, the experts of the present study also held similar views and claimed that to train teacher educators or teachers regarding such concepts finances can be a big challenge. Also, visionary people can be a challenge. Besides the acceptability to adopt change and shift towards adopting GCED and ESD was also seemed challenging to the participants of the present study.

The present study was also in agreement with Blankman, Schee, Volman & Boogoard (2015) where it was stressed to include the concept of sustainability and the authors were of the view that this will enhance the cognitive, affective, and comprehension capabilities in pupils and develop in them the knowledge and skills regarding the social, economic and environmental concepts. They also asked to include the same

in both the curriculum and the pedagogies. The study did not find consensus with Stabback (2016) who insisted on the inclusion of four pillars of learning suggested by UNESCO which relate to learning to know, learning to do, learning to live together, and learning to be. On analysis of the present study curriculum, it was witnessed that there was more focus on the pillar to know as the curriculum was found more content-focused and based on theories rather than practical knowledge. The present study also seems in accord with Junyent & Cebrian (2015) who stresses the inclusion of sustainability in the pedagogy and curricula as the same is suggested by UNESCO and expressed the view that pre-service teachers are the change agents of future generations.

The views of Amadio (2013) were seen in agreement with the present study where the participants were also of the view that the concepts of GCED and ESD may either be taught separately as different disciplines or may be integrated into different subjects because the integration of the themes, can be the better solution as this would not burden the already overloaded curriculum. Integration of the themes across the subjects can give learners a clear and holistic picture of content knowledge, skills, and competencies. According to the Global Monitoring Report (2016), it is witnessed that the Social Studies subject incorporates most of the GCED and ESD themes. Similarly in the present study, the subject 'Teaching of Social Studies' witnessed many of the themes and subthemes of GCED and ESD. Likewise, it mentions that the main challenge of monitoring this target is to see that the local and national aspirations are aligned to achieve this objective, the participants of this study also want this target to be set according to local and national context without compromising on our national interest. They highlighted the main challenge of incorporating sustainability, which is contextualizing to the local context.

There is an agreement seen with Haider, 2016 who as accepted by the experts in the present study asked for the involvement of the teachers in the designing of the curriculum and to allow them to give feedback on their existing skills and their preferred skills, as they are its real implementers. Andrabi's (2016) study also seems to agree with the present study where the participants also were in agreement stressing human rights and life-long learning and told that God has given every human being an equal status irrespective of his caste, creed, and color or social and financial status. Similar views were expressed by the present study participants.

The results of content analysis were seen in agreement with Tomasevki (2004) where the themes of 'Human Rights' were found sufficient compared to other themes. The present study also is in agreement with the study of Saetre (2016) where, as in our teacher education curricula, there is no importance given to ESD even in Norway. The lack of ESD concept is also witnessed in the geography curricula of that country. More stress is given on the knowledge regarding the problems of the environment and the environmentally friendly measures but there is no focus on the issues regarding ESD in the school curricula or texts.

The study of UNESCO (2015) also endorses the views expressed by the participants in the present study where it stresses upon inclusion of this concept in the wide array of subjects like Civics, History, Arts, Music, Literature, Environmental Studies, etc. A similar opinion for the implementation of the GCED concept was given by the experts of the present study where they asked to integrate the concepts in the existing curricula as this will allow making the already burdened curricula easy to application.   The study participants were of the view that GCED can also be adopted or implemented as a separate subject.

The present study was also in accord with the study of Guo (2014), who designed the curricula for student teachers and also taught them the course. Upon analyzing the results after some time, found that global citizenship education not only motivates the learner but also develops the learner's interest in the subject. It grooms the personality of both the teacher and the learner and enables them to develop self-reflection and critical thinking leading to problem-solving ability. He also suggested integrating global citizenship topics in the teacher education curricula so that the teachers can get enabled to teach 21st-century learners.

There is a unanimity of the present study with the study of the European Commission (2018) which stresses upon the attaining of the knowledge, skills, and competencies which are relevant to the world of work and which are applicable towards the solution of issues. The present study also stressed the attainment of such knowledge, skills, and competencies that are relevant and practically applicable.

There is an agreement of the present study with the study of Ken, Summers & Harriet, (2007) who stressed the importance of sustainability in the teacher education programs and identifying the gaps in the curricula and asked to adopt best practices and make them relevant to the needs and professional development of teachers. So that the teachers wear the lens to see the issues related to sustainability and apply the solutions required. Similar views were expressed by the present study participants who told that this will develop critical thinking skills and awareness for themselves and the environment.

The present study is in concurrence with the study of UNESCO (2015) whereby it is identified that the basic understanding of GCED is that all humans are equal and are entitled to get equal rights for education and living a healthy and dignified life. Similar

views were expressed by the experts while commenting in favor of including topics of GCED and ESD in the curriculum.

Syed &Akhter (2018) in their study expressed their concerns that despite the conference held in Islamabad in 2005 on DSED, no practical steps were taken for its implementation of ESD in Pakistan. The study participants also shared their same apprehensions.

Burridge, Chodkiewicz, Oquro & Varnham, (2013) suggests including the contents of human rights in the curriculum as a standalone subject or integrating it into a unit of any subject or to integrate it across the curriculum. The study participants also expressed similar views regarding the integration of the human rights theme. The unanimity of opinion was seen with the present study participants who claimed that practical aspects of the curriculum must be kept in mind instead of focusing more on the theoretical features.   Elder (2019) also stressed practically making the learner effective and competent to avoid focusing only on theoretical concepts.

UNESCO (2013) finds consensus with the present study where it has asked to incorporate the concept of global citizenship in the subjects like Geography, Civics, Environmental Education, and Cultural Education. It stresses the inclusion of the subjects across the curriculum or it can be introduced as separate subjects. The study participants also held similar views. They suggested that integration would be more beneficial rather than introducing these themes as separate subjects but they told that in case of integration not getting possible, separate introducing of the topics of global citizenship would also be beneficial, they articulated.

Integration of concepts of GCED and ESD in the curriculum is not an easy task and it can be challenging to both the educationists and the curriculum developers and

therefore it needs careful consideration. Different teaching styles and training of teachers may be required. The training of teachers also requires care as they are the important stakeholders in the teaching-learning process and the main implementers of this concept (IBE-UNESCO, 2018). The study participants also expressed similar fears about the integration of this topic in the curricula, saying that it requires experts to train the teacher educators as the teacher educators themselves are not well-versed with these topics, therefore they need the training to extend their understanding of this topic. A similar opinion was held regarding education for sustainable development. It was contended that though the topics of education for sustainable development can be introduced in the curriculum as separate subjects but amazing results can be obtained if ESD is integrated into the whole of the curriculum. And integration has been widely accepted because of the multifaceted nature of ESD (Mochizuki, 2017). The present also showed unanimity of views regarding the integration of the topics of ESD.

Patrick, Macqueen & Reynolds (2012) say that like the school curricula the teacher education curriculum is also overloaded with compulsory, pedagogical, technological, classroom management, and other theoretical subjects leaving little space for global education. Therefore global education in the curricula must be included with the subtitles as 'Civic and Citizenship Education', 'Asian studies', 'Environmental Education', 'Language Education', and 'Values Education'. The participants of the present study also are showing their concern regarding the overloaded curriculum of B.Ed. (Honors) say that this is leaving little space for the inclusion of global citizenship education. They told that the inclusion of these themes may require the deletion of already incorporated subjects from the curriculum. So the participants showing

agreement with the authors' view insisted the concepts be included in the subject of Islamic studies, Civic studies, and Environmental education.

5.6 Conclusion

From the study of content analysis, it is concluded that the human rights theme had the highest percentage of GCED and ESD themes while it was observed that education of sustainable development theme was not much covered in the B.Ed. curriculum and even in the subjects of science sustainability was nominally covered. Similarly, the theme of Peace was also slightly included and gender equality had the lowest percentage of themes though it covered almost seven subjects. The theme of 'Health and Well Being' was not covered in any of the subjects which shows our little concern for the health of youth in particular and the health of other learners in general. The skills and competencies were abundantly found in almost all subjects. Pedagogy was also covered copiously. The profuse inclusion of competencies and pedagogies endorses the fact that B.Ed. curriculum mostly focuses on how to teach, and what to teach. Related content is comparatively low when we examine it in the context of GCED and ESD. When we look at comparative analysis of subjects for content knowledge inclusion we see that the subject of 'Social Studies' dominates, followed by the subject of 'Contemporary Trends and Issues in Education' followed by 'Foundation of education subject'. Global Citizenship theme was covered in almost eleven subjects but with low proportion. Gender Equality and Peace themes were found comparatively less covered in B.Ed. subjects. Overall the contents analysis concludes wide gaps existing concerning GCED and ESD in the curriculum and target 4.7 not sufficiently included.

From the objective opinion for the inclusion of global citizenship education and education for sustainable development for the attainment of education agenda 2030, the experts strongly agreed for their inclusion of the themes and the disagreement was

very low. The mean calculation for the expert opinion showed that all experts agreed to its inclusion. On the inclusion of sexuality education, comparatively more disagreement was seen but for other subthemes of health education, the experts highly recommended its inclusion.

The subjective views of curriculum experts conclude that there are huge gaps seen in the curriculum of B.Ed. for the inclusion of the themes. The experts found gaps in the themes of human rights, education for sustainable development and peace, and other themes. Healthy lifestyles and healthy ways of living were missing and careful integration of health and gender equality issued was stressed. Regarding the inclusion of GCED and ESD themes majority of the experts favored its inclusion while some denied saying that the curriculum is already burdened and the inclusion of these themes will overburden the existing curriculum. They however suggested the integration of the themes across the subjects. The curriculum experts felt a lack of national policy coverage on the themes, especially the health theme. They were of the view that there is no understanding of the concept of GCED and ESD in the teachers as well as learners. Training of teacher educators and teachers through workshops and seminars was proposed. Inclusion of these topics from an early age was suggested for better learning future understanding of learners. Whatever short or long-term are intended to be achieved that particular agenda must be included in the curriculum of ECE, primary and Elementary curriculum, the experts told. For preparing prospective teachers SDG agenda 2030 is advised to be wholly taught to the learners. The themes were suggested to be included with the practical focus instead of theoretical emphasis. The deliberate inclusion of the 'Peace' component in the curriculum was stressed for the development of non-violent behaviors as it was deemed as a proactive strategy for countering terrorism. The particular inclusion of global citizenship in the subjects of

History, Geography, Trends and Issues in Education, Gender Development, and Civic education was suggested besides integrating it in other subjects. It was also resolved that the inclusion of GCED themes will enable critical, creative, and collaborative thinking and team working skills. It was also determined that the inclusion of ESD will enable the learners to solve issues related to the environment and the atmosphere and will allow them to get aware of the relationship between society, economy, and the environment. Besides including the themes for content knowledge devising assessment strategies was also stressed to monitor the implementation of the GCED and the ESD themes. The themes of ESD were suggested to be included in the topics of Environmental education, Biology, and Chemistry. The themes can be included in the foundational, elective, or general courses but integration was preferred they opined. Regarding challenges for the inclusion of the themes, it was concluded that keeping our cultural background in mind the themes were suggested to be included with an Islamic perspective. Contextualization was considered a major challenge hence careful integration was proposed to avoid conflict with the local aims. Capacity building of teacher educators in line with the pre-service curriculum is a challenge they felt, and therefore asked to hire experts on the topics for their training. Competent and visionary people who can predict long-term benefits were suggested to be included in the design of the curriculum. Taking of in-service as well as prospective teachers' opinion for the designing of curriculum and taking their views regarding their presentation skills and their future preferred skills themes were suggested. The topics like energy, water, life on earth, and a few aspects of quality education were advised to be included. It is ultimately concluded that teachers must be educated to run the social process of teaching successfully and effectively. Experts to teach the topics of GCED and ESD are required as global citizenship education is very important to be

imparted so that we prepare future teachers compatible with the global trends and acquire knowledge and skills to promote sustainable development. They concluded that the inclusion of these themes can help attain education agenda 2030. The sub-theme of sexuality education was asked to be named as youth/adult health education or Health and Hygiene education. The need for multiculturalism and international understanding was also emphasized to promote universal brotherhood in this interconnected world. It was firmly believed that if the teacher educator is aware of the themes, the goals related to health, hunger, and poverty can be achieved and any of the existing gaps can easily be filled. If these themes are covered in the curriculum for the beginners of the school, it can make a great difference as the inclusion of the themes can benefit both the learners and the teachers. The learners can attain problem-solving, critical thinking skills, and become effective in resolving conflicting situations and live in peace. The convergent conclusions observed systematic integration of human rights topics as this will develop self-awareness and awareness of others. To develop awareness between the society and the environment, the inclusion of sustainability topics from the early classes was stressed. Gender equality as per our cultural background was deemed as a sensitive issue hence its careful integration in the curriculum was sought. Experts believed that the present curriculum was prepared to meet the local requirements and asked the future curriculum to be prepared to keep the regional and global aspirations. Finally, it was resolved that these themes may be explicitly included so that the youth can become ethically responsible, progressive, and prosperous citizens.

5.7 Recommendations

1. The topics of GCED and ESD are the cross-cutting themes and these may be included in the subjects of History, Geography, Trends, and Issues in Education, Gender Development, and Civic education as well as in the subjects of Environmental Education, Biology, and Chemistry by involving the subject experts.

2. The topics of GCED and ESD can also be taught as separate subjects but the integration of these topics across the subjects is more preferable. Relevant subject specialists in the field may sit together to make an integrated curriculum. They may be included in the Elective, Foundational, and General courses. For the development of peaceful behaviors, the theme of 'Peace& Non-violence' may deliberately be integrated into the curriculum.

3. Contextualization is considered a major challenge hence careful integration was proposed to avoid conflict with the local aims. Competent and visionary people who can predict long term benefits were suggested to be included in the designing of the curriculum

4. Capacity building of teacher educators in line with SDGs is a challenge, therefore it was suggested for hiring experts on the topics for their training. There may be coordination between the stakeholders and the implementers.

5. For preparing prospective teachers for the SDG agenda it was proposed that they may be taught wholly about this topic. Teachers' educators and student teachers may be made aware of GCED and ESD through workshops and seminars. The Pre-service teachers may be allowed to give feedback on their existing and their preferred skills while designing the curriculum.

6. Sustainable development goals have social, economic, cultural, and environmental dimensions therefore the curriculum prepared was proposed to have

linkages between the subjects. An integrated approach can be adopted to include the themes of GCED and ESD in the subject of pre-service teacher education.

7.   Health and Well Being theme with more focus on healthy lifestyles and mental education may be incorporated in the curriculum involving clinical psychologists and doctors.

8.   Formative and summative assessment strategies may be developed to see the implementation of GCED and ESD in letter and spirit.

9.   Global citizenship education is very important to be imparted so that we prepare future teachers compatible with the global trends and acquire knowledge and skills to promote sustainable development. The inclusion of these themes can help attain education agenda 2030. Molding public opinion through social media is needed as 'Social Taboo' can be a challenge in introducing these new themes of GCED and ESD.

10.   For the attainment of any short-term or long-term program, the agenda must be included in the ECE, Primary, and Elementary curriculum. It is preferable to introduce this concept at an early age as this can be more fruitful than introducing it in later stages of learning.

11.   Periodic revision, evaluation, and redesigning of the curriculum are required to keep in view the SDGs and the purpose of establishing peace. The B.Ed. curriculum was prepared in 2012 and now it needs revision. The themes of GCED and ESD may be included keeping our cultural background in mind with an Islamic perspective.

12.   Sufficient financial resources are required to be allocated for the incorporation of GCED and ESD themes in the curricula as well as their implementation in the classrooms.

5.8   Recommendations for Future Research

1.   The present education policy may be studied to see its compatibility with sustainable development goals with a focus on GCED and ESD.

2.   The component of the socio-emotional aspect of assessment may be specifically be focused on future research on GCED and ESD.

3.   All themes and subthemes of GCED and ESD may also be studied with the Islamic perspective based on Quran and Sunnah.

4.   Research may be done to see the inclusion of GCED and ESD themes in ECE and Secondary teacher education curricula.

"The Course Outline for GCED and ESD as suggested by IBE-UNESCO (2016) for future National Curriculum of B.Ed. in Pakistan"
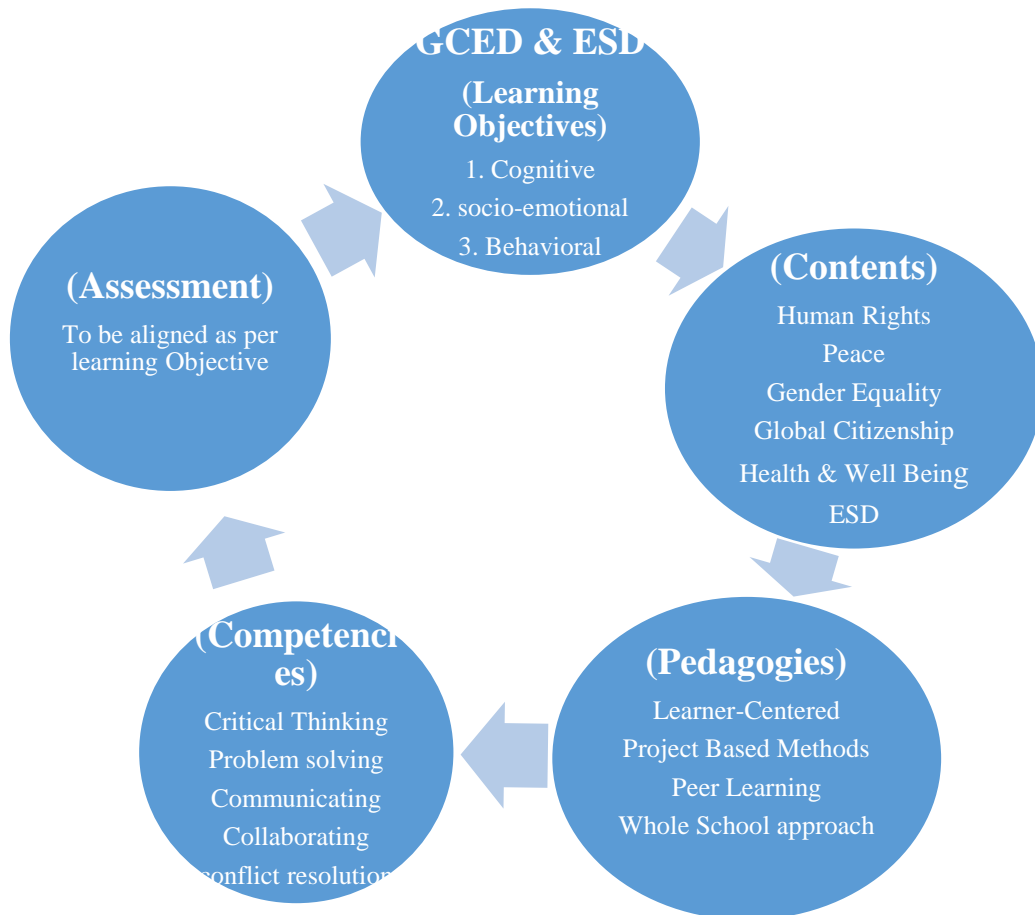
Figure 5.1 The Course Outline for GCED and ESD as suggested by IBE-UNESCO (2016) for future National Curriculum of B.Ed. in Pakistan"

5.9 "The Course Outline for GCED and ESD as suggested by IBE-UNESCO (2016) for future National Curriculum of B.Ed. in Pakistan

This course outline is developed as a stand-alone subject of global citizenship education (GCED) and education for sustainable development (ESD) as a suggested model for the upcoming curriculum of B.Ed. in Pakistan. Only the course description is mentioned here. The detailed course learning outcomes and the teaching strategies along with unit-wise course description, their cognitive, socio-emotional, and behavioral learning outcomes, competencies, assessment strategies as well as the pedagogies are given in the appendices. The resource material is also mentioned. (Appendix-D, E & F).

Course Description:

This course will benefit the pre-service teachers in attaining the knowledge, socio-emotional, and behavioral learning objectives required to support sustainable development, through having respect for human rights, adopting the sustainable mode of life, appreciating diverse cultures, encouraging a peaceful and conflict-free environment, promoting gender equality, develop international understanding and focus on healthy lifestyles. The content of this course focuses on both the mental and non-cognitive features of learning. It will enable the student teachers to acquire knowledge, skills, and competencies essential for them to become informed citizens and undertake vibrant characters in resolving the local and global challenges through global citizenship education and education for sustainable development. It will enable them to develop the competencies required to be sustainable consumers and global citizens. It will also help the student teacher to reflect their progress in the direction of assuming a global-local citizen status. SDG target 4.7 is particularly linked to education

through which attainment of the other sixteen sustainable goals gets possible. It introduces the student teachers of Pakistan for global citizenship education and education for sustainable development. The importance of this target is endorsed in many of the world resolutions especially related to human rights, peace, international understanding which was endorsed by the member states of UNESCO in 1974. The complete "Course outline for GCED and ESD" is listed in detail

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Content Analysis Questionnaire

Category	Sub-Categories	Included=1	Not Included=0
Human Rights	Human Rights, Rights and Responsibilities (Child Rights, Cultural Rights, Indigenous rights, Women's rights, disability rights)		
	Democracy/Democratic Rule, Democratic Values/ Principles		
	Freedom (of expression, of speech, of the press, of association)		
	Social Justice		
	Human Rights Education		
Education for Sustainable Development	Sustainable Development, Sustainability, Sustainable		
	Ecology, Ecological Sustainability(eco-systems, bio-diversity, biosphere, Ecology, loss of diversity)		
	Environmental Education		
	Environmental Sustainability/ Environmentally sustainable		
	Climate change (global warming, carbon emissions,/footprint)		
	Renewable Energy, Alternative energy sources: tidal, wind, wave, geothermal, biomass)		
	Waste Management, Recycling		
	Economic Sustainability, Sustainable growth, Sustainable production, and Consumption, green economy		
	Social Sustainability, Social cohesion		
	Education for Sustainable Development, Sustainability education, Education for Sustainability		
	Peace, peace-building		
	Abuse/		

Peace	Harassment/Violence, (school-based violence/bullying, household-based violence, gender-based violence, child abuse/harassment, sexual abuse/harassment		
Gender Equality	Gender Equality		
	Gender Equity		
	Gender Sensitivity		
	Gender Parity		
	Empower(ment of) women/girls (female empowerment, encouraging female participation)		
Global Citizenship	Globalization, globalization, Global/international citizen(ship), global culture/identity/community		
	Multicultural(ism)/ Inter Cultural(ism)		
	Global Citizenship, Global citizenship education, global education, education for global citizenship		
	Migration/Immigration		
	Global Competition/competitiveness/globally competitive/international competitiveness		
	Global-Local thinking, local-global, think global act local, global		
	Global-Inequality/disparities, National/local citizenship/ identity(ies)/culture(s)/heritage		
Health & Well Being	Mental, emotional health, psychological health		
	Healthy Lifestyles (nutrition, diet, cleanliness, hygiene, sanitation, clean water, bearing /staying healthy)		
	Physical health/health activity/fitness		
	Awareness of Addiction,(Smoking, drugs, alcohol)		
	Health Education		
	Sexual and/or reproductive health education, Sexuality Education, HIV/AIDS education		
	Critical thinking		

Competencies	Problem Solving		
	Conflict Resolution/Management, Negotiation		
	Collaboration/Collaborating, Working well with others		
	Respect/appreciation for diversity		
	Tolerant/Values of tolerance		
	Attitudes of care empathy and compassion		
	Solidarity, global solidarity, common humanity		
	Environmentally sustainable lifestyles (Taking responsibility for environment, conservation, protection, restoration, stewardship)		
	Participation/skills to participate at local, national, global levels: Active citizen(ship), civic engagement, constructive participation, serving the community, volunteering		
	Socially/ethically responsible/ engaged, responsible consumers, consumer responsibility		
Pedagogies	Student-Centered Learning (learner-centered, child-centered, active methods, project-based methods, democratic/open classroom)		
	Peer learning/education (or peer to peer);		
	Inclusive Education		
	Whole-School Approach, future-friendly school		
	(Integrated) Use of ICTs/Social media in learning		

Source: (IBE, 2016 pp. 38-39) Global Monitoring of Target 4.7: Themes in National Curriculum Frameworks

Survey Questionnaire for Expert Opinion

Name: _____   Academic qualification: **M.Phil./Ph.D./ Post Doc**

University Employed: _____   Gender: Male/Female_____

Experience: (10-15yrs); (15-20Yrs); (20-25yrs); (25-30yrs); (30-35yrs)

Topic: <u>An Appraisal of Pre-Service Teacher Education Curriculum with Reference to Sustainable Development Goals</u>

a) Strongly Agree (SA) =5   b) Agree ((A) =4   c) Partially Agree (PA)) =3   d) Disagree (DA) =2   e) Strongly Disagree (SDA) =1   ($\checkmark$)

Main Theme: Human Rights						
Q#1	In your opinion inclusion of content/themes of **Human rights** and its sub-themes in B.Ed., Honors Pre-service (Elementary) curriculum can be helpful in the attainment of SDG Education Agenda 2030					
	Sub-Themes	SA	A	PA	DA	SDA
1a	Rights					
1b	Democracy					
1c	Freedom					
1d	Social Justice					
1e	Human Rights Education					
Q#2	In your opinion inclusion of content/themes of **Education for Sustainable Development** and its sub-themes in B.Ed., Honors Pre-service (Elementary) curriculum can be helpful in the attainment of SDG Education Agenda 2030					
Main Theme: Education for Sustainable Development						
2a	Sustainable Development					
2b	Ecology					
2c	Environmental Education					
2d	Environmental Sustainability					
2e	Climate change					

2f	Renewable Energy Resources					
2g	Waste Management					
2h	Economic Sustainability					
2i	Social Sustainability					
2j	Education for Sustainable Development					
Main Theme: Peace & Non-Violence						
Q#3	In your opinion inclusion of content/themes of **Peace** and its sub-variables in B.Ed., Honors Pre-service (Elementary) curriculum can be helpful in the attainment of SDG Education Agenda 2030					
3a	Peace					
3b	Abuse/Harassment &Violence					
3c	Peace Education					
Gender Equality						
Q#4	In your opinion inclusion of content/themes of **Gender Equality** and its sub-variables in B.Ed., Honors Pre-service (Elementary) curriculum can be helpful in the attainment of SDG Education Agenda 2030					
4a	Gender Equality					
4b	Gender Equity					
4c	Gender Sensitivity					
4d	Gender parity					
4e	Empowerments					
Global Citizenship						
Q#5	In your opinion inclusion of content/themes of **Global Citizenship** and its sub-variables in B.Ed., Honors Pre-service (Elementary) curriculum can be helpful in the attainment of SDG Education Agenda 2030					
5a	International citizenship					
5b	Multiculturalism					
5c	Immigration					
5d	Global-Local thinking					
5e	Global-Competitiveness					
5f	Cultural heritage					

5g	Global Citizenship Education					
5h						
Health & Well Being						
Q#6	In your opinion inclusion of content/themes of **Health & Wellbeing** and its sub-variables in B.Ed., Honors Pre-service (Elementary) curriculum can be helpful in the attainment of SDG Education Agenda 2030					
6a	Physical fitness					
6b	Mental health					
6c	Healthy Lifestyles					
6d	Awareness of Addiction					
6e	Health Education					
6f	Sexuality Education					

Source: (UNESCO, 2016b p.293). Global Education Monitoring Report

Open-Ended Questions:

Q3). State the gaps you find in B.Ed. Honors (Elementary) Curriculum regarding themes and subthemes of Human rights, Sustainable Development, Peace and Non-violence, Global citizenship, Gender Equality, and Health Education in B.Ed. (Honors) curriculum?

Q4). Illustrate the gaps related to inclusion or non-inclusion of SDGs (Sustainable Development Goal#4) broad theme Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) in the curriculum and in which subjects of Pre-Service B.Ed. Honors (Elementary) Curriculum?

Q5). List challenges as per our cultural background do you feel can be faced in inclusion Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) in the B.Ed. Honors (Elementary) Curriculum?

Sample of study for (CONTENT ANALYSIS)
Scheme of studies B.Ed. Honors Prescribed by HEC Pakistan

S. No.	Courses	Nature of Courses
1.	Pakistan Studies	Compulsory
2.	Islamic Studies	As above
3.	English-II (Communication Skills)	As above
4.	Functional English-I	As above
5.	Ethics	As above
6.	Computer Literacy	As above
7.	English-III (Technical Writing & Presentation Skills	As above
8.	Child Development	Foundation
9.	General Methods of Teaching	As above
10.	Classroom Management	As above
11.	Classroom Assessment	As above
12.	Foundations of Education	As above
13.	School, Community, and Teacher	As above
14.	Foundations of Education	As above
15.	Curriculum Development	As above
16.	Educational Psychology	As above
17.	Methods of Teaching Islamic Studies	Professional
18.	Teaching Literacy Skills	As above
19.	Teaching of Urdu	As above
20.	The teaching of General Science	As above
21.	Instructional and Communication Technology (ICT) in education	As above
22.	Teaching of English	As above

23.		Teaching of Mathematics	As above
24.		The teaching of Social Studies	As above
25.		Research Methods in Education	As above
26.		School Management	As above
27.		Test Development and Evaluation	As above
28.		Research Project	As above
29.		Teaching Practice	Short Term
30.		Teaching Practice	Long Term
31.		Urdu	Content
32.		General Science	As above
33.		Arts, Crafts, and Calligraphy	As above
34.		Pedagogy-I	Methods of teaching related to specialization
35.		Pedagogy-II	Methods of teaching related to specialization
36.		Contemporary Trends and Issues in Education	Professional
37.		Introduction to Guidance and Counselling	As above
38.		Comparative Education	As above
39.		The teaching of General Science	As above

Source: www.hec.gov.pk

4.13. Objective-3: Suggestions for future curriculum as recommended by (IBE-2016).
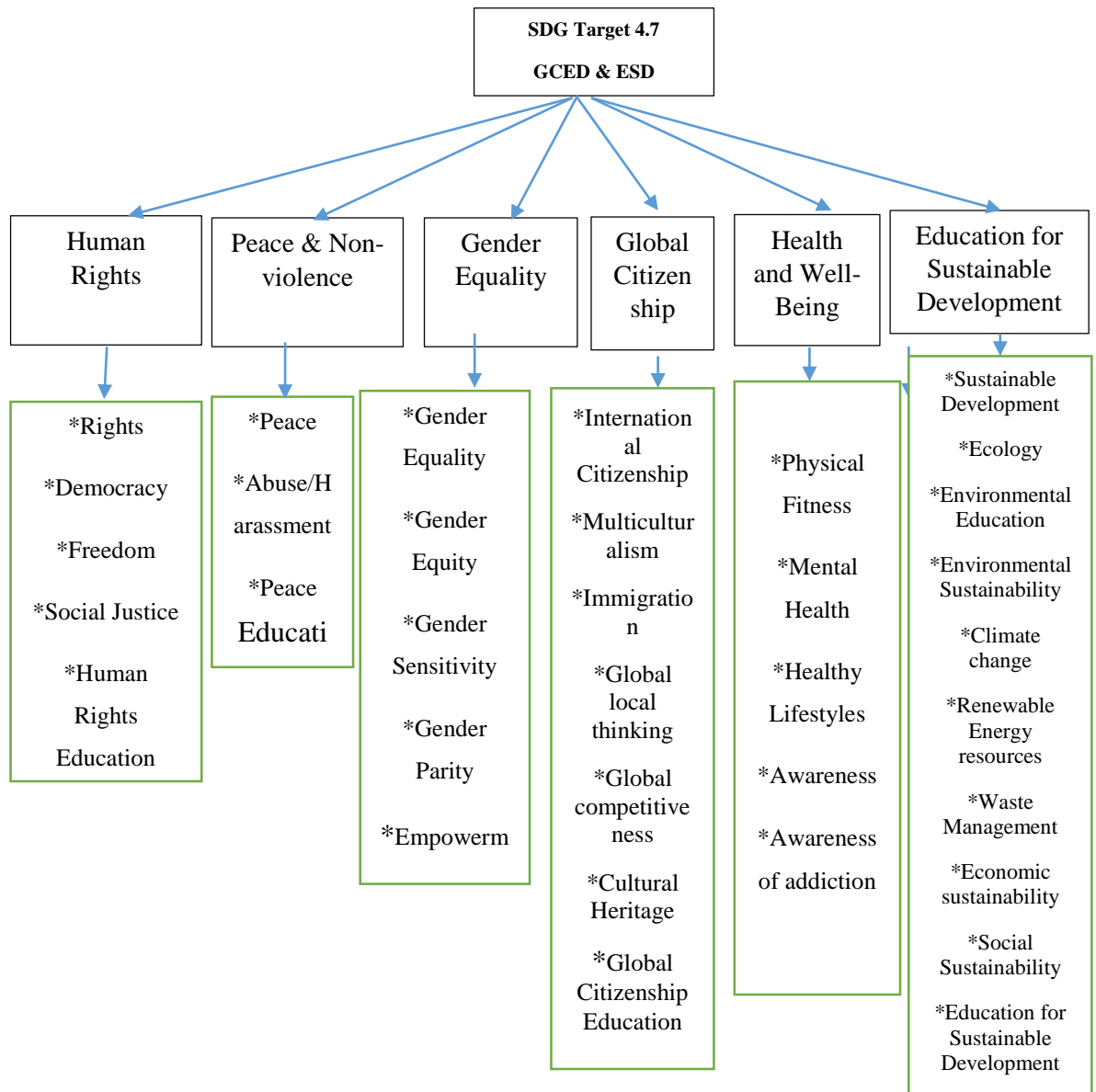
Figure- 42 Source: IBE-UNESCO, 2016

Appendix-E

"The Course Outline for GCED and ESD as suggested by IBE-UNESCO (2016) for future National Curriculum of B.Ed. in Pakistan

Course Description:

This course will benefit the pre-service teachers in attaining the knowledge, socio-emotional, and behavioral learning objectives required to support sustainable development, through having respect for human rights, adopting the sustainable mode of life appreciating diverse cultures, encourage a peaceful and conflict-free environment, promote gender equality, develop international understanding and focus on healthy lifestyles. The content of this course focuses on both the cognitive and non-cognitive features of learning. It will enable the student teachers to acquire knowledge, skills, and competencies essential for them to become informed citizens and undertake dynamic characters in resolving the local and global challenges through global citizenship education and education for sustainable development. It will enable them to develop the competencies required to be sustainable consumers and global citizens. It will also enable the student teacher to reflect their progress in the direction of assuming a global-local citizen status[1]

SDG target 4.7 is particularly linked to education for the attainment of the other sixteen sustainable goals gets possible. It introduces the student teachers for global citizenship education and education for sustainable development. This target is also highlighted in many of the universal conventions related to human rights, peace, international understanding which was endorsed by the member states of UNESCO in 1974[2].

Learning outcomes

After learning this course, the pre-service teachers will be able to:

1. Overview SDG 4 and its targets.
2. Examine the scope and concept of global citizenship education and education for sustainable development
3. Categorize rights related to universal humanity
4. Develop and adopt sustainable practices and behaviors
5. Demonstrate values of peace and tolerance

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[1] UNESCO. (2017). Unpacking Sustainable development goal 4 education 2030: A guide book. Paris: UNESCO.
[2] UNESCO, U. (2016). *GEM Report: Education for People and Planet*

6. Appraise the tasks and prospects of the information age to develop global citizenship in the local context
7. Critically evaluate gender parity in various fields of life
8. Determine the benefits of healthy lifestyles
9. Play active roles of local and global citizens and appreciate cultural diversity.
10. Evaluate the importance of GCED and ESD in particular and SDGs in general and also in the context of Pakistan particularly

Teaching and learning approaches

The student teachers will be adopting various teaching-learning approaches. They will be able to adopt diversified approaches to promote their personal and professional grooming.

1. Learner-centered teaching
2. Project-based methods
3. Peer learning
4. Comprehensive education
5. Reflective teaching strategies
6. Whole school technique
7. Dialogue and discussion
8. Use ICT & social media in education
9. Group discussions
10. Field trip and experiential learning
11. Lecture
12. Case studies[3]

Assessment Strategies:

1. Working in the group for the application of GCED and ESD competencies
2. Discussion on human rights (Child rights, women's rights, disability rights, etc.).
3. Demonstrating activities for conflict resolution and promoting peace
4. Reflective diaries and field notes and Peer learning activities for cultural diversity
5. Role play against bullying, harassment, and promotion of gender equality
6. Project work for sustainable production and consumption
7. Group work for activity-based sustainability learning
8. Projects for renewable energy, waste management, and water conservation
9. Field trips and excursions for international understanding[4]

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[3] IBE. (2016). *Global Monitoring of Target 4.7: Themes in National Curriculum Frameworks. Background paper prepared for the 2016 Global Education Monitoring Report*. Retrieved from https://www.oneplanetnetwork.org/sites/default/files/491245629eng.pdf

[4] https://hec.gov.pk/english/services/universities/RevisedCurricula/Documents/2011-2012/Education/ContempIssuesEdu_Sept13.pdf

"Course Outline for GCED and ESD" (Unit Wise)

Unit-1: Sustainable development goals, Goal 4 (Introduction)

Unit description

This unit familiarizes the student teachers with the conception of seventeen sustainable development goals and their purpose. It scrutinizes the specifics of goal 4 and examines the targets of goal 4 with special reference to target 4.7.1

Cognitive Learning Outcomes:

At the end of the unit, the pre-service teacher will be able to:

1. Recognize the 17 SDG goals and their importance in removing poverty
2. Identify goal 4 and its relation to quality education and lifelong learning as the main source of sustainable development
3. Comprehend the importance of education for the people, especially of rural areas, and the causes for their lack of access to eminence in education and lifelong learning prospects and understand inclusiveness.
4. To know the importance of SDGs for Pakistan
5. To understand the concept of quality education in Pakistan

Socio-Emotional Learning Outcomes:

The student teachers will be able:

1. To build cognizance of the importance of quality education for all and develop an unprejudiced and all-inclusive approach to sustainable development goals.
2. To inspire and authorize others to request and use educational opportunities
3. To be able to distinguish the inherent value of education and to investigate and familiarize their learning requirements for their progress.

Behavioral learning outcomes:

The student teachers will be able:

1. To contribute in assisting and applying quality instruction for all, SDG and associated approaches at all levels
2. To encourage and take steps for making access to school possible.
3. To ask for support in developing policies that encourage free, indiscriminate superior education opportunities to all leaving no one left behind
4. To encourage elders and parents for pursuing education all along with their life

Unit:1 Sustainable development goals, Goal 4	
Week#	Topics/themes
1.	Sustainable development goals (Agenda 2015-2030)
2.	Goal 4 and its explanation for Quality Education SDGs and Pakistan Quality Education in Pakistan
3.	Life-long learning Inclusive education

Unit-2: <u>Global Citizenship Education and Education for sustainable development its themes</u>

Unit description

This unit enables the student teachers to examine the concept of global citizenship education and its themes. They will also explore the universal basic human rights and the international conventions related to human rights.

Cognitive Learning Outcomes:

At the end of the unit, the pre-service teacher will be able:

1. To distinguish the seven targets of goal 4, especially know about target 4.7.1
2. To understand the concept of global citizenship education and education for sustainable development
3. To know the concept of human rights and their related themes
4. To know how democratic form of government is the most suitable one

Socio-Emotional Learning Outcomes:

The student teachers will be able:

1. To identify different targets of goal 4 and contribute in working for the target 4.7.1
2. To feel answerable in adopting sustainable lifestyles and be a responsible local and global citizen.
3. To appreciate and value the rights of fellow human beings and utilize the right to vote and be a democratic citizen

Behavioral learning outcomes:

The student teachers will be able:

1. To supervise the attainment of target 4.7.1 and encourage the peer group'
2. To develop tolerance and show universal brotherhood and inspire others to follow the same
3. To adopt sustainable consuming and producing habits
4. To encourage the realization of child rights, women's rights, and the rights of the vulnerable.

Unit:2 Target 4.7.1 & GCED& ESD (Introduction)	
Week#	Topics/themes
4.	Seven targets of goal 4; Target 4.7 Target 4.7.1
5.	Introduction to Global citizenship education(GCED) and Education for Sustainable development (ESD)
6.	Human Rights & Its subthemes Rights Democracy

Unit-3: Education for stainable development goals and their subthemes

Unit description

This unit familiarizes the student teachers about the challenges facing the planet Earth and how to ensure the continuity of resources for the coming generations. This unit will enable teachers to plan for sustainable use of water and energy resources and about protecting the environment and making it more economically and socially sustainable and adopting sustainable consuming and producing habits, making our natural surroundings more useful for the present and the future generations.

Cognitive Learning Outcomes:

At the end of the unit, the pre-service teacher will be able to:

1. Understand the concepts of energy, water, and other natural resources
2. Know about the economic, social, and environmental dimensions of sustainability
3. Comprehend the sustainable consumption and production procedures
4. Identify the causes for extreme climatic conditions and the challenges to mitigate

Socio-Emotional Learning Outcomes:

At the end of the unit, the pre-service teacher will be able:

1. To collaborate with others in influencing the policymakers to devise policies related to sustainable renewable energy resources
2. To critically reflect their role in making sustainable use of water and other natural resources
3. To feel the depletion of resources and take measures to avoid wastage and adopt sustainability.

Behavioral learning Outcomes:

At the end of the unit, the pre-service teacher will be able:

1. To plan and motivate peer learners to adopt measures for sustainable consumption
2. To make projects related to renewable energy, climate change, waste management
3. To encourage their families and communities for sustainable use of water
4. To adopt practical approaches for attaining social, economic, and environmental sustainability[5]

Competencies for promoting sustainability

1. Coordinated thinking
2. Rational competency
3. Deliberate competency
4. Collective competency
5. Pre-emptive competency

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[5] UNESCO (2015). Global citizenship education: Topics and learning objectives.

6. Critical thinking
7. Cognizant competency
8. Unified analytical thinking[6]

Unit -3	Education for sustainable development
Week#	Topics/themes
7.	Education for sustainable development & its subthemes Sustainable Development Ecology; Water conservation Environmental Education
	Climate change Renewable Energy Resources Waste Management
9.	Economic Sustainability Social sustainability Education for sustainable development

Unit-4: Peace & Non-violence & Gender Equality

Unit description

The unit will acquaint student teachers with the values and behavior to adopt peaceful and non-conflicting behaviors. Adopting reconciliation, pacification, and peace-making measures for conflict resolution. Educating the learners for peaceful co-existence and democratic attitudes. Gender equality topics will enable the learners to know about discrimination and gender-based violence and measures required to empower the female gender explicitly.

Cognitive Learning Outcomes:

The student-teacher at the end of the unit will be able:

1. To comprehend the concept of peace and tranquility
2. To identify the value of conflict resolution, tolerance, and patience
3. To grasp the notion of peace education
4. To understand the concept of gender equality and the gender discrimination, violence, and inequality
5. To identify the fundamental rights of females, adolescents together with the right to freedom from mistreatment and ferocity and their procreative rights
6. To be cognizant of women rights in lawmaking, as consultants, industry market, civic and private decision making
7. To understand the role of women in technology and the fields of ICT

Socio-Emotional Learning Outcomes:

The student-teacher at the end of the unit will be able:

1. To discern the value of peaceful living
2. To predict the violent situation and keep cool

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[6] Mochizuki, Yoko. (2017). Textbooks for Sustainable Development - A Guide to Embedding.

3. To sense exploitation and provocation stay calm
4. To be able to discuss and debate against the traditional treatment given to women
5. To raise voice for the empowered and respectable position of women
6. To be able to highlight the vulnerable women in society and express solidarity with these women folk

Behavioral Learning Outcomes:

The student-teacher at the end of the unit will be able:

1. To device strategies for maintenance of peace and resolving conflicts with understanding
2. To ask the stakeholders for devising policies against the violators of peace
3. To develop problem-solving skills and stand against abuse and harassment
4. To take steps for the empowerment of women
5. To be able to assess and contribute to the measures taken for gender equality.
6. To stand against gender discriminatory attitude and support gender empathy
7. To take measures in planning, implementing, and devising strategies for gender equality

Competencies required for Peace and Gender Equality:

1. Problems solving skills
2. Conflict resolution
3. System thinking skill
4. Compromise, Pacification and reconciliation skills

Unit -4 Peace & Gender Equality	
Week#	Topics/themes
10.	Peace Abuse/Harassment Peace Education
11.	 Gender Equity Gender Sensitivity
12.	Gender Parity Empowerment

Unit-5: Global Citizenship Education

Unit description

This unit familiarizes the student teachers with the interconnectedness of the world and their roles as the local and the global citizen to resolve universal challenges facing the globe and the value of living in peace with the world community. Accepting diverse cultures and searching for unity in diversity

Cognitive Learning Outcomes:

The student teachers will be able:

1. To understand about inter-connectedness and interlink age of the global society
2. To identify the diversity of various cultures

3. To know about the responsibility as a local and global citizen
4. To comprehend the concept of global competitiveness
5. To recognize the ancient structures and their importance

Socio-Emotional Learning:

The student-teacher at the end of the unit will be able:

1. To appreciate the existence of numerous nationalities
2. To applaud various cultures and their diversified nature
3. To feel responsible for the local and the global issues
4. To admire the cultural heritage of our region and the world

Behavioral Learning outcomes:

The student-teacher at the end of the unit will be able:

1. To devise plans for making an individual a citizen of the globe
2. To arrange discussions and debates for the preservation of cultural diversity
3. To design programs for developing ideas facing the locality, region, and the universe
4. To develop strategies for sustainable global competitiveness
5. To force the policymakers to devise plans and policies for the immigrants
6. To appreciate and take steps to preserve their cultural heritage

Competencies for global citizenship:

1. Appreciation skills
2. Cross-cultural communication skills
3. Perspective-taking skills
4. Social Interaction skills
5. Ethical decision-making skills
6. Oral and written communication skills
7. Creative thinking skills
8. Critical thinking skills
9. Problem-solving skills
10. Global Perspective seeking skill
11. Conflict Resolution skill[7]

Unit -5 Global Citizenship Education	
Week#	Topics/themes
	International Citizenship Multiculturalism; Immigration Global-Local thinking

---

[7] Edwards, D. B., Sustarsic, M., Chiba, M., McCormick, M., Goo, M., & Perriton, S. (2020). Achieving and Monitoring Education for Sustainable Development and Global Citizenship: A Systematic Review of the Literature. *Sustainability*, *12*(4), 1383.

14.	Global competitiveness
	Cultural Heritage
	Global citizenship education
	Global Citizenship Education in Pakistan

Unit-6: Health & Wellbeing

Unit description

This unit familiarizes the student teachers with concepts of health and hygiene especially in the context of gender in health. It will enable them to know about the challenges of deadly communicable diseases caused due to involuntary or irresponsible behaviors and actions. They will be able to identify strategies for the promotion of healthy lifestyles through several media. They will grasp the steps necessary for healthy physical and mental wellbeing. The learners will be able to devise strategies for personal health as well as the health of others.

Cognitive Learning outcomes of Health and Wellbeing

The student teachers will be able:

1. To critically comprehend the concept of health and well-being and understand the importance of gender in health.
2. To know the factual position of deadly communicable diseases like HIV and AIDS and Coronavirus and deaths causing due to these diseases.
3. To understand the socio-political status of people and their health situation and the strategies they can adopt for encouraging healthy lifestyles
4. To know the ill-effects of violence and bullying on the mental health and emotional status of the people.
5. To distinguish the strategies required for promoting positive mental and physical well-being and educating youth for their health and hygiene.

Socio-Emotional Learning Outcomes:

The student-teacher will be able:

1. To express empathy with the patients suffering from diseases and find ways for their cure.
2. To be able to talk freely about the deadly diseases and their prevention and suggest preventive strategies.
3. To promote the health and wellbeing of people especially of youth (both genders)
4. To encourage health and wellbeing and develop understanding, values for healthy lives
5. To inculcate individual commitment for the health of oneself, others, and the community.

Behavioral Learning Outcomes:

The students-teacher will be able:

1. To incorporate health behaviors in their daily lives
2. Plan strategies for the mental and physical health of oneself and others
3. Promote activities for health awareness through media and other channels
4. Devise strategies to convince the stakeholders for taking proactive measures for the health and wellbeing of the people.

5. Demand and promote the public officials for devising plans and policies to promote health and wellbeing.

Unit -6 Health & Well-being	
Week#	Topics/themes
15	Physical Fitness Mental Health Healthy Lifestyles
16	Awareness to addiction Health education Sexuality (Youth health) education

Assessment Tasks

Quiz (In-class participation)-10%

Group Presentation & Project Work-40%

Term Paper -50

Appendix- F

Objective-3

Suggested topics for GCED and ESD as suggested by IBE-UNESCO (2016) for future National Curriculum of B.Ed. in Pakistan"

Introduction

The concepts and learning outcomes of Global citizenship Education and Sustainability can be included in various curricular documents especially in Social Studies/Pakistan Studies and Science courses in particular and integrated with other courses in general. Modules can be developed for which we can have the list of topic areas and the learning outcomes. These topics can be integrated across the curricula or can be taught as separate courses. The list of learning resources is included and many more documents can be found from the GCED clearinghouse. Modules can be prepared according to the themes given by (IBE-UNESCO (2016b p. 293) and from Preparing Teachers for Global Citizenship Education: A Template (2017 p-37-39)

Resources

Title   (Author/Websites)

1. **Human rights Education Pack**
   Amnesty International, 2015
   https://www.amnesty.org/en/documents/act30/2621/2015/en/

2. **One Voice for All Education pack**
   British Council for All Education Pack
   https://schoolsonline.britishcouncil.org/classroom-resources/list/one-voice-all

3. **Rivers of the World Education Pack**
   British Council
   https://schoolsonline.britishcouncil.org/classroom-resources/list/rivers-world;
   http://www.riversoftheworld.org.

4. **The Critical Thinking Workbook**
   Games and Activities for Developing
   Critical Thinking Skills
   Global Digital Citizen Foundation
   http://www.schrockguide.net/uploads/3/9/2/2/392267/critical-thinkingworkbook.pdf

5. **Global Digital Citizenship Education**
   Quick Start Guide

Global Digital Citizenship Foundation

http://hub.globaldigitalcitizen.org/download-gdc-quickstart-guide

6. **Project-Based Learning Ideas Guide K-12 Learner**

Global Digital Citizenship Foundation

https://solutionfluency.com/en/downloadables/pbl-ideas-book

7. **Whole School Case Studies**

Oxfam, 2013

https://www.oxfam.org.uk/~/media/Files/Education/Teacher%20Support/Think
%20pieces/Ed%202012%20case%20studies.ashx

8. **Education for Global Citizenship-A Guide**

for Schools;

Global Citizenship Education in the classroom-

A Guide for Teachers

Oxfam, 2015.

9. **Math, English Science and Global Citizenship**

Oxfam, 2015

 http://www.oxfam.org.uk/education/global-citizenship/global-citizenship-guides

10. **Climate Change in the classroom**

UNESCO, 2013

http://unesdoc.unesco.org/images/0021/002197/219752e.pdf]

11. **Global Citizenship Education-Topics**

And Learning Objectives

(UNESCO, 2015)

http://gcedclearinghouse.org/resources/global-citizenship-education-topics-
andlearning-objectives

12. **A Teacher's Guide on the Prevention of Violent Extremism**

UNESCO, 2016

http://unesdoc.unesco.org/images/0024/002446/244676e.pdf

13. **Connect with Respect: Preventing Gender-based Violence in Schools**
UNESCO, 2016

http://unesdoc.unesco.org/images/0024/002432/243252E.pdf

14. **Schools in Action, Global Citizens**

For Sustainable Development-A17.

Guide for Students

UNESCO, 2016

http://unesdoc.unesco.org/images/0024/002463/246352e.pdf

15. **Schools in Action, Global Citizens**

For Sustainable Development-A

Guide for Teachers

UNESCO, 2016

http://unesdoc.unesco.org/images/0024/002468/246888e.pdf

16. **Education for Sustainable Development-**

Learning Objectives

UNESCO, 2017

http://unesdoc.unesco.org/images/0024/002474/247444e.pdf

<u>Source:</u> *UNESCO Asia-Pacific Regional Bureau for Education (2017* p-37-39)*)*
Preparing Teachers for Global Citizenship Education: A Template (Draft), Thailand,
Bangkok

<u>**Additional Resources:**</u>

1. **Global Citizenship Education in Pakistan**

   Pasha, A. (2015). Global citizenship in Pakistan. *International Journal of Development Education and Learning*

2. **Pakistan's Implementation of the 2030 Agenda for Sustainable Development**

   https://sustainabledevelopment.un.org/content/documents/233812019_06_15_VNR_2019_Pakistan_latest_version.pdf

3. **UNESCO Pakistan Country Strategic Document 2018-2022**
   https://en.unesco.org/sites/default/files/ucsd.pdf

Appendix-G

Results of All GCED & ESD Themes Combined

S. No.	Subject	HR	ESD	PEACE	G-EQA	H&WB	GC
1.	Functional English-1						
2.	Islamic Studies/Ethics	5		1	3		
3.	Child Developments				2		
4.	Urdu						1
5.	General Science		3				
6.	General Methods of Teaching						
7.	English-II						
8.	Computer Literacy						
9.	Classroom Management	1					
10.	General Mathematics						
11.	Pakistan Studies	1					2
12.	Methods of Teaching Islamic Studies						
13.	The teaching of Literacy Skills						
14.	Arts, Crafts, and Calligraphy						
15.	Teaching of Urdu						
16.	The teaching of General Science		2				
17.	Instruction and com in Edu (ICT)						2

18.	Teaching Practice						
19.	Classroom Assessment						
20.	Teaching of English						
21.	Teaching of Mathematics						
22.	School, community, and Teacher			2			3
23.	The teaching of Social Studies	7	5	1			7
24.	Teaching English-III						
25.	Foundations of Education	2		1			6
26.	Curriculum Development			2			
27.	Educational Psychology						1
28.	Contemporary Trends and Issues in Edu	4		2			1
29.	Comparative Education						
30.	Intro to Gui &Counc						
31.	Pedagogy-I						
32.	Pedagogy-II						
33.	Research Methods in Education						
34.	Teaching Practice (Short Term)						
35.	School Management						
36.	Test Development and Evaluation						
37.	Teaching Practice (Long Term)						

38.	Research Project						
39.	Developmental Practicum						

Appendix-H

Mapping for Competencies and Pedagogies

S.No	Subject	Included in Competencies	Included in Pedagogies
1.	Functional English-1	1	4
2.	Islamic Studies/Ethics	2	0
3.	Child Development	0	4
4.	Urdu	0	2
5.	General Science	0	1
6.	General Methods of Teaching	1	0
7.	English-II	0	2
8.	Computer Literacy	2	2
9.	Classroom Management	2	3
10	General Mathematics	1	3
11	Pakistan Studies	7	3
12	Methods of Teaching Islamic Studies	0	0
13	The teaching of Literacy Skills	0	1
14	Arts, Crafts, and Calligraphy	1	0
15	Teaching of Urdu	0	0
16	The teaching of General Science	2	0
17	Instruction and com in Edu (ICT)	3	4
18	Teaching Practice (Short term)	0	0
19	Classroom Assessment	0	2
20	Teaching of English	1	1
21	Teaching of Mathematics	2	2
22	School, community, and Teacher	3	1
23	The teaching of Social Studies	7	2
24	Teaching English-III	1	0
25	Foundations of Education	3	1
26	Curriculum Development	1	2
27	Educational Psychology	1	3
28	Contep trends and Issues in Edu	3	5
29	Comparative Education	1	3
30	Intro to Gui &Counc	3	4
31	Pedagogy-I	0	0
32	Pedagogy-II	0	0
33	Research Methods in Education	2	2
34	Teaching Practice (Short Term)	3	4
35	School Management	3	1
36	Test Development and Evaluation	0	3
37	Teaching Practice (Long Term)	2	3

38	Research Project	0	0
39	Developmental Practicum	1	3

Content Analysis Curriculum Mapping

(Sample) Curriculum Mapping			
Knowledge (Cognitive Content)/ Subject: Teaching of Social Studies			
Category	**Sub-Categories**	**Included= 1**	**Not Included= 0**
Human Rights	Human Rights, Rights and Responsibilities (Child Rights, Cultural Rights, Indigenous rights, Women's rights, disability rights)	1	
	Democracy/Democratic Rule, Democratic Values/ Principles	1	
	Freedom (of expression, of speech, of the press, of association)		0
	Social Justice	1	
	Human Rights Education	1	
	Total=1		
Sustainable Development	Sustainable Development, Sustainability, Sustainable	1	
	Ecology, Ecological Sustainability (eco-systems, bio-diversity, biosphere, Ecology, loss of diversity)		0
	Environmental Education		0
	Environmental Sustainability/ Environmentally sustainable		0
	Climate change (global warming, carbon emissions,/footprint)	1	
	Renewable Energy, Alternative energy sources: tidal, wind, wave, geothermal, biomass)		0
	Waste Management, Recycling		0
	Economic Sustainability, Sustainable growth,		0

	Sustainable production, and Consumption, green economy		
	Social Sustainability, Social cohesion		0
	Education for Sustainable Development, Sustainability education, Education for Sustainability	1	
	Total=1		
Peace and Non-Violence	Peace, peace-building	1	
	Abuse/		0
	Harassment/Violence, (school-based violence/bullying, household-based violence, gender-based violence, child abuse/harassment, sexual abuse/harassment		0
	Peace Education	1	
	Total=1		
Global Citizenship	Globalization, globalization, Global/international citizen(ship), global culture/identity/community		0
	Multicultural(ism)/ Inter Cultural(ism)	1	
	Global Citizenship, Global citizenship education, global education, education for global citizenship	1	0
	Migration/Immigration		0
	Global Competition/competitiveness /globally competitive/international competitiveness		0
	Global-Local thinking, local-global, think global act local, glocal	1	0
	Global-Inequality/disparities, National/local citizenship/ identity(ies)/culture(s)/heritage (include a note if the overall feeling is one of precedence of the national over the international, eg maybe find terms such as		

	'nationalism,' 'patriotism,' 'motherland')		
	Total=1		
Gender Equality	Gender Equality		0
	Gender Equity		0
	Gender Sensitivity		0
	Gender Parity		0
	Empower(ment of) women/girls (female empowerment, encouraging female participation)	1	
	Total=1		
Health and Well Being	Physical health/health activity/fitness		0
	Mental, emotional health, psychological health		0
	Healthy Lifestyles (nutrition, diet, cleanliness, hygiene, sanitation, clean water, bearing /staying healthy)		0
	Awareness of Addiction,(Smoking, drugs, alcohol)		0
	Health Education		0
	Sexual and/or reproductive health education, Sexuality Education, HIV/AIDS education		0
	Total=0		

Appendix-J

Permission for using of instrument-1

Request for scale/instrument and permission to adapt 📁 Inbox x

Nasreen Bano — Sat, Aug 12, 2017,
Dear Sir/Madam, It is a well known fact that the world today is working for Sustainable Development and being a Scholar of Education, I too wish to contribute i

Anna Kyung Hwa Chung <khchung@unescoapceiu.org> — Mon, Aug 14, 2017, 12:51 PM
to me ▾

Dear Dr. Nasreen Bano,

Thank you for your kind email.

For your information, UNESCO Headquarters have developed a website on SDG Target 4.7 which I would like to share with you below:

https://en.unesco.org/gced/sdg47progress

They are expecting to have more updates on the information on measurement and indicator for SDG 4.7 in the near future.

For further information about Eduation for Global Citizenship in general, you can find resources through UNESCO GCED Clearinghouse: https://www.gcedclearinghouse.org/

If you have any further question related to this field, please contact UNESCO headquarters GCED section at gced@unesco.org.

Once again, thank you for your kind interest and your initiative to make this world a better place.

Best regards,

Anna Chung

Appendix-K

Response to the query of UNESCO Chief regarding use of the instrument

Nasreen Bano

Ph.D. (Scholar)
NUML, Islamabad.

On Thu, Aug 17, 2017 at 9:02 AM, Thaung, Nyi Nyi <nn.thaung@unesco.org> wrote:

Dear Nasreen,

I have asked my colleagues for their advice.

Pls also have a look at the following link of APCEIU. You may find some interesting ones for your study.

http://www.unescoapceiu.org/board/bbs/board.php?bo_table=m43

I also attached here with two publications which might be interesting to you.

Nyi Nyi

From: Nasreen Bano [mailto:manonasreen11@gmail.com]
Sent: Wednesday, August 09, 2017 2:23 PM
To: Thaung, Nyi Nyi <nn.thaung@unesco.org>
Subject: Acknowledgement

Respectable Mr. Thaung,

Sir, This mail is to acknowledge the fruitful conversational we had on SDG#4. Being the Scholar of Ph.D., I have taken this initiative along with my supervisor to explore the understanding of Sustainability in Educators.

I am thankful to you for the time you spared to discuss on the issue of Sustainable Development Goals #4. This is the universal agenda and its attainment very much depends upon Education. Educators have a great role to play on this agenda to put into action.

I highly appreciate your assurance to find and share the Scale/Instrument if it exists or if someone has developed on framework of SDG#4.7 and also to see who can validate the scale/instrument if it is developed by the researcher.

Looking forward for your kind cooperation in this regard.

Appendix-L

UNESCO Chief Thang Nyi Nyi suggestion for reading resource regarding Target

4

Appendix-M

UNESCO Chief in Pakistan query about the instrument

≡ M Gmail | Q nn.thaung@unesco.org | X ▾ | ⑦ ⠿ N

3 of 6 ‹ ›

From: Thaung, Nyi Nyi
Sent: 17 August 2017 09:27
To: Mochizuki, Yoko <y.mochizuki@unesco.org>; Jain, Nitika <n.jain@unesco.org>
Subject: Seek your kind advice

Dear Yoko and Nitika,

Greetings from Islamabad.

I have a request from the Ph.D student doing research on SDG 4.7.

She would like to know is there any assessment tools, instruments, framework to measure the knowledge of SDG 4.7 (ESD, GCED, Civic Edu, etc.. to teachers.

Please find below the yellow highlighted texts.

Any advice to her? Do you think APCEIU colleagues could help her?

Thanks in advance,

Nyi Nyi

From: Nasreen Bano [mailto:manonasreen11@gmail.com]
Sent: Wednesday, August 09, 2017 2:23 PM
To: Thaung, Nyi Nyi <nn.thaung@unesco.org>
Subject: Acknowledgement

Respectable Mr. Thaung,

  Sir, This mail is to acknowledge the fruitful conversational we had on SDG#4. Being the Scholar of Ph.D., I have taken this initiative along with my supervisor to explore the understanding of Sustainability in Educators.

  I am thankful to you for the time you spared to discuss on the issue of Sustainable Development Goals #4. This is the universal agenda and its attainment very much depends upon Education. Educators have a great role to play on this agenda to put into action.

I highly appreciate your assurance to find and share the Scale/Instrument if it exists or if someone has developed on framework of SDG#4.7 and also to see who can validate the scale/instrument if it is developed by the researcher.

Looking forward for your kind cooperation in this regard.

`

Appendix-N

Acknowledgement sent to UNESCO Chief in Pakistan Thaung Nyi Nyi

Good Afternoon Nyi Nyi, I am very glad to see the efforts you have put to get the scale/instrument for my SDG Target 4.7. I shall surely try to see the literatu

Thaung, Nyi Nyi <nn.thaung@unesco.org>   Thu, Aug 24, 2017, 3:02 PM

to me

Good luck and keep me update time to time.

Regards,

Nyi Nyi

From: Nasreen Bano [mailto:manonasreen11@gmail.com]

Sent: Thursday, August 24, 2017 2:49 PM

To: Thaung, Nyi Nyi <nn.thaung@unesco.org>

Subject: Acknowledgement

Good Afternoon Nyi Nyi,

I am very glad to see the efforts you have put to get the scale/instrument for my SDG Target 4.7. I shall surely try to see the literature you have got from yoko and Nikita. I am hopeful it will surely help me in developing my scale. If I readily get a scale I shall adapt it with the consent of the authority/person who has developed.

I feel so honored for your being so kind in helping me out find the scale. I shall surely share the scale once I develop so that it can be validated.

Thanks once again

Nasreen Bano

Scholar Ph.D.(Education)

Appendix-O

Chung permission for using Instrument

Letter of Permission for Research from NUML

Date: 14-05-2018

NATIONAL UNIVERSITY OF MODERN LANGUAGES
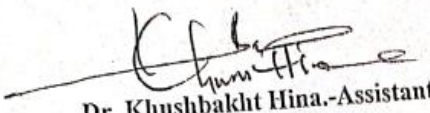#### Academics Branch/ &

Subject: **PERMISSION FOR DATA COLLECTION/ FOCUS GROUP**

This is to certify that Ms. Nasreen Bano d/o. Mr. Yousuf Khan bearing Registration# (PD-F-16-084) Roll # PD-EDU-AF-ID-006, enrolled in Ph.D. in the discipline of Education, Faculty of social sciences NUML Islamabad.

With a view of facilitating the candidate in gathering data/conducting interview/ focus group for her research, you are requested to kindly provide her desired information pertaining to your organization, publication/relevant training and development material etc.

It is assure you by the researcher that this research is a purely academic activity and the information provided by you will be used for research purpose only.

Thanking you.

Dr. Khushbakht Hina.-Assistant Professor

(Coordinator NUML Research & Regional campuses Academic Branch)

Dr. Khushbakht Hina
Assistant Professor
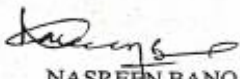National University of Modren
Language & Sciences
Islamabad Pakistan
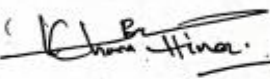
Appendix-Q

Request Letter to Conduct Research

<u>Covering Letter</u>

·Dated: 12-10-18

Dear Sir/Madam,

Ms. Nasreen Bano is the scholar of Ph.D. Social Sciences (Education) from NUML bearing registration number (PD-f-16-084) and Roll# PD-EDU-AF-IID-006. She is conducting research on Global Citizenship Education and Sustainable Development. The inclusion of contents/themes of GCED and ESD in the B.Ed. Pre-Service (Elementary) curriculum. The data collected for the purpose will be purely utilized for research purpose and your valuable opinion and cooperation in this regard will be highly appreciated.

(   )

NASREEN BANO

Ph.D. Scholar

(   )

Dr..KHUSHBAKHT HINA,

Supervisor, ,

Deputy Director Research,

Academic Research, NUML,

Islamabad.

(   )

DR. HUKAM DAD MALIK
HEAD
DEPARTMENT OF EDUCATION
NUML, ISLAMABAD

Dr. HUKUM DAD

Head of the Department,

EDUCATION DEPTT, NUML,

ISLAMABAD

Appendix-R

<u>Letter of Validity from Expert-1</u>
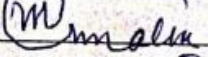
To Whom It May Concern

This is to certify that the standardized research instrument of IBE-UNESCO (2016) prepared by **"Renato Opertti and Massimo Amadio"** adapted to be used by the researcher in the Ph. D. research have been reviewed by me and I found that the instrument has been designed adequately to assess the Contents of Curriculum of B.Ed. (Honors) Elementary Level and to take opinion of Educational Experts/Curriculum Developers.

It is considered that above mentioned research instrument bears adequate construct and content validity according to the purpose of research and can be used for data collection by the researcher.

Name: <u>Dr. Mushtaq Ahmad Malik</u>

Designation: <u>Assistant Professor</u>

Institute: <u>Department of Education; University of Sargodha</u>

Signature: _____

Date: <u>22-10-2018</u>

Stamp:
Dr Mushtaq Ahmad Malik
Assistant Professor
Department of Education
University of Sargodha

Appendix-S

<u>*Letter of Validity from Expert-2*</u>

CERTIFICATE OF VALIDITY

TOPIC: An Appraisal of Pre-Service Teacher Education Curriculum with Reference to Sustainable Development Goals

By: <u>Nasreen Bano</u>

Supervised By: <u>Dr.KhushBakht Hina</u>

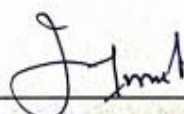National University of Modern Languages, H-9, Islamabad, Pakistan.

This is to certify that the standardized research instrument of IBE-UNESCO (2016) prepared by **"Renato Opertti and Massimo Amadio"** to be used by the researcher towards her thesis have been assessed by me and I find that the instrument has been designed adequately to assess the Contents of Curriculum of B.Ed. (Honors) Elementary Level and to take opinion of Educational Experts/Curriculum Developers.

It is considered that the research instrument, developed for measurement of the above-titled research. It assures adequate construct and content validity according to the purpose of research and can be used for data collection by the researcher with a fair amount of confidence.

Name: <u>Dr.Ehsan Mahmood</u>

Designation: <u>Area Education Officer/Principal</u>

Institute: <u>Federal Directorate of Education, Islamabad</u>

Signature: _____

Date: <u>22nd July, 2018.</u>

Stamp:
Dr. Ehsan Mahmood
Area Education Officer (Tarnol)
Federal Directorate of Education
G-9/4, Islamabad

Letter of Validity from Expert-3

CERTIFICATE OF VALIDITY

TOPIC: An Appraisal of Pre-Service Teacher Education Curriculum with Reference to Sustainable Development Goals

By: Nasreen Bano

Supervised By: Dr.KhushBakht Hina

National University of Modern Languages, H-9, Islamabad, Pakistan.

This is to certify that the standardized research instrument of IBE-UNESCO (2016) prepared by "Renato Opertti and Massimo Amadio" to be used by the researcher towards her thesis have been assessed by me and I find that the instrument has been designed adequately to assess the Contents of Curriculum of B.Ed. (Honors) Elementary Level and to take opinion of Educational Experts/Curriculum Developers.

It is considered that the research instrument, developed for measurement of the above-titled research. It assures adequate construct and content validity according to the purpose of research and can be used for data collection by the researcher with a fair amount of confidence.

Name: _Dr. M. Imran Yousuf_

Designation: _Associate Professor_

Institute: _____

Signature: _____

Date: _24-10-18_

Stamp:

Dr. M. Imran Yousuf
Associate Professor
Department of Education
PMAS-Arid Agriculture University
Rawalpindi

Appendix-U

Research Topic Approval Letter

NATIONAL UNIVERSITY OF MODERN LANGUAGES
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF EDUCATION

Dated: 07-11-2017

ML.1-4/2017/Edu

To: Nasreen Bano,
651-Phd/Edu/F16

Subject: APPROVAL OF PHD THESIS TOPIC AND SUPERVISOR

1. Reference Academic Branch's Notification No. ML.6-2/17-Syl/Acad dated 31-Oct-2017, the Faculty Board of Studies has approved the following vide its meeting held on 11th & 12th of September 2017.

    a. **Supervisor's Name & Designation**
        i. Dr. Khush Bakht Hina
          Assistant Professor, Department of Education,
          NUML, Islamabad.

    b. **Topic of Thesis**

"AN APPRAISAL OF PRE-SERVICE TEACHER EDUCATION CURRICULUM WITH REFERENCE TO SUSTAINABLE DEVELOPMENT GOALS."

2. You may carry out research on the given topic under the guidance of your Supervisor and submit the thesis for further evaluation within the stipulated time. It is inform you that your thesis should be submit within described period by Jun 2021 positively for further necessary action please.

3. As per policy of NUML, all MPhil/PhD thesis are to be run on turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis run from own sources.

4. Thesis are to be prepared strictly on NUML's format that can be had from (Coordinator, Department of Education)

Telephone No: 051-9265100-110 Ext: 2090
E-mail: snudrat@numl.edu.pk

Dr. Hukam Dad Malik
Head,
Department of Education