Abstract

In a world with 7 billion people and limited natural resources, humans have to use them (social, economic & environmental) without destroying them for future generations. The leading aim of the paper was to explore the phenomena of Education for Sustainable Development (ESD) and the role of the social studies curriculum. The paradigm of the research was interpretivism, and phenomenological design was used. The semi-structured interviews protocol was used to collect data. Five participants (Experts of social studies curriculum PCTB) were selected using the purposive sampling technique. Data were analyzed using NVivo12, and thematic analysis was conducted using open, axial, and selective coding. Five themes (People, planet, prosperity, peace, and partnership) were selected during the qualitative data analysis process. It was evaluated that the social studies curriculum designed by Punjab Textbook Board incorporated the values of sustainable development among six, seven, and eighth grade students. However, some indicators that are missed need a minor addition.

**Keywords:** Sustainable development, Curriculum, social studies, phenomenology
Introduction

The terms sustainability is better defined as careful use of natural resources and protection of the natural resources with aim to save in a way that is usable by next generations. Sustainability is focused to fulfill the economical, environmental, and social needs of present generation with aim to save these natural resources to be available for future generation as well (Bonnett, 1999; Hansen et al., 2016).

Education for sustainable development is firmly implanted through the environmental, social, and economic education efforts (see Figure 1). It is important to make a curriculum viable that becomes part of the culture for the said purpose and targets. Sustainable development can only be applicable if education and curriculum encompass the goals and objectives of sustainable development (Agyeman, 2005; Kopnina, 2012). Moreover, it is practically implemented in the classrooms not just for exam preparation but also to bring, develop, and improve sustainability in students (Gonzalez-Gaudiano, 2005). These improvements need to go beyond any uncertainty with clear signs so that achievements are achievable. Bringing this nature of sustainability into students can help to save the resources for future use (Goldney et al., 2007).

Figure 1. Education Sustainable Development: A Sketch

Sustainability is better seen as an association between the system as students and their environmental factors, rather than a distantly sketched out goal to be cultivated. In the present times, civilizations all over the globe have a strong sense of care for their and future generations’ future (Bruntland, 1987). They have shown focus on formulating and implementing goals towards a secure and prospering economic present and future. The administrations and expertise frameworks of sanctified places (Shami & Hussain, 2006).

The Sustainable Development Goals (SDGs) is a plan or framework similar to the worldwide schedule as per the UN protocols, as in difficulties we may face as a worldwide community while opening up new avenues in all the aspects of our future
Furthermore, the SDGs implores the community to participate in other possible activities and outcomes that can improve our view on sweeping changes that this framework may require and incorporate multi-partner collaborations and adaptable changes towards the global agenda (Tilbury, 2002). No doubt, standard capital frameworks and biological systems at the global level benefit streams that support every person’s movement toward achieving the SDGs to any extent (Chatzifotiou, 2006).

The SDGs are an extensive plan reflecting the universal notion of the complications and openings we all face (Sauve, 1996). Moreover, the agenda of SDGs attempts to do development some other way, with more unambiguous and more impressive use of multi-partner relationships to push such a comprehensive, consolidated and versatile course of action fit for recognizing system-wide change (Huckle & Wals, 2015). Point of fact, ordinary capital stocks and biological framework advantage streams uphold every human development toward achieving the SDGs (Venkataraman, 2009).

All again and again, "practicality" is seen accordingly as an unquestionable condition that we attempt to describe and show up at rather than a methodology of "masterminded change or "administered learning." This method must incorporate the working of practical associations among people and people and their condition (Calder, & Clugston, 2003). To impart these requires the progression of learning prepared for acclimating to analysis, with upgraded abilities to improve important initiative by sharing information, communication, and appreciation (Ferreira et al, 2007). It emphasized that insufferable development, everyone is a user and provider of information. Sustainable Development Goals (SDGs) highlighted that fully open interest in the fundamental initiative is key for achieving financial encroachment (Summit, 2002). This shows the horticulture segment basic activity in propelling complete and legitimate monetary turn of events, business, and superior to average work for all. Mainstreaming work heightened and valuable developing systems is critical to reducing aberrations (SDG 10) by doing wage-making practices for the provincial poor (Union & Unep, 2013).

Similarly, mechanical and institutional advancements (SDG 9) can drive farming productivity without additional commitments from typical resources. Moreover, keen use of bio fuels reduces loads fair and square and the lightness of provincial item costs on 7 SDG. The social tradition of agro-biological frameworks can expand budgetary, social, and environmental associations among urban and natural zones SDG #11 (Combes, 2005).

Sustainability, a continually creating subject, is alongside the sign to help everyone's needs satisfaction, checking that of future ages, by obliging financial turn of events, social advancement, and regular affirmation and social well-being (Bruntland,
As shown in Figure 2, the principles of SD are training for sustainable development are: Living within the limit of the environment, develop a sustainable economy, enhance good governance, using sound science responsibility, and ensure a strong and healthy society. All are key to the presentation of a culture of viability.

Figure 2. Principles of Sustainable Development

While researching the origins of issues related to ESD and the relationship between improvement and sustainability, it was discovered to be a good starting point to quickly depict the evolution of the thought of progress and advancement, not only because it was the ancestor to ideas’ turn of events, but also because it would at the appointed time (Forster, 1985). Overall, "sustainability" is viewed as meeting our needs of economic, environmental, and social with attitude of saving these natural resources for future generations (Mogensen & Schnack, 2010).

When discussing social development goals, it is a universal set of 17 goals, 169 targets, and 241 indicators that UN member states are expected to localize in their development agendas and socio-economic policies during the period 2015-2030. All 17 goals are based on three pillars, i.e., inclusivity, equity, and sustainability”. To follow and implement these UN (SDGs), the Pakistani parliament accepted these goals as "national development goals” with the help of the Ministry of Planning, Development, and Reform. Planning Ministry was influential in launching and laying the groundwork for these SDGs, bringing them a resolution for the people development national plan and working with the provincial governments (Khan et al., 2013).

The curriculum is a drafted and approved syllabus. The major elements of curriculum on Sustainable development are (1) ethics and values, (2) sustainable competencies, (3) mapping the learner world, and course promotion with its final assessment (see Figure 3).
In comparing strong and weak sustainability, Figure 4 showed that strong sustainability systematically promotes a culture. At the same time, weak sustainability scattered all three aspects (Economic, environmental, and social) of sustainability in the society.

The above strong framework also helps to arrange budgetary and normal estimates for a society to flourish while guiding on a social level for long. Various holes and indecisions are significant in our insight into worldwide dangers and strategies on the most proficient method to empower individuals to become asset productive, affluent, and maintainable. A significant experience is diminishing conflicts amongst the central areas and endorsing collective energies in strategies and instruments. As of now, strategies and systems are set up without palatable deliberation for the cross-sectoral significance. The shortage of connecting between organizations has turned into a disparity between the segments regarding rules and applications (Giddings et al, 2002). Along these lines, this paper principally is expected to do a survey to assess the targets of Sustainable
Development in Pakistan, which is to be implemented by the Planning Commission while inspecting the void left, if any, in the strategy and practice in the implementations of SGDs and accomplishments gap, if any (Ashford, 2004). These goals can be achieved only by confidence among the objectives which must encompass in strategy and planning (Nolet, 2009). This is only possible if the philosophical acceptance is observed when considering the significance of the SGDs and coming out of the previous past disillusionments that may have caused grievances to accept this structured framework fully gives in the shape of overall strategies and plans (Nayyar, & Salim, 2005; Nicolaides, 2006).

Therefore, the curriculum experts and strategy makers can come together for a coordinated effort to develop a curriculum at a different level of education for environmental, economic, and social sustainability development as an initial step to achieve the SGDs simultaneously making new advancements so that our planet can prosper instead of ending up devoid of functions to estimate a better standard of the worldwide population (Bhutto & Bazmi, 2007).

It is the responsibility of the governing bodies to assess the importance of SD in the curriculum and make essential and aggressive steps to make these goals in curriculum and functioning part of the society (Bandarin, 2015).

At present, strategies and components are built up without good deliberation for the cross-sectoral significance. The shortage of connecting between curriculum, education, and sustainable development has wound an imbalance between rules and applications (Corney & Reid 2007). Keeping these aspects in perspective, this paper explains the perception of members of PCTB who developed or dealt with the social studies curriculum. The current study was a qualitative exploration of SDGs values incorporation in elementary school students using the social studies curriculum.

The study findings might be useful by curriculum developers, teachers, researchers, textbook writers, and education policymakers. The curriculum developers may use the study findings to revise the Social Studies curricula at the elementary level. The textbook writers might use the findings to write textbooks focusing on ESD content and ESD competencies. Teachers might use the findings to improve their students’ knowledge of sustainability issues and their competencies regarding sustainability. Policymakers might use the study's findings to devise policies regarding the implementation of education for sustainable development. Future researchers may use the findings to plan further research in the area of education for sustainable development.
Objectives of the Study

The given were the objectives of this paper:

1. To explore the perceptions of curriculum experts about Education for Sustainable Development Incorporation through Social Study Curriculum.
2. To dig out the opinions of experts about ESD values Incorporation through social study curriculum at elementary grades.

Methodology

The study was conducted under the interpretivism paradigm, and qualitative methodology was used. The design was hermeneutic phenomenology. And semi-structured interviews were used for data collection. Detail as shown in Figure 5.

Figure5. Phenomenology Procedure

As shown in Figure 5, “Hermeneutic phenomenology is a research method used in qualitative research in the fields of education and other human sciences, for example, nursing science. It is a widely used method example and well known for his hermeneutic phenomenological method (Fraenkel, Wallen, & Hyun, 2012).

Semi-structured interviews were conducted to collect data from five participants. The participants were selected using purposive sampling. The demographics of the participant are presented in the given table.
Table 1

Participants Demographic Information

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Participant A</th>
<th>Age</th>
<th>Experience</th>
<th>Scale</th>
<th>Relevance with ESD and Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Participant A</td>
<td>55</td>
<td>28</td>
<td>18</td>
<td>Subject specialist of social studies in Punjab Curriculum Text Book (PCTB)</td>
</tr>
<tr>
<td>2.</td>
<td>Participant B</td>
<td>35</td>
<td>9</td>
<td>17</td>
<td>Subject specialist of social studies in PCTB</td>
</tr>
<tr>
<td>3.</td>
<td>Participant C</td>
<td>55</td>
<td>25</td>
<td>19</td>
<td>Director of curriculum wing</td>
</tr>
<tr>
<td>4.</td>
<td>Participant D</td>
<td>27</td>
<td>3</td>
<td>17</td>
<td>Subject specialist of social studies in curriculum wing</td>
</tr>
<tr>
<td>5.</td>
<td>Participant E</td>
<td>48</td>
<td>20</td>
<td>18</td>
<td>Subject specialist of social studies in PCTB</td>
</tr>
</tbody>
</table>

Data Analysis

Qualitative data refers to non-numeric information such as interview transcripts, notes, video, audio recordings, images, and text documents (Hatch, 2002). Data were analyzed using NVivo 12. All the recorded interviews were transcribed and imported into NVivo 12. The node and coding were done using the open coding technique.

Results

Figure 6 shows that the coding way out of the data collected from participants using semi-structured interviews. The significant categories show that sustainability's economic, environmental, and social dimensions are endorsing students through the social studies curriculum.
Figure 6. Mapping of Themes

Figure 7 shows the word cloud exhibited that the significant perceptions of participants about education for sustainable development are being imparted. The most frequent concept that all participants repeated was learning for sustainability. All other concepts discovered during thematic analysis are illustrated in the above figure of word cloud generated through NVivo 12.
Given five themes were noted during the thematic analysis of the collected data from the participant.

**People**—most respondents discussed the social studies curriculum as imparting social development and socio-cultural knowledge among students. Before the 18th amendment, the curriculum design was under the Federal government's jurisdiction, later transferred to the provincial government. We are, still to this day, using the same curriculum that our predecessors designed and follow the curriculum copied from other countries with either a slight change every year or choose a new country every year for updating the curriculum. Before the 18th amendment, only specific personal worked on and designed the curriculum, and very little input was welcomed from the provincial school bodies.

*Teachers and professors from educational institutes are invited to participate in curriculum design. There is very little change in each updated version of the curriculum. The stakeholders welcome all suggestions. After compilation, the PTBB Chairman of the Punjab text board is responsible for holding sessions for final discussions for any required changes.*

**Participant 1**

**Prosperity**—Prosperity is the flourishing, thriving, good fortune, and successful social status. Prosperity often produces profuse wealth, including other factors which can be profusely wealthy in all degrees, such as happiness and health. *Many topics are included in such a curriculum. Environmental pollution, proper use of water, and*
awareness of the weather are all included in the curriculum. All topics already exist. Continue to add new topics as needed. But the syllabus for social studies is the same as before. These topics are not included in the sixth grade but are part of seventh and eighth. The students are informed about industry and trade.

To some extent, these topics are implemented in the curriculum. As the mental capacity of young kids is still small, an effort is made to make it easier for them to understand. Still, these topics are surely included in books other than social studies.

If the modern digital age and trends are considered, then sustainable development goals are paramount. Our syllabus does not cover all aspects of these goals. It is the need of the hour to give importance to these goals, and all the curriculum stakeholders should make every effort to implement these goals. This is the age of digital phenomenon, and the world has become a global village, and due to this, young minds are growing very fast. If these goals are not fully considered, we will be left behind in the global growth race.

**Participant 1**

The importance is given to the inputs provided by the teachers and professors from the educational institutes. It is also essential to consider the modern techniques, trends, and demands in formulating the changes in the curriculum. We have also introduced a few new things in Geography. If any organization requests that a new topic be added, we collect feedback from different people. For example, in 1122, food adulteration, children's health, and such topics are also included in the curriculum. Even though Smog is a common occurrence these days but is not included in the syllabus but definitely will be included next time. All of these are included at the elementary level. Still, they have been only slightly defined for the children. At the elementary level, these topics are presented in small bits and chunks to make it easy for young kids to understand as much as is required. There is knowledge about ESD, and the books include many similar topics, but this term has neither been used nor included in the curriculum before. It is desperately needed for the future so that we can conserve natural resources for our future generations.

*The syllabus is in good condition, but important nonetheless should also be given to Sustainable development. It is essential to preserve the natural resources for the future and present generations. Students must be included because they are the primary stakeholders in this regard. The world is growing and evolving rapidly, and therefore we must be prepared to face all the challenges to join that growth and*
evolution. The interviewee used to attend seminars and training held by the university while working there but didn’t attend any since joining the curriculum department.

**Participant 2**

**Peace**--Peace is a notion of societal relationship and agreement in the absenteeism of hostility and ferocity. In a social sagacity, peace is usually used to a lack of struggle and autonomy from the dread of violence between organizations, individuals, and groups. The curriculum is not well designed and is not in tandem with the most recent developments. It is of very little importance that what changes or direction is required when designing the curriculum. Hardly any work is done, or any consideration paid in heed to update the curriculum with modern changes and needs of the society. A higher weight age is given to the representatives from the federal government, which overshadows the suggestions by the rest of the representatives, which was before the 18th amendment. The interviewee didn’t mention the voting structure after the amendment.

The interviewee believes that the same curriculum has been followed since 2006, and hardly any opinion is taken or implemented from his immediate circle. Environment, pollution, water conservation, climate change, among other things, is part of the social studies curriculum. We need to add new techniques as the world has gone far beyond what we teach today. There is still a shortage in the curriculum. Modern technological and social aspects should be kept in mind before formulating. The ability to think and critical learning has increased of this generation in this digital age. This is the era of E-learning, digital communication, and fast access to facts; therefore, these must be accommodated in schooling to prepare young minds to meet the ever-growing future. Social studies curriculum must include those things that we need in society and is useful for becoming good citizens. We must imitate or at least include examples from countries such as Japan and Finland. Our aim should be to become an excellent humanistic society rather than well-educated but aimless citizens. We are well aware of ESD. Most of the modern world is careful and very particular in saving the natural resources for their future generations and urges each other to implement best practices in their respective countries while ensuring all stakeholders are involved in the policymaking.
Participant 5

Partnership-- The terms organization is an arrangement where parties, known as colleagues, consent to coordinate to propel their shared advantages. The accomplices in an association might be people, organizations, intrigue-based associations, schools, governments, or mixes.

Yes, I am well familiar with this term. We make changes according to whatever topics the curriculum committee adds or informs us to include. We keep modern requirements in mind. The curriculum has already included most of the Sustainable Development goals; the term is not widely used. Even though there are some meetings and seminars in the curriculum wing, none consider the topics a part of Sustainable development.

Participant 4

Planet-- A planet is a galactic body circling a star or excellent remainder that is sufficiently huge to adjust its gravity. It isn't sufficiently enormous to cause nuclear combination and has freed its neighboring district from planetesimals.

The curriculum is very good, up-to-date, and on par with most recent developments in the modern world, especially in the elementary level of schooling. All the experts are welcomed for input and any change while ensuring the most recent developments are considered. The interviewee is completely satisfied with the standard of the current curriculum. All the stakeholders are involved in curriculum design. The curriculum at the elementary level is very good. Still, it is seemingly difficult for younger students to grasp so many topics as part of the curriculum. Therefore, the interviewee believes that the subsequent changes will lessen that burden. These topics are included in the social study curriculum at the Elementary level and aren’t lacking in any respect. The syllabus is formulated upon the best requirements and most modern topics and concepts. The curriculum is very good. It covers all things according to the child’s needs and age level.

Participant 3

Unique Case-- Many topics are included in such a curriculum. Environmental pollution, proper use of water, and awareness of the weather are all included in the curriculum. All topics already exist. Continue to add new topics as needed. But the syllabus for social studies is the same as before. Some respondents talk about the
problems related to the system and ESD. Training is necessary for the development of teachers and their respective students, but we never had such training or been sent abroad for training in most modern techniques. The government doesn’t seem to consider the importance of such training and seminars.

Figure 8. Barriers of Sustainability Development

The world is growing rapidly. Society desperately needs well-trained citizens. Students need to be practically trained and aware. Social studies include Sustainable Development topics but need to follow more with Educational Sustainable Development. The last training where a foreign teacher was involved was 25 years ago on Bloom taxonomy. There hasn’t been a similar training ever since. Even if there is training abroad, concerned personal are not sent for it.

Conclusion and Future Directions

The curriculum design is very good, and the interviewee is satisfied with it. Professional and competent experts have designed it. Each provincial government has recently delegated responsibility to provide curriculum design and update for further approval. It is of utmost importance that most recent trends that are accepted as best practices are included. All the stakeholders are involved, but we still follow the older curriculum without any significant changes. Experts have worked on this curriculum, so all of these topics are covered. If needed and stipulated by senior representatives, a summary is created, and new topics are added to the curriculum. All the unanimously approved opinions are more likely to be added to the following curriculum change. Everything is fine with the design of the curriculum concerning these topics. The syllabus
is fine and formulated according to a child’s mental level, and if anything is needed, it is added. It is made by the experts in this field and thus, has considered all aspects which are important for a child’s mental growth. We don’t need this term. Our syllabuses have such and similar topics, and we have designed them very well. Instead, I am of the view that the teaching load should be lessened for the students. Important social studies are included in the curriculum for the elementary level and don’t need much improvement. We had already included similar goals in our design, while others talked about sustainable development goals. The interviewee believes there isn’t a need for training and seminars, but we hold several meetings, training, and seminars per government protocols. The syllabus diagram is entirely strong then the visitor is cozy along with it. It has been designed by way of a professional yet in a positioning expert. These days, the accountability has been delegated according to each regional administration by providing syllabus format and update for in addition approval, or that is over utmost worth as near recent tendencies up to expectation are commonplace, namely beneficial practices are included. All the stakeholders are worried; however, we nevertheless observe the older curriculum besides any massive changes.

Experts hold worked over that curriculum, then every over these topics is covered. I wished then stipulated from chief representatives. A summary is made, yet modern topics are added following the curriculum. All the unanimously approved opinions are extra probable in conformity with remaining delivered according to the next curriculum change. Everything is quality, including the layout of the curriculum regarding this topic. The syllabus is best nationally formulated in imitation of a child’s intellectual degree, and then proviso anything is needed, such is added. It is committed via the professionals between this discipline yet thus, has considered all elements vital because of a child’s intellectual growth. Permanency we don’t want it term. Our syllabuses have certain and similar matters, yet we hold designed such altogether well. Instead, I am about the consider so much the discipline lay must lie lessened for the students. Important social studies are blanketed among the elementary degree syllabus or don’t need a good deal of improvement. Meanwhile, we protected comparable desires in our graph while others just spoke regarding sustainable development goals. The interviewee believes that place isn’t necessary because of training then seminars; however, we maintain countless meetings, education, and seminars to take care of government protocols.
Recommendations

It is very essential to save the resources for the present and future generation. Therefore, sustainability development is very important and hot topic in these days. On the bases of the result and findings it is recommended that:

There is an extreme need to define the goals of sustainability development according to the modern digital age by the curriculum experts and to achieve the best result, the curriculum of elementary level should be developed after defining the goals. Moreover, experts should work on curriculum, so all of relevant and required topics may cover.

It is suggested to stakeholders who are responsible of developing curriculum to take serious steps in developing the new and Up to Date curriculum of sustainability development at the elementary level. Moreover, the curriculum on sustainability development at the elementary level should be monitor and update yearly. For the successful process of updating the curriculum, all stakeholders (curriculum experts, teachers, students, and parents) must be involved.

It is suggested to textbook board, to perform its role not only in developing the latest curriculum on sustainability development that cop the modern techniques and trends but also work hard in implementation the updated curriculum with zeal and zest.

The social studies curriculum is not well design and not matched with the recent development of technology. therefore, it is suggested to add new techniques in the curriculum like, E-communication, E resource, E learning in sustainability development. Moreover, there is an extreme need to improve the social study curriculum at the elementary level, focusing on environmental, social, and economic development and saving of natural resources with respect of electronic resources.

There is an extreme need for training seminars, meetings, and workshops for all stakeholders of curriculum developers especially to the teachers and the employ of Punjab Curriculum Textbook Board (PCTB).

References


