DESD and Teacher Education Curricula in Pakistan

The DESD has in focus four major areas of intervention for the materialization of the concept ‘sustainable’ which a few years back was just abstract. One of these areas is to re-orient and revise educational programs from nursery to university level. Whenever one refers to education, teacher education emerges as the topmost important area.

Methodology of this Paper

This paper aims at analyzing the curricula of teacher education programs using DESD lens with the purpose to find a way ahead. For this purpose:

1. Teacher education programs offered throughout the country have been listed and briefly described.
2. The curricula of each teacher education program was analyzed using the following template of themes and sub themes of the Decade of Education for Sustainable Development.

<table>
<thead>
<tr>
<th>Socio-cultural perspective</th>
<th>Environmental perspective</th>
<th>Economic perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Rights</td>
<td>Natural resources</td>
<td>Poverty reduction</td>
</tr>
<tr>
<td>Peace and human security</td>
<td>Climate change</td>
<td>Corporative responsibility and accountability</td>
</tr>
<tr>
<td>Gender equality</td>
<td>Rural development</td>
<td>Market economy</td>
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<tr>
<td>Cultural diversity</td>
<td>Sustainable urbanizations</td>
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<tr>
<td>Health</td>
<td>Disaster prevention and mitigation</td>
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<tr>
<td>HIV/ AIDS Governance</td>
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</tbody>
</table>

3. Inter comparison of curricula of various teacher education programs was made.
4. Effort was made to identify the reasons in the variation in emphasis on sustainability issues at various levels.
5. Suggestions for reorienting teacher education programs have been put forward.

Teacher Education Programs

Pakistan has more than 550,000 teachers in the public sector schools and nearly 100,000 in the private schools. Teacher Education is imparted through pre-service and in-service teacher training institutions. But it is predominantly pre service in the form of certificate, diploma or/degree program. In-service training programs are conducted by specified units of the provincial governments where the content remains limited to the teaching of prescribed school curricula or development of administrative skills or orientation to the government
initiatives such as formation of school management councils etc. These institutions are known as Provincial Institutes of Teacher Education (PITE) and in Punjab there is the Directorate of Staff Development. At the federal level in-service teacher education is conducted by the National Institute of Science and Technology Education (NISTE)

**Pre-Service Teacher Education Programs**

Various types of pre-service teacher education programs are offered to prepare teachers for different levels of education.

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Title of Program</th>
<th>Entry Acad. + Program Duration</th>
<th>Level/grades for which prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Primary Teacher Certificate (PTC)</td>
<td>10+1</td>
<td>1-5</td>
</tr>
<tr>
<td>2.</td>
<td>Certificate of Teaching (CT)</td>
<td>12+1</td>
<td>6-8</td>
</tr>
<tr>
<td>3.</td>
<td>B.Ed</td>
<td>14+1</td>
<td>Secondary</td>
</tr>
<tr>
<td>4.</td>
<td>B.S.Ed</td>
<td>12+3</td>
<td>Secondary</td>
</tr>
<tr>
<td>5.</td>
<td>B.Sc (Hons) in Edu.Studies</td>
<td>12+4</td>
<td>Secondary</td>
</tr>
<tr>
<td>6.</td>
<td>M.A Education</td>
<td>14+2</td>
<td>Secondary and HS</td>
</tr>
<tr>
<td>7.</td>
<td>M.Ed</td>
<td>B.Ed+1</td>
<td>Secondary and HS</td>
</tr>
<tr>
<td>8.</td>
<td>M. Phil</td>
<td>Master in Edu+ 2 year</td>
<td>Higher TT</td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The first two programs have been discontinued from 2002 onwards in Punjab, the biggest province of Pakistan with a little more than 60% population of the country, and the minimum requisite qualification for a primary school teacher has been raised to a bachelor degree.

**Teacher Training Institutions**

All except the three very small teacher training institutions are in the public sector. The factor restraining the private sector venturing on to teacher education programs is highly commercial and profit motive which such programs cannot yield. As a matter of fact teaching is not a profession of choice and hardly any body would invest heavily to become a teacher which is quite low on the socio-economic scale.

1. Government Colleges of Elementary Teachers : PTC and CT
3. Institutes /Departments at public universities do , and M. Phil/Ph. D
4. University of Education do
5. One private Institute B.Ed Elementary
6. Two Departments of Edu. in two private univ. one offering master from this year other offering M. Ed, Ph. D

Process of Curriculum Development for Teacher Education

1. PTC and CT

For these two undergraduate programs the curriculum and text-books are developed at the central (national) level by the Curriculum Wing of the Ministry of Education.

2. Bachelor and Master Level Programs

University prepares their own curricula. The Higher Education Commission also prepares curriculum outlines through various committees with membership from teacher education institutions. These outlines are provided to the universities as guidelines and minimum requirements.

3. M. Phil and Ph. D.

Universities prepare their own curricula.

Curriculum of PTC.

Duration: 42 weeks

**Overall aims.** Out of 17 objectives of the program following two relate to ESD.

15. To sensitize teachers about their roles in nation building and social development.

17. To acquaint teachers with contemporary issues (pop. explosion, environmental pollution, drug abuse) and international commitments such as peace, education, democratic attitude etc. and to sensitize teachers to play their key role for these purposes.


**Taught Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Marks /weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Edu., Curriculum and Instruction</td>
<td>100</td>
</tr>
<tr>
<td>2. Edu. Psy. and guidance</td>
<td>100</td>
</tr>
<tr>
<td>3. Teacher, school and society *</td>
<td>100</td>
</tr>
<tr>
<td>4. Language and methods of teaching</td>
<td>100</td>
</tr>
<tr>
<td>5.* Math/Sciences/Social Studies/Islamiat/English *</td>
<td>100 each</td>
</tr>
<tr>
<td>and methods of Teaching</td>
<td></td>
</tr>
<tr>
<td>6. Practical Art</td>
<td>100</td>
</tr>
<tr>
<td>7. Health and Physical Education *</td>
<td>100</td>
</tr>
</tbody>
</table>

Thus out of eleven taught courses three with* have some objectives and content relevant to ESD the detail of which follows.

**Teacher, school and society**

Nine out of ten objectives relate to ESD

1. Highlight importance of school community relationship and to develop attitude and skills for socializing children and training them for citizenship.
2. To develop skills for curriculum development and methodology in the area of literacy/adult education;
3. To point out consequence of smoking, alcohol and drug abuse, and to guide children in the light of their socio-psychological conditions;
4. To point out dangers of population explosion and to persuade for family planning;
5. To help pupils achieve simple factual awareness of their environment in general terms and of their place in it;
6. To arouse in pupils an understanding of environmental problems;
7. To lay foundation for the development of positive attitude towards environment.

**Social Studies and Methods of Teaching**

Out of 10 objectives two are related to ESD.

1. Senses problems related to social, civic and natural environment and take interest in social, civic and environmental matters;
2. Acquires skill for developing international understanding among children;

**Physical Education**

Out of 11 objectives following four relate to ESD.

1. Understand and inculcate among children healthy practices regarding environmental cleanliness, communicable diseases, and hazards of plants, animals and insects;
2. Understand harm of misuse of sex urge and AIDS and guide children in terms of preventive measures;
3. Guide children regarding precautions in handling common things/traffic rules;
4. Observe deviations among children from normal health and refer cases to parents and health workers.
Curriculum of Certificate of Teaching (CT)

Duration: 42 weeks

Aims of Program
Out of 17 objectives of the program one relates to ESD i.e.
17) To acquaint the teachers with contemporary issues (pop. explosion, environmental pollution, drug abuse etc) and international commitments such as peace, education, democratic attitude etc and to sensitize teachers to play their key role for these purposes.

Taught Courses
Core courses
1) Education, Curriculum and Instruction 100
2) Educational Psychology and Guidance 100
3) Teacher, School and Society 100
4) Testing, Eval. and Counseling 100
5) Elem. school organization and class management 100
6) Islamic Education and Ideology 100
7-9) Methods of Teaching Science/ Math/ Lang. 100

10-11) Optional Courses
To be selected out of content+ methods of teaching courses from the given options:

Group 1
1. Science and methods of teaching
2. Social Studies and methods of teaching
3. Islamiat or moral education

Group 2
4. Fundamentals of Agriculture
5. Agricultural Education
6. Fundamentals of Industrial Arts
7. Industrial Arts Education
8. Fundamentals of Home Economics

Out of seven core courses one ‘Teacher school and society’ relates to ESD to some extent. Out of optional courses one may or may not select social studies from the first three. But out of the second group students will selected at least one course which have some relevance ot ESD concepts.

Some detail of course having ESD relevant concept is given as under.

Teacher, School and Society
The whole course addresses the ESD relevant issues and teachers’ role
1. to highlight importance of school community relationship and to develop attitude and skills for socializing children, training them for citizenship, and for enhancement of girls’ education.
2. to promote global perspective with regard to basic human rights as envisaged in Islam and to develop democratic attitude for peaceful co-existence, free from inequality and injustice.
3. to develop skills for curriculum development and methodology in the area of literacy/adult education.
4. to point out consequences of smoking, alcohol and drug abuse, and to guide children in the light of their socio-psychological conditions.
5. to point out dangers of population explosion and to persuade for family planning.
6. to help pupils achieve simple factual awareness of their environment in general terms and of their place in it.
7. to arouse in pupils and understanding of environmental problems.
8. to lay foundation for the development of positive attitude towards environment.

**Social Studies and methods of Teaching**

Out of ten objectives two relate to ESD i.e.

1) Sense problems and take interest in problems related to social, civic and natural environment,

2) Acquire skill for developing international understanding among children

The contents of the course have one of the sixteen units on issues mentioned in the objective which includes:

- Geographical, regional and Pakistan
- Environmental concerns
- Socio economic problems

All the relevant concepts included in CT curriculum are presented in the proceeding table.
Curriculum of Bachelor of Education

Entry Requirement: Bachelor Degree
Duration: 2 Years /four Semesters
The program has not been launched. At present it is a 42 weeks course.

**Total taught courses: 14**

**Core courses: 10**

Out of ten core courses, Perspectives of Edu. In Pakistan has one unit relevant to ESD.

- Unit: Social Issues in Education
  - Drug abuse and its prevention
  - Environmental Education
  - Population Education
  - Education for peace, tolerance and human rights
  - Moral/religious education as response to modern crisis of values and international crimes (hijacking, drug trafficking)

Part II: Teaching of Biological Sciences Unit 8. Is on Ecology

Curriculum of Master of Education

Duration: one year
Entry B.Ed

**Objectives.** No mention of ESD as such

**Courses**

7 core courses and two professional electives to be selected from a list of nineteen courses

The core courses deal with purely educational issues with nothing directly on issues of sustainability. Four of the nineteen professional courses are highly relevant but there is no guarantee that students will opt for such courses even when the intuition offers those. To this date only one course, ‘Environmental Education’ is offered to M.S.Ed students at one university.

The relevant professional courses are:

- Gender and Education
- Environmental Education
- Human Rights Education
- Health and Physical Education

**Suggestion:** Professional courses should be divided into two groups-Group No. 1 may include the courses relevant to ESD and Group No. 2 may have all other courses. Student should be required to take one course from each of the two groups.

**Contents of the ESD Relevant Courses**

1. **Gender and Education**
   1) Gender Education
   2) Religious perspective
   3) Gender in Islam
   4) Gender & Sociology
   5) Gender and Politics
   6) Gender balance
   7) Women’s specialized fields
2. Human Rights Education
1) Universal Declaration of Human Rights
2) CRC
3) Human Rights in Islam
4) Human Rights’ Education
5) Global implications of Human Rights
6) Human Rights’ Education in Pakistan

3. Environmental Education
1) Understanding the Environment
2) Energy and its conservation
3) Environmental problems due to intensification of agriculture
4) Environmental problems due to industrialization
5) Preservation of wild life
6) Pollution
7) Global warming
8) Environmental Education

5. Health and Physical Education
1) Comprehensive School Health promotion
2) Raising health awareness
3) Nutrition
4) Ourselves
5) Diseases
6) Safety first

Does not include any thing on AIDS/HIV, Morality, Social norms etc.
Curriculum of B.Sc. Hons. in Education Studies

Academic entry requirement: Twelve years of schooling
Duration of program: Two years
Professional courses: 36

Courses relevant to ESD
1. Geography, Health and Environment
2. Education, Futurism and Change
3. Topical seminar in Education

Course outlines

Geography, Health and Environment
- Understanding geography, health and environment
- Raising awareness about environmental issues
- Environmental problems
- Preservation of wild life
- Diseases and preventive measures (no mention of diseases)

Education, Futurism and change
Out of six units one is ‘education, culture and society future problems and issues’ with sub-topics
- knowledge explosion
- cultural issues
- economic issues
- women studies
- ignorance
- poverty
- diseases

Topical Seminar
In a long list it includes Drug Education. Environmental Education, Population Education, Women Studies, Civic Education, Poverty and Education.
## Comparative Summary of ESD concepts in curricula of Teacher Education Programs

<table>
<thead>
<tr>
<th>Broad area</th>
<th>ESD concepts</th>
<th>PTC</th>
<th>CT</th>
<th>B.Ed</th>
<th>B.Sc. Hons in Edu.</th>
<th>M.A.Edu./M.Ed</th>
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</thead>
<tbody>
<tr>
<td><strong>Socio Cultural perspective</strong></td>
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<td></td>
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<tr>
<td>Human Rights</td>
<td>BHR liberty, equality and justice</td>
<td>Basic human rights</td>
<td>Literacy</td>
<td>Violation of BHR</td>
<td></td>
<td>Human Rights: *</td>
</tr>
<tr>
<td>Peace and Human Security</td>
<td>Tolerance, Peaceful living</td>
<td>Nuclear arm race, tolerance peaceful living for citizenship</td>
<td></td>
<td>Edu. for peace, tolerance and humanity</td>
<td></td>
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<tr>
<td>Gender Equality</td>
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<td></td>
<td></td>
<td></td>
<td>Gender and society: *</td>
</tr>
<tr>
<td>Cultural Diversity</td>
<td>UN, International understanding</td>
<td>UN. Its organs, Muslim and international world, New International econ. Order, Coop. and internat development</td>
<td></td>
<td>Moral,/religious edu. in crisis of values and international crimes</td>
<td></td>
<td>Cultural issues</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>AIDS/AIDS Edu. AIDS and other common diseases</td>
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<tr>
<td><strong>Environmental perspective</strong></td>
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<tr>
<td>Climate Change</td>
<td></td>
<td>Effect of geog. on human life, Env. Problems and threat to life</td>
<td></td>
<td>Ecology</td>
<td></td>
<td>Global warming: *</td>
</tr>
<tr>
<td>Rural Development</td>
<td>Env. prob. by intensification of agri. Problems of using fertilizers, damming water, soil loss and conservation</td>
<td></td>
<td></td>
<td></td>
<td>Env. Edu.</td>
<td></td>
</tr>
<tr>
<td>Sustainable urbanization</td>
<td>Air, Chemical Water, noise, pollution</td>
<td>Cultural heritage, envi. Prob by industrialization, pollution</td>
<td></td>
<td>Environmental issues</td>
<td></td>
<td>Environ. problems of industrialization</td>
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<tr>
<td>Disaster prevention</td>
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<tr>
<td><strong>Economic perspective</strong></td>
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<tr>
<td>Poverty reduction</td>
<td>Pop. and Economic progress.</td>
<td>Socio-economic problems, m Underdevelopment, poverty</td>
<td></td>
<td>Econ. Issues, Poverty, ignorance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Responsibility</td>
<td></td>
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<td></td>
<td>Econ. Issues</td>
<td></td>
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<tr>
<td>Market Economy</td>
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* In B.Sc Hons and at master level the courses/topics are elective or are topical seminars

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15
Brief Conclusions

1. ESD has not been explicitly pronounced in the education policy of Pakistan and hence in the teacher education programs.
2. In general, the sustainability concepts and issues have been neglected by the teacher education/training programs. However, the pre-service programs include some of the conventional issues having bearing on sustainability but the in-service programs are totally non-responsive to this need.
3. The concepts which are found relevant have been there because of several international sources and interventions on individual issues i.e. drug education, population education, environmental issues etc.
4. Completely neglected areas are gender equality, governance, disaster prevention, corporate responsibility, market economy. HIV/AIDS is included only in PTC. Similarly rural development is neglected altogether except at CT level.
5. The undergraduate teacher training programs have addressed the sustainability issues in a much better way including their diversity and understanding. As a matter of fact it is evident that higher the teacher training program, most neglected are the sustainability issues i.e. issues like HIV/AIDS are included at PTC level to the extent of even overdoing for primary age children to be taught by PTC teachers but are not seen in any other program.
6. At the postgraduate level not only that the listed topics are too few, those are under optional/elective courses not being offered. When offered in future some students may or may not opt for those. Thus, the impact will be minimal.
7. It appears that Curriculum Wing of the MoE is more responsive to the international developments particularly the sustainability concerns and issues as compared with the higher education system.

The Way Ahead

1) The education policy should explicitly state the inclusion of ESD in the curriculum of all levels and programs of education.
2) The analysis leads to suggest that there is a need to approach higher education institutions in general and teacher education in particular for creating awareness about the sustainability concepts and issues and to include those in the relevant curricula.
3) UNCECO has transformed the concept of sustainable development through coordinating the efforts of various partners who can change the fate of this planet. National UNESCO Commissions and UNESCO offices need to undertake actively the establishment or promote/support the establishment of multi-sector forum/s on sustainable education in the countries which are left behind.
4) In Pakistan the UNESCO Commission should urge the universities through the HEC to constitute committees on ESD and launch degree programs in the areas. This will further motivate and encourage teacher education institutions to engage in training teachers in ESD.
5) Presently some of the sustainability concepts in Pakistan are dealt by the Ministry of Environment which has issued a highly ambitious, nearly like a wish list policy in 2005. Other than setting realistic and achievable and strategy support targets the MoE, Ministry of Environment and HEC should coordinate to utilize education for the attainment of many of the goals of sustainable development. This multi-sector approach will help in designing a widely acceptable policy and workable strategy.
6) Teacher Accreditation Council should be established which may ensure the inclusion of essential concepts in the teacher education curriculum at all levels. Presently there is no such body in Pakistan.

7) In principle no curriculum should not be over stuffed with too many concepts. It should be revised by adopting interdisciplinary/inter-subject approach to spread the new concepts in a subtle manner over the whole curriculum. But, to my experience and understanding the curricula of teacher training programs are not too heavy to accommodate ESD concepts in the relevant courses through taught or practical activities.

8) The materials developed by UNESCO and other organizations on sustainable development should be widely circulated and shared.

9) The in-service programs should be equally rather more responsive to focus on ESD through short courses for immediate intervention. The material, modules and toolkits developed by UNESCO and other organizations can be used as a beginning point.

10) Professionals from each member country should be encouraged to develop context relevant ESD materials for further use in teacher training.

11) Teacher training institutions and other relevant organizations should be encouraged to undertake research on ESD.

References