CHALLENGES IN TEACHER EDUCATION AND SUSTAINABLE DEVELOPMENT

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ABSTRACT

If we are to have any hope of a sustainable society, we need all citizens to have the knowledge, attitudes and skills to bring this to fruition. Education is a key strategy, however, its potential to help us achieve a sustainable society will not be realized if we do not have teachers able to teach sustainability education. The success of sustainability education in schools is in no small way dependent on the sorts of preparation for this task that teachers receive through their teacher education. Sustainability teacher education needs to prepare trainee teachers not only through the provision of new content on sustainability but also through experiencing and becoming skilled at using pedagogies that are interdisciplinary, holistic, enquiry-based, experiential and action-oriented.

TEACHER EDUCATION

Teacher education refers to both initial preparation for teachers (i.e., pre-service) and continuing professional development for practitioners (i.e., in-service). Teacher education is important in that it helps to professionalize the teaching field, improve student learning, and contribute to the overall success of schools. Teacher education is mainly provided in TEIs some of which are universities. Some countries have teacher-certification requirements and others have teacher-education program requirements. In some countries, governments set qualifications or standards for the initial preparation of teachers and for continuing education. In other countries, universities set these standards for initial teacher preparation. Because no international standards exist for teacher education, it is practiced in a wide variety of ways around the world. There are no international standards for ESD in teacher education. Institutions of teacher education fulfil vital roles in the global education community; they have the potential to bring changes within educational systems that will shape the knowledge and skills of future generations. Often, education is described as the great hope for creating a more sustainable future; teacher-education institutions serve as key change agents in

transforming education and society, so such a future is possible. Not only do teacher-education institutions educate new teachers, they update the knowledge and skills of in-service teachers, create teacher-education curriculum, provide professional development for practicing teachers, contribute to textbooks, consult with local schools, and often provide expert opinion to regional, state and national levels of education.

SUSTAINABLE DEVELOPMENT

Sustainable development combines the two terms, 'sustainability' and 'development' to indicate a pattern of growth which strengthens both the national capabilities to care for their people in relation to their total relationship with the resources of earth. It focuses upon a relationship between humans and their environment and indicates a warning that human being can not push development which is against nature. After Brundtland Report sustainable development was defined as "Sustainable development is the development which meets the needs of the present without compromising the ability of future generations to meet their own needs". Sustainable development is a process which involves human's intelligence, decision making efficiency, planning and management skills, power of imagination, entrepreneurship, development and production with environmental safety etc. Usually, sustainable development is a human subject. The issue associated with sustainable development can be seen as one of the basics of any society. The three pillars of sustainable development are economic, environment, and social.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

Education for Sustainable Development is an idea of education which aims to empower the individuals to assume liability to build a sustainable future. The thought of sustainable development touches aspects of the institutional and social framework. There has been increasing identification of the significant role of education in promoting sustainable development since 1992 Earth Summit in Rio de Janeiro. However, any individuals or organizations do not have all the knowledge to develop learning systems which are essential to maintain sustainable development in the specific surroundings. Education can be an effective mean of social change for two important reasons (Sterling, 2016). Firstly, education has the potential to enhance the effectiveness of other means of implementation by developing informed engagement, empowerment of stakeholders and cultivation of their

creativity and enthusiasm. Secondly, education can leave a lasting change as stakeholders have the ownership of the change, in contrast to other means of implementations such as policy, monitoring, incentives and legislation which are effective only when they are in force. Santone et al. (2014) have introduced a new paradigm called 'Education for sustainability' (EfS) to educate new prospective teachers through (teaching, learning and developing) collective problem solving skills to address critical environmental, social, economic issues and transfer these EfS proficiency to K-12 students (through content knowledge, skills, behaviors and dispositions).

IMPORTANCE OF TEACHER EDUCATION

For education to be an effective vehicle of social change, teacher education becomes invariably indispensable. Holistic approach in education for sustainable development should take into account how new teachers are being prepared for real-life tasks in school. Regardless of the paradigm shift envisioned in the sustainable development goals, means of its implementation with missing personal and cultural dimensions in teacher education risk ongoing efforts to be external actions of the biophysics world, when in fact what is essentially needed for a lasting change is the shift of consciousness in our inner psychosocial worlds (Rockström et al., 2015). Perhaps with such shift of consciousness, students would not be asked to draw a poster on sustainable consumption for the sake of a competition without appreciating the underlying concept of sustainability. The revision of curriculum delivery methods in his study reflected the need for education for sustainability itself to be transformative, rather than confirmative (Sterling, 2016). Teaching and learning strategies used for delivery of curriculum for sustainable development requires transformative approach that is able to raise awareness, provide the knowledge and skills for lasting behavioural change in lifestyle and active participation in social issues with the mind set of societal needs and economic interests placed within the capacity of Earth's life-support system (Griggs, 2013). The most significant reason to focus on the role of teacher education in achieving sustainability is, therefore, that the introduction of sustainability education into schools depends largely on the nature and extent of education received by trainee teachers. Many current teachers, while interested in the educational benefits for their students of sustainability education, feel they have neither the skills nor the training to be able to deliver sustainability education to their students. Teacher training in sustainability education content

and approaches would not only prepare teachers for the complexities of teaching sustainability education but would also broaden the base of staff in schools who are committed to the educational benefits that sustainability education offer.

CHALLENGES IN TEACHER EDUCATION

Over the years, teacher education in India has witnessed tremendous challenges resulting from various socio-economic, political and technological advancements. A great extent of planning and resources have been spent for improving the quality of teacher education. New technologies have been introduced in the field of education, in spite of the fact, teacher education could not be raised up to the expected level. It is lacking behind somewhere in recognizing its purpose. Educational programmes for teachers or teacher education has not made complete use of their development skills. The teachers with the knowledge of latest technological advancement are not being produced, who are expected to make use of these forthcoming techniques (Jamwal, 2012).

Working of Teacher Education Institutions - The National Council for Teacher Education (NCTE) is a governing body, which controls the functioning of teacher education institutions and prevent them from turning into commercial institutions. In India, the education system is expanding and there have been establishment of varied numerous institutions in urban as well as in rural areas. It sometimes gets difficult to monitor the functioning of all the institutions. Some unprincipled institutions have only the objective of making money, the quality of education provided is in a deprived state and they produce specialized but incompetent teachers because of non- attending system for teacher trainees, which is a matter of great concern. The reason being, incompetency of teachers can impose detrimental effects upon the system of education.

Lack of Life Skills oriented Education - Life skills are referred to the skills, which are indispensable for personal growth and development. These skills enable individuals to deal with the life's difficulties and adversities in an operative manner. These skills include, (a) thinking skills, these are, self-awareness, problem solving, creative thinking, decision making and critical thinking, (b) social skills, these are, interpersonal relations, effective communication and empathy (c) emotional skills, include stress management. Main issue is, teacher education is memory based i.e. there is not any active involvement of students, hence,

the deficiencies are in terms of lacking in life skills oriented education among the students, which are crucial for all round development of students.

Poor Funding: Teacher education is bedevilled by poor funding from all levels of government. This has resulted in the inadequate provision of teaching and learning materials, obsolete textbooks, dilapidated school buildings, overcrowded classes and ill-equipped classrooms lacking in sophisticated Information and Communication Technology (ICT) systems. Teaching and learning techniques of previous generations (e.g., lecture and memorization) are not sufficient to deal with the complexity and uncertainty of a future beset by climate change or to bring about the profound societal changes that are inherent in the search for a more sustainable future. Pedagogy like other areas of education must change to keep pace with the global acceleration of change. "Education for Sustainable Development requires far-reaching changes in the way education is often practised today" (UNESCO, 2012).

Problem of selection: The improvements are required to be made in the selection methods that would not only lead to progress in the quality of training with better selection methods but would also save the social and personal depletion. In the selection of teachers, it is vital to have better selection methods. Some suggestions include, test of general knowledge should be applied, candidates should be interviewed, organization of tests in school subjects, test of intelligence should be administered, language, aptitude, interest and attitude inventory should be administered and in making provision of guidance services.

Problems in conduction of Teaching Practice: Practice Teaching neither adequate nor properly conducted stimulate all kinds of elaborate arrangements regarding practice in teaching. Teaching is an art and those who are in this profession are required to develop the skills and abilities among them to perform well in their job duties. Student teachers in some cases, do not take the job of teaching seriously, lacking in sense of duty unconcerned to children, negligent, aimless, and lacking innovative measure in teaching which prove to be the major impediments in the development of pedagogical skills.

Non implementation of good teaching methods: In India, teacher educators are opposed to experimentation and innovation in the utilization of teaching methods. Their acquaintance with modern classroom communication strategies is negligible. There have been teachers, who are lacking the skills and capabilities and are not able to render an effectual job

performance. The lack of knowledge regarding technologies, unawareness regarding the use of innovative strategies and methods and not possessing the required educational qualifications are some of the areas that prove to be impediments within the course of their job performance and impose faulty teaching methods. When the students are not able to understand the concepts properly, then they feel the teacher is not skilled and practiced in teaching.

Isolation of teacher's education department: The teacher education has become isolated from schools and current development in school education has been observed by education commission. The schools consider the teacher education department as an institution, with which they are not familiar with and it is not a nursery for the professional development of school teachers. These departments are primarily not concerned for the comprehensive pedagogy involved in the procedure, but only observe the decorum of completion of the prescribed number of lessons and the course curriculum.

Lack of adequate empirical research: Research in education has been noticeably neglected. The research conducted is of low quality. Before undertaking any research, the teacher programmes are not taken into consideration in an appropriate manner. It is vital to conduct adequate research regarding the implementation of teacher education programs. What are the flaws and inconsistencies that need to be identified, what remedies are to be put into practice to make improvements and the measures needed to make the investigation procedures effectual. Research enables to bring about innovative and modern strategies into the system of teacher education.

Other challenges in Teacher Education: Other challenges that are experienced in teacher education have been mainly related to the deprived standards with respect to resources for colleges of education. Unfavourable financial conditions of the colleges of education prove to be impediments within the course of providing infrastructure and other facilities. Negative attitude of managements towards development of both human as well as material resources, lack of occupational perceptions, scarcity of feedback mechanisms, objectives of teacher education are not adequately understood, secondary level teacher education is not the concern of higher education and lack of enthusiasm towards the profession are other limitations. Uniform education policy of the government treating reputed institutions alike, traditional curriculum and teaching methods within the teacher education programme and disorganised

and unsuitable organization of teacher education and unexpected and insufficient co-curricular activities are other problems that need to be taken into consideration.

RCOMMENDATIONS

- Make use of community resources (e.g., NGOs, institutions, clubs, religious organizations, government agencies, businesses, etc.) in the teacher education program, both within and outside the classroom, to teach about local sustainability issues, efforts to address these issues, sustainable practices, and sustainable businesses.

- Establish new models of professional development in ESD that draw together essential skills, cross-curricular approaches, and action-based learning models so that student teachers and in-service teachers can work on projects that are relevant and important to their communities' future well-being.

- Establish regional teacher-education groups to develop sustainability-related modules and relevant literature, which should be made available on a regional scale.

- Develop strong regional consortium teams that allow educators from a range of sustainability-sector groups outside your organization to come together to *support teacher-education initiatives.*

- Establish partnerships among universities to ensure ESD becomes the norm rather than an experiment or an isolated case and hence easily eradicated. Require interdisciplinary coursework on sustainability for student teachers and make materials available for student teachers on local and global sustainability issues.

CONCLUSION

Sustainability education is different from environmental education in that it seeks to develop a 'frame of mind' that requires educators and learners to be open to and engage with the complexity of environmental issues. We need a new generation of professionals that think and take decisions within this new perspective and it is necessary to modernise higher education structures towards sustainability (Bilodeau et al., 2014; Leal Filho et al., 2015). Ramos et al. (2015) has remarked that despite the efforts of many universities in integrating SD into the curricula, it has been recognized that changes have been little and that they have been occurring at a slow pace (Watson et al., 2013). Within this context, traditional sustainability approaches and teaching methodologies tend to be questioned. Moreover,

capacity building and empowerment are crucial and support participatory approaches for transformation (Disterheft et al., 2015. It is teachers who hold the key to change, as they are the implementers of sustainability education in schools. Over the past 15 years, much has been written about the need to reorient teacher education towards sustainability. In all such writings, teacher education is identified as a key strategy that is yet to be effectively utilised to embed sustainability education in schools. In conclusion, a sustainable society will only be achieved through a well-educated citizenry who have the requisite knowledge, attitudes and skills. For schools to play a role, we need teachers who are knowledgeable about both sustainability education content and pedagogies.

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