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# **Enhancing Sustainable Development through Critical Thinking in Education: A Multifaceted Collaborative Strategy**

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#### ABSTRACT

Development is required for every nation in all the aspects. For this, it is necessary to improve the knowledge base economies by exploring the basic requisites. Sustainable development is a holistic approach to meet the needs of present with no compromise the needs of tomorrow. For sustainable development, it is necessary to face its challenges rationally. Education works as one of the most powerful instruments for bringing about the changes required to achieve sustainable development. Thus, education would need to progress in a new direction by developing the thinking skills among the students. They should be able to connect with society through their learning experiences. In this view, instruction within sustainable development would seek out to nurture critical thinking skill in addition to traits. It facilitates the students to envisage certain vital events in the future prospect as well as to take right decision. This study present review on the role of critical thinking for sustainable development as well as the methods of teaching likely to enhance critical thinking skills are outlined. Further, it proposes ways to develop critical thinking skills of students as a collaborative strategy for nation development.

Keywords: Sustainable Development, Critical Thinking

## INTRODUCTION

We locate at a serious moment where humanity must decide its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise (The Earth Charter Initiative, 2000). It seems to be an urgent need for making decisions that guarantee a peaceful and sustainable future. With reference to the whole globe, there are numerous intricate crises in the contemporary world (Orr, 2004). These are so severe that Orr (2004) discussed about "planetary emergency". Hoffman (2015) stated that several researchers agree with need of change in people's behaviour for sustainable development and a sustainable future which can be possible through education for sustainable development. It entails the knowledge about skills, morals and attitudes that contribute for sustainable development.

For present and future generations, Education for Sustainable Development (ESD) enriches the ability the learners to take informed decision and liable actions for ecological integrity, economic feasibility and immediate society. It demands the strengthening of individuals by reflecting their actions, intriguing their present and future social, intellectual, economic and ecological impact from a local to a global perspective. Individuals ought to be emancipating to perform in complex situations in a sustainable way that may require them to strike out in novel directions and to partake in sociopolitical processes, moving their societies towards worldwide peace which results in sustainable development. United Nations (UN) adopted 2030 Agenda for Sustainable Development along with 17 Sustainable Development Goals (SDGs) to secure a peaceful, flourishing and equitable life for every individual. Disparity, unsustainable consumption patterns, weak institutional capacity and environmental degradation are considered as major barriers for sustainable development (SD). It emphasizes the common consensus that citizens need to acquire a set of major competencies along with knowledge and understanding for active participation in taking over liability for the world. These transversal competencies can be taught through applicability of individual's actions in different contexts. Therefore, Education plays a significant role by imparting the knowledge and skills, especially critical thinking skills that are necessary to build understanding and to shape sustainable future. Thus, the process of learning must enjoy conditions of freedom and values which allow critical thinking to flourish.

### CRITICAL THINKING AND SUSTAINABLE DEVELOPMENT

In the present digital era, critical thinking is crucial for future success. Fostering critical thinking skills is indispensable in the area of education to promote innovation. The ancestry of critical thinking detected two thousand five hundred years ago in Socratic Method. Later, the concept of critical thinking recognized in Bloom's taxonomy. Each hierarchical level of this taxonomy subsume by the higher levels of cognition (Forehand, 2005).

Critical thinking is focused, logical and goal-directed thinking skill which includes the ability to solve problems, drawing inferences and making decisions (Halpern, 1999). Thus, critical thinking involves the use of cognitive skills to enhance the likelihood of a desirable conclusion. Mertes (1991) defined critical thinking as conscious process use to infer information and experiences through reflective attitudes and actions.

The pace with which technology is progressing these days, societies may possibly meet different sort of uncertain challenges which require innovative and self-organized actions. Hence, awareness about the complexity of the world is obligatory for people to proceed for positive change (UNESCO, 2015). It contributes to social, environmental and economic development by enabling people to question the ideologies and narratives. Such questioning can lead to a greater understanding of human well-being. Sustainability citizens requisite key competencies to engage constructively and reliably with today's world (UNESCO, 2017). These specific competencies encompass their abilities for successful action (Rychen, 2003). Critical thinking is imperative in the present information based society where information is in bulk from all the directions (Kaur, 2017). Every person has to know how to convert information into knowledge. Performing the tasks in real world sustainability challenges incorporates the skills and attitudes for problem solving (Barth et al. 2007; Wiek et al. 2011; Barth, 2014). Thus, developing the competency of critical thinking is a pre-requisite to survive and thrive in technology-driven future.

#### METHODS OF TEACHING CRITICAL THINKING

Critical thinking comprises of logical thinking as well as the disposition to use thinking skills by making the use of inferences with a spirit of inquiry. Pithers (2000) stated that traditional teaching methods such as lecture method inhibit the critical thinking skills among students. These skills cannot be taught by a certain program. Even the students can excel through their own thinking whereas the teachers act as facilitators by emphasizing on content-specific skills. Review of literature revealed that teaching from multiple perspectives about a concept plays a vital role. Further, metacognition has observed as a means to build up critical thinking skills. It facilitates the students and teachers to imitate strengths and weaknesses of their thinking processes (Pithers, 2000). Critical thinking differs from other mental processes by allowing students to assess information so as to reach the most suitable solution of a problem (Shah, 2010; Thompson, 2011). Its teaching methods include the assignment to provoke the learners for utilization of critical thinking skills to execute evidence-based practices. Cho and Jonassen (2002) intended a study to find out the benefit of effective writing structures for students to retrieve ideas from their memories. Geertsen (2003) affirmed that admiration for others' opinion, withholding judgment and readiness to explore all possibilities are the characteristics essential to cultivate high level thinking. Simpson, Mulvill and Courtney (2001) applied a criteria-based critical thinking tool to advance teaching efficiency. Gruber and Boreen (2003) accessed the prior experiences of students to fetch importance to their dialogue. The advantage of allowing learners for expression of their ideas and experiences increases their meaningful discussions. If the teachers spend time to foster brainstorming session, the students might encompass to implement their ideas meaningful for enhancing sustainable development.

#### STRATEGIES FOR SUSTAINABLE DEVELOPMENT

Sustainable development has to understand as a central component of quality education intrinsic in the conception of lifelong learning. Hence, all educational institutions should consider their accountability to deal intensively with issues of sustainable development and sustainability competencies from kindergarten to tertiary level in non-formal and informal education. They require comprehensive and transformative education to address pedagogy and learning outcomes. Sustainable development incorporates interactive teaching and learning settings into the curriculum to transform sustainability contents from teaching to learning. It demands action-oriented pedagogy to facilitate self-directed collaborative learning and problem-orientation by linking the formal and informal learning. Such instructive approaches can make feasible the expansion of the key competencies desirable for upholding sustainable development.

For boosting the programmes for sustainable development, critical thinking strategies include the competency for deduction, interpretation and evaluation to draw conclusion. It is obligatory for educators to become familiar with different teaching approaches to equip the students with ability of judgement. Teacher training programmes must emphasize on critical thinking strategies through group discussion with involvement of students to develop deeper understanding and estimation in a more significant manner. Langer (1997) emphasized on the innovative power of mindful learning. He stated that students should learn through numerous perspectives to comprehend similarities of content to present mindfully. Teachers play a crucial role here. For teacher training, Infusion approach is another favoured approach which incorporates critical thinking into the existing subjects in many ways. Continued practice plays miraculous role for the success of sustainable development. We know that practice makes perfect in every task. Consistency is significantly important for developing critical thinking skills among students. Teacher training persists on rational thinking at different levels. This can be done by motivating the optimistic attitude towards critical thinking. All the elements of critical thinking discussed herein assist the fragile prospective for a wide community of critical thinkers.

## **CONCLUSION**

Education can provide an innovative vision for sustainable development at global level. This multifaceted collaborative strategy based on critical thinking allows each person to attain the all the skills and attitudes compulsory to erect a sustainable future. Embarking the path for sustainability requires an insightful revolution of how to think and act. Individuals need to become change-makers for sustainability. It entails to motivate the active participation of students for their overall growth. Home environment and emotional intelligence were observed as strong predictors of critical thinking

of adolescents (Kaur, 2019). Hence, family and educators occupy an important role in a society because they can use curriculum to challenge students for critically analyzing their circumstances, effectively engendering reflection which can lead to collective action. It is crucial to promote quality education along with training at all levels of education. Empowering the students to act thoughtfully in the complex situations can lead them in new direction. Thus, critical thinking skills should be taken into consideration in any educational institutions for embarking current issues of the world.

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