Contextualizing and Infusing Gross National Happiness (GNH) Values Through Teaching Primary Schools Mathematics: Approaches and Relevancy

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Abstract-This paper presents approaches and relevancies of contextualizing and infusing GNH values through teaching primary schools Mathematics at Samtse, Bhutan. Teachers and principals of four primary schools were interviewed, classroom teachings were observed, and the relevant documents were studied. Findings confirmed contextualizing and infusion of core GNH values and higher degree GNH values are practiced depending on their suitability and feasibility; teachers` most persistent difficulties are how to contextualize GNH values in Mathematics lessons, and infuse the values through teachings; through teaching GNH values students` temptation towards unsocial activities and unreachable materials are reduced, on other hand their positive behaviours, openness, and being responsible are enhanced. This study is important for all because it provides significant insights: teaching GNH values promotes principles of GNH and holistic education and learners gain a deep understanding of common values and happiness. It also inculcates primarily required moral values and maintains peace and harmony in society. Although no demerits of teaching GNH values were reported, the resilience of practice of contextualizing and infusing GNH values through teaching Mathematics has been found weak.

Key words: GNH; contextualization; infusion; identify; approaches; relevancy

I. INTRODUCTION

In today`s world if we can balance materialistic developments and spiritual development then the coexistence of these developments in our life would provide us with more happiness. Education is one of the most powerful tools that helps people understand this "balance". Spirituality has positive effects on health, attitudes and behaviours in adolescent (Rew L and Wong YJ, 2006; Kub J and Solari-Twadell PA, 2013). Drukpa (2016) highlighted the review of Kesebir & Diener (2008) on Aristotle's quotation on happiness: happiness is the meaning and purpose of life, the whole aim and end of human existence. In a nation, it is unachievable to maintain happiness for every citizen, but it is possible to manage happiness for the majority of the population: Gross National Happiness (GNH).

The Gross National Product (GNP) is not for measuring the actual wellbeing (Gross National Happiness,2005) of people. The term `GNH` was first coined by the fourth King of Bhutan Jigme Singye Wangchuk in 1972 (Ura et al., 2012) for the happiness and well-being of Bhutanese people. Since then, in Bhutan, the concept of GNH has been followed as the main philosophy of socio-economic development. As this philosophy is flourishing in Bhutan, happiness is being realized promoted amongst Bhutanese people. As Ura et al.(2012a) maintained, `pursuit of happiness is collective effort`, happiness index of **GNH** concept is used to measure the collective happiness and well-being of people in Bhutan. Ura (2012) clearly states that GNH values are infused into different subjects including Mathematics. Thus, this study was conducted to explore approaches and relevancies of the practice of contextualizing and infusing GNH values in teaching Mathematics at PSs of Bhutan. This study was conducted in four primary schools located in Samtse district of Bhutan.

II. MATERIALS AND METHODS

We used interviews, lesson observations and the relevant documents to collect data on Mathematics contents, relevant GNH values, and appropriate approaches to contextualize and infuse the values in teachings Mathematics at the selected PSs. The randomly selected ten PS Mathematics teachers and three PS principals were interviewed, and eight PS Mathematics teachers teaching Mathematics lessons were observed. Since the PS students were not competent enough to face an interview, they were not interviewed. Consistency in the methods of data collection and the gender equity of the participants were maintained well.

Data collected from interviews were analyzed using the process of emerging themes. Data collected from lesson observations and the documents: textbooks, lesson plans and the GNH manual were analyzed using the content analysis approach.

Findings revealed from these sources were triangulated in order to get the most authenticated result.

III. Results and Discussion

Based on the theory of constructivism, this study was carried out successfully with an objective to explore approaches and relevancy in the practice of contextualizing and infusing GNH values through teaching Mathematics in the four selected PSs and also to see how resilient this practice was. Methods used were semi-structured interviews, lesson observations and documents analysis. Some distinguished findings as indicated from this study are:70% PS Mathematics curriculum are relevant for this practice; the types of GNH values reflected in the documents are 90% same as that revealed from interviews; PSs practice two categories of GNH values: Core GNH values and Higher degree GNH values; and there is a huge impact of infusion of GNH values in teaching at PSs if the practice is carried out properly. The impacts revealed are students` enhanced positive behaviours and openness, students being responsible and more interactive.

IV. Conclusion

This study was confined to only 4 PSs. The interviews were limited to the principals (3) and teachers (10), and 6 teachers` lessons observation since PS students were not competent enough to attend the interviews to perform the cross-sectional study. Since schools do not have standard tools to measure and assess the GNH values laden lessons, assessing students on teachings of GNH values is limited to observing and interviewing. Teachers need to be cautious that normally GNH values laden lessons take more time to complete, and also there is a danger of getting the lesson diluted and losing its original concept if more time is spent on GNH values. However, no demerits of infusion of GNH values in Mathematics lessons were reported.

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