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TEACHER EDUCATION & DEVELOPMENT | RESEARCH ARTICLE

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*Corresponding author: Deki C. Gyamtso, Department of Research and External Relations, Royal University of Bhutan, Thimphu, Bhutan E-mail: dcgyamtso.ovc@rub.edu.bt

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TEACHER EDUCATION & DEVELOPMENT | RESEARCH ARTICLE Teacher learning in changing professional contexts: Bhutanese teacher educators and the Educating for GNH initiative

Deki C. Gyamtso^{1*}, Kezang Sherab² and T. W. Maxwell³

Abstract: This study was conducted in the two teacher education colleges (CoEs) of the Royal University of Bhutan (RUB). It was intended to fill the knowledge gap of teacher educators' reactions to the Educating for Gross National Happiness (EdGNH) policy introduced in Bhutan in 2010. EdGNH is recognized as one of the most critical and comprehensive attempts to operationalize GNH in schools in Bhutan thereby making it absolutely essential to ensure that the country's education system embodies and reflects GNH values and principles. Using education as the instrument of change will ensure that GNH will survive and flourish. The research questions focus on the implementation and challenges associated with this innovation. A questionnaire was used (n = 66) followed by teaching observations with a selected sample of lecturers (n = 5) in the two CoEs. Results revealed that lecturers need to build EdGNH into their modules, upgrade their knowledge and skills about GNH values and practices, and develop the idea of tacit learning associated with EdGNH.



Deki C. Gyamtso, & Kezang Sherab, & T. W. Maxwell

ABOUT THE AUTHORS

Deki C. Gyamtso is an associate professor currently working in the Department of Research and External Relations, RUB. She previously taught courses in curriculum, pedagogy, assessment and research methods in Samtse College of Education. She has published on teaching and learning in higher education and now offers professional development programmes on research, curriculum and pedagogy to college staff.

Kezang Sherab is an assistant professor currently working at the Paro College of Education, Royal University of Bhutan. His research interests are in student engagement, efficacy beliefs, GNH education, and youth issues.

T. W. Maxwell taught courses in social justice, curriculum and research methods for more than 20 years. He has published well over 100 pieces nearly 50 of which relate to Bhutan. Tom has worked with Bhutanese education colleagues since 1997. He retired in 2010.

PUBLIC INTEREST STATEMENT

The idea of gross national happiness (GNH), as opposed to gross national product, was first articulated by the 4th Bhutanese King in the early 1970s. The concept GNH is steeped in Buddhist teachings and has received worldwide interest. The Educating for Gross National Happiness policy was introduced into Bhutanese schools and colleges in 2010 to ensure that the Bhutanese education system promotes values that are central to the Bhutanese way of life. Implementation of this policy had previously been found as problematic in schools. This study focuses on the implementation and challenges associated with this innovation in the two colleges of education of the Royal University of Bhutan. Results revealed that lecturers need to (1) build Educating for Gross National Happiness into teacher education modules; (2) upgrade their knowledge and skills about GNH values and practices, and (3) develop the idea of tacit learning associated with Educating for Gross National Happiness. We argued that Educating for Gross National Happiness need to be made explicit especially to prospective teachers.

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Subjects: Teaching & Learning; Education & Development; Teachers & Teacher Education; Continuing Professional Development; Curriculum

Keywords: Educating for Gross National Happiness; self-efficacy beliefs; GNH values and principles; teaching and learning practices

1. Introduction

Gross National Happiness (GNH), Bhutan's unique developmental philosophy and foundation of the nation's governmental policies, places Educating for GNH as critical for the sustained development of Bhutan (Gross National Happiness Commission, 2010). Studies on GNH have advocated that for GNH to survive and flourish, it is absolutely essential that Bhutan's educational system be fully transformed to embody and reflect GNH values and principles (Hayward, Pannozzo, & Colman, 2009). This paper appropriately, examines the new essence of learning in Bhutan exemplified in the Educating for Gross National Happiness (EdGNH) initiative (Minstry of Education [MoE], 2010) and the efforts undertaken by teachers and teacher educators to incorporate this into their teaching. EdGNH is *radical* because this policy intends to shift a previously academically oriented curriculum to one which also incorporates happiness as the key goal for education, indeed for life. Such an initiative has its challenges in implementation. The paper addresses the theme of teacher learning associated with the EdGNH initiative in school contexts via studies in the literature but the research itself focuses on teacher education. Accordingly, it examines whether the teaching practices of lecturers in the two Colleges of Education (CoEs) are consistent with Educating for Gross National Happiness (GNH) pedagogy.

We know that teacher learning (knowledge and practice) has a central role in effective and innovative action in the profession (e.g. Borko, 2004). Teacher learning has the power to reshape teaching and so the way that students learn. The EdGNH initiative in Bhutan intends for educational change to take place (MoE, 2010) consistent with the concept of GNH which is the guiding philosophy of the Royal Government of Bhutan (RGoB). Education is viewed by the RGoB as one of the fundamental ways to achieve GNH (MoE, 2010). In a country that is culturally conscious, EdGNH is considered a culturally appropriate approach utilising the richness of Bhutanese culture to improve the outcomes of education in Bhutan. However, there is much to be overcome in terms of the culture and traditions of primary and secondary education in Bhutan, not to mention teacher education, if the initiative is to be successful.

2. Brief history of the Bhutanese education system

To a considerable extent, education in Bhutan has been shaped by its history. From the eighth-century AD to the early twentieth century, monastic education was the predominant form of education in Bhutan (see Dukpa, 2016). Towards the end of the 1950s, the beginning of the modern era opened a new chapter in the history of learning and scholarship in Bhutan (Gyamtso, 2013). The introduction of a secular education system led the way towards mass education mostly achieved by the 2010s (Namgyel & Rinchen, 2016). During the early period of modernisation of education in Bhutan, the school curriculum was largely imported from India (Gyamtso & Dukpa, 1999) and, since Bhutan lacked teachers, many were recruited from India. They brought the characteristics of "vessel filling"—teacher centeredness—which was dominant in the Anglo-Indian schools in India at the time (Gyamtso & Maxwell, 2012).

More recently, "modern" education has seen a marked improvement and development in the curriculum. 1985 was a watershed in the history of modern Bhutanese education (Gyamtso, 2013). The Bhutanisation of the curriculum began, incorporating many traditional Bhutanese values, traditions and subject matter, so that teaching and learning was in accordance with national needs and aspirations (Education Division, 1989, p. 8). Progressively, many Bhutanese were trained as teachers so the reliance on Indian teachers diminished. Moreover, over the last 20 years or so, most of the education officials and lecturing staff at the two CoEs were exposed to Western models of education and many tried to assimilate the new Western ideas into the Bhutanese context, such as activitybased learning, shifting the focus from teacher-centeredness to child-centeredness as well as moving away from the "remoteness of (Indian) content to familiarity of content" (Dolkar, 1995, p. 7). Some elements of learner-centeredness gained a foothold in the education policies but to a lesser extent in teacher practices (Gyamtso, 2013). Formal examinations gained a strong hold on what was and is learned (Namgyel & Rinchen, 2016). All in all, the Bhutanese education system has witnessed a rapid growth within just half a century (Maxwell, 2008; Namgyel & Rinchen, 2016).

3. Introduction of the Educating for GNH initiative

Several curricular reviews have been conducted aimed at improving the quality of education in Bhutan (see Dorji, 2005). One of the strategies to improve the quality of education was "wholesome education" which was rigorously implemented in the mid-1980s to inculcate traditional values in a more holistic way (Ngedup, 2006, cited in Sherab, 2013, p. 3). In 1999, the Bhutanese education system also witnessed the introduction of values education (Sherab, 2013) in response to the social issues such as "weakening traditional family ties and the community-based social support system" and youth-related problems such as drugs, petty crimes and teenage pregnancy (Department of Education Bhutan, n.d. p. 8, cited in Sherab, 2013, p. 4). Besides formal teaching of values in the 2000s, schools were required to inculcate values through extra-curricular programmes (Sherab, 2013). Both these developments provided the background to the introduction of EdGNH from 2010 as there remained concern about the values of school graduates (Sherab, 2013). The MoE has made it clear that all schools and the COEs implement GNH values and principles in their everyday work (Sherab, 2013).

The idea of GNH, as opposed to gross national product, was first articulated by the fourth King in the early 1970s. The concept has been receiving increasing attention from around the world. The phrase "gross national happiness" is steeped in Buddhist teachings that indicate that one gains merit through prayer (*Drowa rig drug semchen thamchen ngi dendu "om mani padmi hum"*¹) and right action. As a fundamental principle of Bhutan's development philosophy any government activity (social, economic, political or religious) is designed to maximise happiness amongst its people through building resilience, ensuring equity and sustainability (Sherab, 2013). The GNH philosophy is therefore committed to generating sustainable happiness amongst its citizen. The key idea behind sustainable development according to O'Brien (2005) is making use of the available resources modestly for the benefit and well-being of future generations. The EdGNH values and principles were introduced in the Bhutanese education system to promote the idea of sustainability. Ever since then schools have been asked to explicitly infuse GNH values and principles while teaching their academic subjects as well as through extra-curriculum programmes.

The Ministry of Education created the parallel concept of "GNH schools". It aims to transform all schools through a focus on innovation and improvement in:

- (1) school leadership and management practices;
- (2) green schools for green Bhutan (physical and psychosocial ambience);
- (3) curriculum: strengthening teaching and classroom management practices;
- (4) continuous and holistic students' assessments (summative and formative);
- (5) co-curricular activities for wholesome development;
- (6) the school-community relationship; and
- (7) the qualities of a GNH school graduate (MoE, 2010, pp. 37–44).

Each of these areas has several indicators that a school needs to address to become a "GNH school" (see MoE, 2010).

Six years has elapsed since substantial work was done on promoting the values and principles of GNH in the Bhutanese Education system (MoE, 2014). Research has shown that there are some problems with the implementation in schools (Sherab, 2013; Utha et al., 2016). According to Utha et al. (2016), little is known about EdGNH implementation in the two CoEs and Royal University of Bhutan (RUB) in general. Although conferences and workshops on GNH Values Education/Universal Human Values (RUB, 2015), were initiated to introduce GNH values and principles to the Colleges of RUB, such as the introduction of mindfulness practices in the CoEs (RUB, 2012) and the GNH PAR project (Young, 2012), so far no studies have been undertaken to study their impact.

It is imperative to examine the challenges of Educating for GNH as an initiative in changing pedagogical practices of both the teachers and teacher educators in Bhutan. Yet, there is a long history of teacher resistance to change in Bhutan (Royal Education Council [REC], 2009; Sherab, 2001, 2013; Sherab et al., 2009) and this is the issue to which we now turn followed by research on school teacher implementation of EdGNH.

4. Literature

Similar to the present study, Mellegard and Pettersen (2016) investigated teachers' perceptions of systemic curriculum change in Norway. It required a "distinct shift, moving from a content-driven to a learning outcomes-driven curriculum" (p. 181). They found, as others before them have found, that "teachers do not see their expanded freedom as real freedom ... (and) what was communicated as extended freedom by policy makers (was) "perceived as extended demands". This implies that the EdGNH initiative take-up would not be straightforward. Unlike the study by Marco-Bujosa, McNeill, González-Howard, and Loper (2017) and another by Coenders and Terlouw (2016) of the sense made of system-provided curriculum materials, in the case of EdGNH, there was no programme or set of school materials as such but the innovation was seen to be congruent with practices and values held dear to Bhutanese ways of life. This makes the EdGNH initiative unusual and in many ways more demanding as the EdGNH innovation required changes to teacher practices/behaviour initiated by central authorities. Recent studies of this kind are few.

Bhutanese teachers are not different from those in other countries. Changing behaviour is not easy. Thirty years ago, Fullan (1985, p. 396) summarised the educational change literature into seven characteristics that support teacher learning:

- (1) The initial stages of any significant change always involve anxiety and uncertainty;
- (2) Change takes place over time;
- (3) Ongoing technical and psychological support is crucial if the anxiety is to be coped with;
- (4) Change involves learning new skills through practice and feedback—it is incremental and developmental;
- (5) The most fundamental breakthrough occurs when people can cognitively understand the underlying conception and rationale with respect to "why this new way works better";
- (6) Organisational conditions within the school (peer norms, administrative leadership) and in relation to the school (e.g. external administrative support and technical help) make it more or less likely that significant change will take place; and
- (7) Successful change involves pressure, but it is pressure through interaction with peers and other technical and administrative leaders.

Twenty years later, Fullan (2007) emphasised learning new behaviour in context rather than effort put into external "professional development" (Fullan, 2007, p. 35) and that leadership on the ground was essential (Printy, 2008). Thus, change seldom occurs from one-shot, out-of-school in-service efforts (Armour & Makopoulou, 2012; Boyle, Lamprianou, & Boyle, 2005; Darling-Hammond & Richardson, 2009; Ingvarson, 1987; Maxwell, 1992) but, to soften Fullan's assertion, external professional development *over time* can be successful (see for example, Maxwell, Bennett, Freebody, Grundy, & Sanche, 1988). Armour and Makopoulou (2012) noted too that interactive learning and collective participation assisted teacher learning. If this is the case then Bhutanese leaders of change will be tested because this kind of leadership is not common in Bhutan. We also know from Guskey's (1986, p. 8) early work that "changes in attitudes, beliefs and understanding generally follow rather than precede changes in behaviour" meaning that behaviour change should be the initial focus of

teacher learning. Later, Guskey added that for real change to take place feedback as well as pressure and support are also required (Guskey, 2002; see also Fullan, 1985). So, more demands are placed on leaders. Hargreaves (2005) pointed out that career stage is also important with early career teachers being more open to change thus implying an important role for teacher educators. Indeed Baker (2013), amongst others, found that teacher educators in the United Arab Emirates in this case could strongly influence pre-service teachers' conceptions of their work. These ideas remain pertinent to the present paper, perhaps especially so given the cultural heritage of Bhutan with its adherence to a patriarchal leadership (Chukie, 2015) and its relatively young teacher cadre.

Teacher change is a continuing arena for research. For example, teacher knowledge, teacher beliefs, teacher efficacy and school culture were the focus of a study by Ertmer and Ottenbreit-Leftwich (2010). Our interest is in teacher efficacy because confidence allows teachers to take risks. Bandura (1997, p. 3) indicated that perceived self-efficacy includes "beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments". Efficacy has received increasing attention in educational change research with many studies identified (Sherab, 2013). Indeed, Sherab's PhD study focussed upon Bhutanese teacher efficacy and their responsiveness to the EdGNH initiative. For example, one case study from Sherab's PhD work showed that the efficaciousness of this school was mainly attributable to promotion of GNH values and principles through various innovative extra-curricular programmes but not in-class activities (Sherab, Maxwell, & Cooksey, 2014).

Clearly, the key to the EdGNH initiative lies with teachers in the schools. There have been two Bhutanese studies in the latter area: Kezang Sherab's (2013) PhD and also a study by RUB and Danish education researchers (Utha et al., 2016). Broadly these two studies are in agreement. There has been little initiation in terms of "infusion through regular curricular [in-class] programmes" (Sherab et al., 2014, p. 1). In fact, there was little evidence of any school classroom practice change from the cases and the questionnaire data in Sherab's study. Similarly, Utha et al. (2016, p. 27) found that implementation seems to be a challenge. Attention to the concept of GNH is apparent as explicit references to GNH values, but less apparent as promotion of the students' well-being through positive learning climate and fruitful teacher-student relations. They later clarified:

Teachers find it difficult to combine, for instance, maths with GNH. The situation is very different with subjects such as literature and history. A potential for progress seems to be associated with the fact that GNH is not only taught as a distinct topic, but also through exemplary practice, e.g. when the teacher acts as a role model, shows respect for the students and allows them to interact openly in team work (Utha et al., 2016, p. 28).

This later idea, expressed as "tacit knowledge transfer" (Utha et al., 2016, p. 51) is very similar to Sherab's (2013, pp. 166–167) use of the concept of "hidden curriculum" where outcomes are not openly articulated to students, but conveyed unconsciously in the classroom environment as teachers and students interact. In contrast to the in-classroom difficulties, both studies found that co-curricular and other activities had been stimulated by EdGNH. Indeed, Utha et al. (2016, p. 91) concluded at one point: "the quality of teaching seems to be developing in a new and more professional didactic direction, not least initiated by the policy of Educating for GNH and more teacher education" and while they did not make it clear what was meant by "more", clearly teacher education has a very important role to play if EdGNH is to succeed.

Since there have been studies of teachers' reactions to the EdGNH initiative since its introduction, this study was intended to fill the knowledge gap of teacher educators' responses to this key initiative. How have teacher educators reacted to the EdGNH initiative? The research questions focus on the implementation and challenges (with the new understanding and practices) of EdGNH by teacher educators.

- (1) What is the level of teacher educators' self-efficacy beliefs in terms of EdGNH?
- (2) To what extent have teacher educators implemented the Ed GNH in their classroom practices?
- (3) What are the challenges teacher educators face in implementing the new understanding and practices?

5. Method

Consistent with the research questions, this study was designed to use a sequential mixed methods approach beginning with the quantitative followed by qualitative approach (Creswell, 2014). The tools employed for data collection were (1) questionnaires to teacher educators (n = 66) because this was an efficient method and a scale with teachers were already available, (2) observations (n = 10) were needed to check to see what teacher educators were actually doing in the classroom and (3) document analysis to support the EdGNH initiative and this provided the background required for the study. A research learning and management matrix (Maxwell & Smyth, 2011; Smyth & Maxwell, 2008) provided a framework for monitoring ongoing progress (see Appendix 1). This study was conducted under the RUB's ethical requirements and approval duly sought from the colleges and participants.

5.1. Questionnaire to teacher educators

The questionnaire was distributed to all academic staff that was on campus at the COEs. The questionnaire for teacher educators consisted of 5 sections comprising 43 items using a Likert-type-scale with a neutral point at the centre (neither disagree nor agree) to respond to each of the items in the five sections:

- (1) Lecturer self-efficacy beliefs to role model GNH values—six items e.g. I am confident that I can teach my students to be honest;
- (2) Lecturer self-efficacy beliefs to infuse GNH values in their teaching—four items e.g. I can easily integrate/infuse GNH values in my academic subjects;
- (3) Lecturer's perceptions on current teaching practices—10 items e.g. In the class I usually encourage students... to learn independently;
- (4) Lecturer's perceptions on the use of teaching activities in the class—11 items e.g. present information on screen; and
- (5) Lecturer's perceptions on the challenges faced in implementing EdGNH—12 items e.g. I have the necessary knowledge and skills to apply GNH values and principles in my classroom.

For all items see Appendix 2. Each section was followed by a request for "Any other comments". Towards the end of the questionnaire, a space was provided for participants to "Please add any other comments you would like to make on challenges of EdGNH as a change agent for your peda-gogical practices".

The items in the self-efficacy belief scales were borrowed from Sherab's (2013) doctoral work on teacher self-efficacy beliefs and the other three scales were taken from Gyamtso's (2013) doctoral study on teaching and learning practices in the RUB. Due to small sample size (n = 66), attempts to replicate the factor structure were not applicable. Hence, the original factor structure from Sherab (2013) and Gyamtso (2013) were used to compute the mean score for each component. Quantitative analyses were carried out using SPSS v. 23 for the 43 items in the questionnaire using Principal Component Analysis (PCA) followed by qualitative analysis of data generated from the open-ended questions and teaching observations.

5.2. Observation of teacher educators

A convenience sample of five lecturers (two lessons each) from one of the colleges was observed. Observation was facilitated using a schedule which is commonly used in the COEs modified by Sherab (2013, see Appendix 3). Observations identified GNH values modelled in the class (if any) while they taught their own academic subject/s. At the same time, strategies used and learning activities concerning GNH values, both positive and negative, were identified. Student reactions to the lessons were observed to be consistent with the EdGNH values and principles. Qualitative analysis was done identifying for key themes that emerged from the observation data and open-ended comments. However, some caveats have to be placed upon these data. The students in the observations were mature aged (school principals) and it is likely that the relationship was one where the lecturers were less authoritarian, more respectful and relaxed during the sessions.

6. Results and discussion

The following analyses examined the current practices and problems teacher educators face following the introduction of the EdGNH through: (1) their self-efficacy beliefs for EdGNH; (2) current practices; and (3) challenges of implementing EdGNH. First, the demographics and the findings from the survey are tabled.

6.1. Demographic characteristics

A total of 66 lecturers from the 2 colleges responded to the survey (Samtse College, n = 32 & Paro College, n = 34). The sample is representative as the response rate is slightly more than 50%. Second, the distribution of respondents in demographic variables such as the teaching subjects, religion, age, qualification, are also proportional to the population (n = 120). As already noted, the observations were of five lecturers who were teaching a Masters in-service course at one of the COEs and so these qualitative data are not representative. As such the findings from this research may not be generalised but will still have some relevance in other contexts where similar practices are in place.

6.2. Findings from the survey

College Lecturers' scores (mean and standard deviation) for self-efficacy beliefs, their perceptions on current teaching practices, perceptions on use of teaching activities and perceptions on challenges they encounter in implementing EdGNH are provided in Table 1.

For a five-point Likert type scale with a middle point of 3, the scores for all components are slightly above average and their self-efficacy beliefs about GNH values and perceptions on other three components were similar as shown by low standard deviations. This is a general indication of teacher educator perceptions of some positive happenings at the colleges in terms of teacher in-service preparation. However, these scores are not very robust.

6.3. Self-efficacy and EdGNH

As shown in Table 1, the lecturer self-efficacy belief in terms of role modelling GNH values to their students showed the highest score (M = 3.96; SD = 0.63). Role modelling by the lecturers in their lessons emerged as the main influence in the lessons observed. Role modelling, consistent with EdGNH, was demonstrated through practice, such as (1) showing respect for the students, (2) allowing them to interact willingly in group work, (3) showing patience when explaining difficult, complex concepts (Observation form 5, 26/01/17), (4) inviting students to disagree (Observation form 6, 27/01/17), (5) reflecting on what was explained, and generally respecting opinions expressed. Using positive feedback and constructive comments led appropriate motivation and also modelled good EdGNH behaviour. By implementing transformative learning through critical reflection of their own beliefs,

Table 1.	Mean and SD for five themes (n = 66)		
Sl. No.	Component/Theme	Mean	SD
1.	Lecturer self-efficacy belief to role model GNH values	3.96	0.63
2.	Lecturer self-efficacy belief to infuse GNH values in their teaching	3.67	0.66
3.	Lecturer's perceptions on current teaching practices	3.27	0.34
4.	Lecturer's perceptions on the use of teaching activities in the class	3.28	0.42
5.	Lecturers' perceptions on the challenges faced in implementing Educating for GNH	3.86	0.47

assumptions and values, the lecturers demonstrated, encouraged and promoted positive learning environment. Such findings have strong positive implications, as these in-service students are more likely to replicate such teaching approaches to their own teaching practices in the schools. This is a positive indication of some success of the EdGNH programme in the COEs in contrast to earlier research in the school context had shown otherwise. For instance, Sherab's (2013) research showed that school teachers had difficulty modelling appropriate behaviour and use of positive feedback to their students which had the potential to negatively impact the students.

Teacher educator belief in their ability to infuse EdGNH values is also relatively high (Table 1). Observations of the lecturers' behaviour and attitude reflected support for the philosophy of EdGNH. They were polite, solicitous, empathetic, attentive, patient, inclusive and courteous. In turn the students were willing, open and participative. Demonstration of such harmonious relationship in the classrooms generated by the positive and supportive behaviours and attitudes of the lecturers and students made an enduring impact on the learning environment. It also indicated that "community vitality" and "education"—two fundamental domains of GNH—were in operation. Findings from this study at the college level are consistent to the earlier findings from the school setting where school teachers exhibited much higher self-efficacy to role model values than to infuse values into their academic teaching (Sherab, 2013).

6.4. Implementing EdGNH

The lecturer perceptions on their use of teaching activities consistent with EdGNH was relatively low (M = 3.27; SD = 0.34) as was their use of teaching activities (M = 3.28; SD = 0.42, Table 1). It was noticeably evident in the 10 lessons observed that GNH values and principles were not explicitly taught as part of the lessons. Instead they were implied in the manner the lessons were conducted. The lessons composed those EdGNH norms, values, beliefs and habits which can be thought of as forming the "hidden curriculum" (Sherab, 2013). Examples included the relaxed, patient demeanour displayed by the lecturers in all observations and the choice of language showing empathy and compassion saying, for example, "even I found and still find it difficult as research is not something you learn by listening but by doing" (Observation form 1, 25/01/17). Other examples were sending specific messages to students reflecting respect of each individual's contribution to the class discussion and collaborative learning through the group work assigned (Observation Forms 1, 2, 3 and 5), and creating a culture of encouragement by, for example, commenting "it seems you all have picked up many critical points from the reading" (when the text was dense and laden with complex ideas on research designs) (Observation form 1, 25/01/17). Finally, when the lecturer empathised with the students on the difficulty in grasping the complexities of research designs and writing a literature review, the students became more accepting and willing (Observation forms 1 & 2, 25/01/17).

Another significant finding was the connection of abstract concepts to real life. Sharing similar experiences with understanding on how to conduct research and showing examples of research data made text to life connection. Such instances were seen in seven of the ten lessons and are a substantial achievement within the EdGNH concept.

While it was difficult to assess the commitment of students to the values and roles modelled in the lessons, it is evident from the students' reactions and show of interest in planning their research proposals that some connection was made to their understanding. Although the lessons did not directly focus on a GNH values, they were directly involved in the hidden learning of values associated with experiences that address the issue of psychological well-being which is one of the nine domains of GNH.

However, not all the lessons generated positive learning experiences. In two instances where the lessons focussed more on explaining the lesson concepts, the learning climate was not encouraging as seen from the lack of discussions and disengagement of students (Observation forms 4 & 5, 26/01/17). The lecturers were not mindful of the degree of receptiveness of the students nor were they mindful of EdGNH ideas.

It is evident from the observations and the survey that there was little in the way of vigorously and deliberately promoting values and principles of GNH in the lessons taught per se. However, EdGNH ideas were evident through the use of hidden curriculum thereby creating powerful opportunities for learning.

6.5. Challenges in implementing the Educating for GNH approach

Teacher educators' belief in their ability to address the challenges of EdGNH are relatively robust (SD = 3.86, SD = 0.47, Table 1) but, as we have noted, EdGNH was not explicitly implemented in the two CoEs. One possible explanation was that the teacher educators did not see it necessary to explicitly address EdGNH ideas with this mature age group. However, the more likely explanations come from the data. There are reasons why EdGNH was not made explicit. First, it was quite clear that the teacher educators lack the required knowledge, skills and strategies in explicitly infusing GNH values and principles. Relevant comments included:

- The college could initiate [a] GNH workshop/refreshment course for the lecturers as a professional development programme;
- I need to attend [a course]/get to know about GNH values:
- Educating for GNH will promote mind training and GNH values and principles;and
- There is a need to orient all faculty on GNH.

It emerges that teacher educators have somehow been left out of the professional development on EdGNH although, ironically, the initial EdGNH workshop was held at Paro College of Education in which selected teacher educators were involved.

Second, EdGNH is not seen as part of the existing teacher-training programme as hinted at by two informants:

- It depends on whether different curricul[a] have considered GNH values and principles in their content like cultural, socio-economic development, environmental and good governance aspects. Then only we will be able to integrate GNH ideas into normal teaching-learning process;
- We do not have separate curriculum for GNH.

This goes part way in explaining why EdGNH was not explicit in the lesson observations. Related to this, third, one of the possible reasons for inadequate treatment of EdGNH in the CoEs actually points at the question of syllabus coverage and exam orientation in the CoEs as indicated by one informant:

• Exam-oriented modules need to focus on coverage of syllabus.

Sherab's (2013) research has shown that many school teachers were concerned about the rigid and bulky school curriculum. Any activities and programmes that were not a part of the content teaching, that is not examined, were ignored. This is likely for the CoEs where teaching the content and examining it is central to the teaching/learning enterprise (see Gyamtso, 2013; Gyamtso & Maxwell, 2012). Never-the-less, in most instances, EdGNH was being implemented in a tacit way as we have seen.

7. Further discussion

Our review of the literature indicated that there were few studies of top down, systemic curriculum change even though such initiatives are common on the part of education authorities. Taken together, the literature is clear that changing teacher practice is not straightforward (Fullan, 1985, 2007; Guskey, 2002; Mellegard & Pettersen, 2016). In Bhutan, two major studies of teacher implementation of the 2010 Educating for GNH initiative both showed that teachers found implementation in the classroom was difficult and in fact they had had little direction given to them thus making

the change more demanding. However, they were more able to incorporate EdGNH appraoches into extra-curricular activities where there had been a long history of similar developments. Understanding that Paro and Samtse COEs could be leading in the EdGNH area (see Baker, 2013), our study indicated that lecturers were, in general, not taking the initiative in pre- and in-service capacity building.

Taken together, it is evident that a far-reaching curriculum development process across the two colleges is required to incorporate EdGNH ideas into teacher education modules. This process should actively involve lecturers and take place over time (Armour & Makopoulou, 2012; Darling-Hammond & Richardson, 2009; Maxwell et al., 1988). A key issue is whether the development will be in the form of a separate module or as a theme running through all modules. It is imperative that teacher education programmes implement EdGNH as teacher educators should play an important role in ensuring EdGNH is wired into their own teaching-learning practices as well as in the schools through the student teachers and through their work as graduates (cf Hargreaves, 2005). Findings from this study suggest that lecturers still need to upgrade their knowledge and skills to infuse GNH values into their teaching modules. Above we have indicated some attitudes e.g. empathy, that are consistent with EdGNH. Similarly, practices that include encouraging students to learn independently, provide tasks that make students think, use a variety of student-centred teaching-learning activities and overall help them enhance their understanding of the potential of the EdGNH programme (see also Gyamtso, 2013).

Further research needs to be undertaken in the impact of specific sub areas of the EdGNH initiative such as psychological wellbeing (mental health), health, community vitality, good governance, living standards, cultural diversity, ecological diversity, and time use. This means that more research is needed on each of the other areas of EdGNH initiative. One such area could be mental health as research studies on mental health (psychological well-being) issues in Bhutanare few. For instance, a recent study of the college students in Bhutan found 12.7% level of suicidal ideation and 3.7% suicide attempts by the college students (Sherab, Howard, Tshomo, & Tshering, 2017). Student wellbeing has become a key agenda for schools and many now consider emotional-social learning (mental health) to be of equal importance to academic learning (Cohen, 2013; Dorji, et al. 2015; Elias & Haynes, 2008; RGoB, 2015). Several international studies have also observed that there is a strong positive connection between positive wellbeing (mental health) and academic performance (Awartani, Witman & Gordon, 2008). In this research, we focused on the reactions of teacher educators to the GNH initiative itself and hope to conduct further research into the sub areas of EdGNH.

Professional development on EdGNH for the teacher educators needs to be associated with this curriculum development work (cf Armour & Makopoulou, 2012; Fullan, 2007; Guskey, 2002). This should not be the one-shot model of professional development but rather a series of professional development activities, which build upon one another over time (see Maxwell et al., 1988). There is much to build on; already some role modelling of EdGNH is being practiced and tacit learning is in place. These need to be made explicit to teacher educators and so to their students. In short, there needs to be a lively discussion in the colleges about what constitutes EdGNH in practical terms.

We saw no evidence of support for the EdGNH initiative at the management level. We know from previous studies (e.g. Printy, 2008) that institutional leadership is essential. Six years later, it is clear that such leadership is needed.

8. Conclusions

The current research is the first of its kind to study the implementation of and challenges with the new understanding and practices of EdGNH by teacher educators. The EdGNH initiative in Bhutan intends for educational change to take place. It points at policy shifts from a previously academically oriented curriculum to one which also incorporates happiness as the key goal for education, but this shift does not appear to have been incorporated explicitly into teacher education modules at the two colleges just as it apparently has not been explicitly taken up in school classrooms. However, tacit learning of EdGNH values and practices is taking place. The idea of tacit learning—the hidden curriculum—is a potentially powerful means of implementing many of the ideas of EdGNH and

should be made explicit to teacher educators in professional development and consequently to prospective teachers.

Evidence from the study showed that lecturers need to upgrade their knowledge and skills to infuse GNH values into their teaching modules, e.g. by using a variety of student centred teachinglearning activities. College lecturers should play a crucial role in making the EdGNH programme in the schools successful but without the knowledge and skills and without EdGNH written into teacher education modules this will be less likely in the present environment. A programme at the college level where EdGNH is central is likely to make long-term impact as every teacher in the Bhutanese education system graduates from these colleges. In fact, Paro College of Education is drafting (2017) a separate module on Educating for GNH with support from UNICEF. This is a timely development.

As we progress with the GNH initiative, we need to identify gaps, which could benefit from further relevant research including research into mental health and psychological well-being, as a crucial part of the EdGNH initiative. This is because recent years have brought new and growing attention to the importance of measuring and monitoring children's well-being (Ben-Arieh, 2009).

Reflections on the limitations of the research show that while the study was the first of its kind to study the implementation of, and challenges with, the new understanding and practices of EdGNH by teacher educators, it does not represent the pre-service scenario. This is, as mentioned earlier; the observations of lessons were of the winter residential schools with in-service students. With pre-service students, the findings may have been somewhat different and this is an area that deserves further study.

In summary, the ways forward for teacher educators in Bhutan include: (1) build EdGNH into teacher education modules; (2) upgrade their knowledge and skills about GNH values and practices; and (3) develop the idea of tacit learning associated with EdGNH. We argued that EdGNH needs to be made explicit especially to prospective teachers. Finally, reflecting upon this study, further research is necessary. Observations of teacher educators in the pre-service context would add considerably to our understanding, as would some attention to leadership.

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Author details

- Deki C. Gyamtso¹ E-mail: dcgyamtso.ovc@rub.edu.bt
- Kezang Sherab²
- E-mail: kezangsherab.pce@rub.edu.bt
- T. W. Maxwell³
- E-mail: tmaxwell47@gmail.com
- ¹ Department of Research and External Relations, Royal University of Bhutan, Thimphu, Bhutan.
- ² Centre for Research and Development, Paro College of Education, RUB, Paro, Bhutan.
- ³ Department of Education, University of New England, Armidale, Australia.

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Note

- 1. *Om* it is blessed to help you achieve perfection in the practice of generosity,
- Ma helps perfect the practice of pure ethics, Ni helps achieve perfection in the practice of tolerance and patience,

Pad, the fourth syllable, helps to achieve perfection of perseverance,

Me helps achieve perfection in the practice of concentration, and the final sixth syllable

Hum helps achieve perfection in the practice of wisdom.

Cover image

Source: The Paro College of Education and the Royal University of Bhutan.

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Appendix 1.

Research management matrix

Research Question: What are the current practices and problems do teachers and teacher educators face following the introduction of the EdGNH?

Sub-questions	Data needed to answer questions	Source of data/Who to contact	Method of data collection	Method of data analysis		Time frame
1. What are the current practices and the problems do teachers face following the introduction of the EdGNH	Current practices and problems	Teacher educators at Paro and Samtse	Questionnaire	Thematic and descrip- tive stats	Deki's PhD	Late Jan./ Early February
			Observation of random sample, N=?	Thematic and descrip- tive stats		Late Jan./ Early February
2. What are the current practices	Current	Teachers	EMSSD Annual	Thematic	Ke-	ASAP
and the problems do teacher educators face following the	practices		Reports	Analysis	zang's PhD	asap
introduction of the EdGNH	problems		MoE records	Thematic Analysis		

Appendix 2.

Questionnaire—Educating for Gross National Happiness Teacher Educators—Colleges of Education

Dear Sir/Madam,

Thank you for agreeing to complete this questionnaire for the research project - *Teacher Learning in Changing Professional Contexts: Bhutan and the Educating for GNH initiative.*

The study is being conducted by researchers from the Royal University of Bhutan (*KezangSherab and Deki C Gyamtso*) and the University of New England, Australia (Tom Maxwell).

Your cooperation in this matter by completing the survey items will be highly appreciated. Your responses will remain **confidential**.

December 2016

Survey

Section I. Demographic information—Please tick the most appropriate choice

- 1. Gender: □ Female □ Male □ Others (please specify)......
- 2. Highest Professional Qualification
 - i. □Bachelors
 - i. 🗆 Masters
 - ii. 🗆 PhD
 - iii. 🗆 Any Others (please specify).....
- 3. Age:
 - i. \Box Less than 25 Years
 - i. □ 26-30 Years

- ii. 🗆 31–35 Years
- iii. 🗆 36–40 Years
- iv. \Box 41 Years and above
- 4. Teaching experience:
 - i. \Box Less than 5 Years
 - i. 🗆 6–10 Years
 - ii. □ 11-15 Years
 - iii. □ 16-20 Years
 - iv. $\hfill\square$ 21 Years and above
- 5. In the last semester (July–November) I taught (Tick all that apply):
 - i. B.Ed Primary—□ Year I □ Year II □ Year III □ Year IV
 - i. B.Ed Secondary— \Box Year I \Box Year II \Box Year III \Box Year IV
 - ii. PgDE—□
 - iii. PgDGC—□
 - iv. Diploma in Sports and Physical Education— \square
- 6. Service status:
 - i. □Regular
 - i. \Box Contract
- 7. Nationality:
 - i. 🗆 Bhutanese
 - i. 🗆 Expatriate
- 8. Religion:
 - i. 🗆 Buddhist
 - ii. 🗆 Hindu
 - iii. □Any others (Please specify).....
- 9. Teaching subject/s (Tick all that apply):
 - i. 🗆 English
 - i. 🗆 Dzongkha
 - ii. □ Mathematics
 - iii. 🗆 History
 - iv. 🗆 Geography
 - v.
 □ Economics
 - vi. 🗆 Physics
 - vii. 🗆 Chemistry
 - viii. 🗆 Biology
 - ix. \square Social Studies
 - x.
 □ Professional Development modules
 - xi. \Box Guidance and counselling
 - xii. 🗆 Health & Physical Education
 - xiii.
 □ Any others (Please specify).....

Section II. The following items have been designed to measure your Self Efficacy Beliefs for GNH Education. Please read the response key provided and indicate by *CIRCLING* the appropriate number against each item.

(1 = Strongly Disagree; 2 = Disagree; 3 = Neither Disagree nor Agree; 4 = Agree; and 5 = Strongly Agree)

		Levels of agreement or disagreement			or	
		1	2	3	4	5
1	I know how to use different ways that might lead to positive changes in students' values	1	2	3	4	5
2	I am able to influence the values of students because I am a good role model	1	2	3	4	5
3	I am usually comfortable discussing issues of right and wrong with my students	1	2	3	4	5
4	I can reduce negative student behaviours through Educating for GNH programme in my classroom	1	2	3	4	5
5	I am confident that I can teach my students to be honest	1	2	3	4	5
6	I am able to positively influence the values development of a student who is problematic	1	2	3	4	5
Any ot	her comments?					
Lecture	ers Self-Efficacy Beliefs to infuse GNH values into their teaching (Sherab, 2013)					
1	I have a good understanding of the Educating for GNH programme	1	2	3	4	5
2	I can easily integrate/infuse GNH values in my academic lessons	1	2	3	4	5
3	I can teach values lessons as effectively as I do other academic subjects	1	2	3	4	5
4	I have a clear vision for implementation of Educating for GNH programme in my teaching	1	2	3	4	5

Section III. The following items have been designed to measure your Current Practices. Please read the response key provided and indicate by *CIRCLING* the appropriate number against each item. (1 = Never; 2 = Sometimes; 3 = Often; and 4 = Always)

	F				
S#	A = In the class I usually	1	2	3	4
1	Encourage students to learn independently	1	2	3	4
2	Expect students to memorise information	1	2	3	4
3	Encourage students to learn with other students	1	2	3	4
4	Give students work that makes them think	1	2	3	4
5	Support students in their learning	1	2	3	4
6	Help students to develop skills to learn better	1	2	3	4
7	Provide learning activities that help students to understand the work	1	2	3	4
8	Provide learning activities that help students memorise the work	1	2	3	4
9	Focus on students' needs and interests	1	2	3	4
10	Understand students learn in different ways	1	2	3	4
Any (Dther Comments				

S#	B = At the moment I use the following <i>teaching activities in the class</i>	1	2	3	4	
1	Present information on-screen	1	2	3	4	
2	Read aloud to the class	1	2	3	4	
3	Manage group work	1	2	3	4	
4	Watch students work	1	2	3	4	
5	Ask questions	1	2	3	4	
6	Explain	1	2	3	4	
7	Answer student questions	1	2	3	4	
8	Lecture	1	2	3	4	
9	Discuss values related to the lesson	1	2	3	4	
10	Give students problems to solve	1	2	3	4	
11	Talk about my experiences	1	2	3	4	
Any (Any Other Comments					

Section IV. The following items have been designed to measure the Challenges of Implementing Educating for GNH. Please read the response key provided and indicate by *CIRCLING* the appropriate number against each item.

(1 = Strongly Disagree; 2 = Disagree; 3 = Neither Disagree nor Agree; 4 = Agree; and 5 = Strongly Agree)

Sl no	Items on Challenges of Implementing Educating for GNH	Levels of agreement or disagreement				
		1	2	3	4	5
1	I believe Educating for GNH has been introduced at the right time	1	2	3	4	5
2	I have the necessary knowledge and skills to apply GNH values and principles in my classroom	1	2	3	4	5
3	I am motivated to implement Educating for GNH in my teaching	1	2	3	4	5
4	Integration/infusion of GNH values in my academic lessons do not hamper coverage of subject content	1	2	3	4	5
5	Educating for GNH has the potential to improve students' academic achievement	1	2	3	4	5
6	We have a supportive leadership in our college to take forward Educating for GNH programme	1	2	3	4	5
7	I believe that Educating for GNH encourages our students become critical thinkers	1	2	3	4	5
8	I believe Educating for GNH promotes mindful learning	1	2	3	4	5
9	I believe Educating for GNH will help to make my teaching more student-centred	1	2	3	4	5
10	The Educating for GNH programme has the potential to solve many youth problems such as school dropout, drug abuse, teenage pregnancy, alcohol, depression, etc.	1	2	3	4	5
11	Colleges of Education should assume a central role in shaping the values of Bhutanese youth/children	1	2	3	4	5
12	Moral lessons learned in the social interactions of daily college life (such as sports, social work, cultural activities.) should have more influence on students than the content taught through formal curriculum	1	2	3	4	5
Any	, pther comments?					

Please add any other comments you would like to make on challenges of Educating for GNH as a change agent for your pedagogical practices.

This is the end of questionnaire

THANK YOU FOR YOUR TIME

Appendix 3. Lesson observation form

Date: _____ College_____ Time: _____ Year/Level: _____

Subject: ______ Topic Taught: _____

Values observed	
Describe strategies used	
Describe learning activities	
Student reactions/commitment	
Researcher comments	



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