



Australian and International Journal of Rural Education

Assessing Educating for Gross National Happiness: Applying the Theory of Practice Architectures

Kaka Kaka

University of New England

kaka2@myune.edu.au

Nadya Rizk

University of New England

nrizk3@une.edu.au

Judith Miller

University of New England

jmiller7@une.edu.au

Abstract

Gross National Happiness (GNH) is a central policy, symbolic of Bhutan, which gave rise to Educating for GNH (EGNH). In Bhutan, the school Performance Management System is the sole instrument used by the Ministry of Education to evaluate the performance of schools. To test the utility of the Performance Management System in fulfilling the intended goals of EGNH, two of its key subcomponents—the School Self-Assessment and School Performance Scorecards—were assessed through the lens of the theory of practice architectures. The theory describes what comprises social practices and how they are shaped by the social, cultural and political contexts in which they occur. Content analysis was carried out using Leximancer text-mining software. The findings showed that the sayings and relatings and their corresponding cultural-discursive and social-political arrangements were not as evident in the School Self-Assessment indicators as the doings and material-economic arrangements. The findings also indicated that both the School Self-Assessment's and the School Performance Scorecards' indicators focus more on assessing leadership than teaching. The authors present several suggestions to ensure a closer alignment with the goals of EGNH, to demonstrate a balanced focus on assessing teaching and leadership, and to represent all practice architectures proportionately. Implications of this study should inform the policy and practices of Educating for GNH values in Bhutanese schools. The methods of the study could be adapted to examine educational practices beyond those of Bhutan.

Keywords: *Gross National Happiness, practice architectures, assessment of schools, Bhutan*

Introduction

Gross National Happiness (GNH) is a developmental philosophy of Bhutan (Karma Ura¹ et al., 2012; Kezang Sherab et al., 2016; Pema Thinley, 2016) that is inspired by Buddhist philosophy and practices. GNH is defined by four pillars and nine domains and evidenced by 33 indicators and 124

¹ Schuelka and Maxwell (2016, p. 3) recommended citing and referencing Bhutanese authors using both given names to accommodate the lack of surnames. Their suggestion has been followed in this paper.

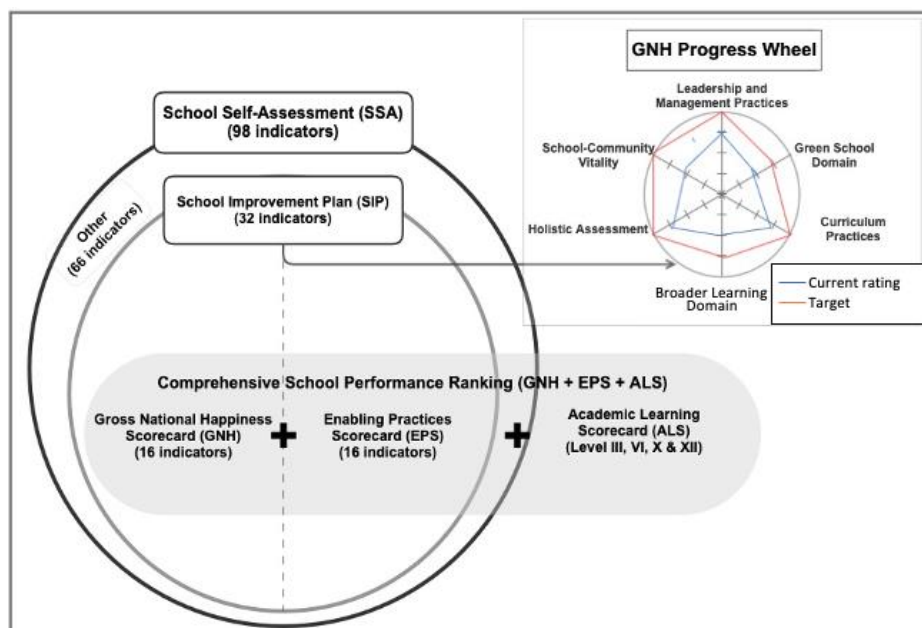
variables (Karma Ura et al., 2012). The Bhutan government uses these indicators to survey the nation and determine the status of national happiness, called the GNH index.

His Majesty the Fourth King Jigme Singye Wangchuck propounded the philosophy of GNH in the 1970s. The first democratically elected government in 2008 identified education as one of the main approaches towards creating a happy society (Ministry of Education [MoE], 2013; Schuelka & Maxwell, 2016). However, GNH did not have an immediate influence over the country's governance practices. The policy of GNH first appeared in government planning in the 9th Five Year Plan (2002–2008) and the influence of GNH philosophy on public policy has grown since (Gross National Happiness Commission, n.d.).

Educating for GNH (EGNH) was one of the principal approaches that the first democratically elected government proposed to infuse, integrate and promote GNH values in the school system (MoE, 2013). All educationists—the key ministry officials, the district education officers, principals, and teachers—received a weeklong orientation to carry forward the EGNH initiative. The orientation was rolled out to all teachers in successive years. The focus of EGNH was to infuse GNH values in all school programmes and practices. EGNH is not a new subject. It is about how schools can enrich and give a heartfelt and genuine context, purpose and meaning to all school programmes, activities and learning (MoE, 2013).

Ideally, the outcome of EGNH was for students to graduate with ingrained GNH values which they then carry into the workforce. Thus, the Ministry of Education reformed education monitoring tools, which were previously used to monitor teachers' professionalism, such as academic planning, teaching, assessment, and other co-curricular and extra-curricular activities. This reform gave rise to the school Performance Management System, which has GNH values as one of its key foci (Education Monitoring Division [EMD], 2020; Pema Thinley, 2016). The system comprises three components: the School Self-Assessment tool, the School Improvement Plan and the School Performance Scorecards (see Figure 1). The School Self-Assessment is a tool used by schools to reflect and assess their performance, and the School Improvement Plan requires schools to prepare an improvement plan by setting targets for the academic year, depicted as a GNH progress wheel. Further, the School Performance Scorecards consist of the Academic Learning Scorecard, the Enabling Practices Scorecard and the Gross National Happiness Scorecard.

Figure 1: The School Performance Management System (from Kaka et al., 2022)



There is no research evidence that the Performance Management System contributes towards fulfilling the intended goals of EGNH, and this is problematic. Kaka et al. (2022) contested the effectiveness of the system, claiming that the key areas of the School Self-Assessment, School Improvement Plan, Enabling Practices Scorecard and GNH Scorecard need to be aligned with the seven standards of the *Bhutan Professional Standards for Teachers* commissioned in 2019 (MoE, 2020). They also argued that the Performance Management System approach was inequitable, and schools with modest facilities, human resources and locations were ranked against well-resourced schools using the same criteria.

To compound the situation, the school performance scores were used by the Royal Civil Service Commission to determine promotions of civil servants, of whom one-third are teachers (Lhawang Ugyel, 2017). This decision did not appear to motivate teachers to improve their practices. Anecdotal information suggests that some teachers are more focused on gathering superficial evidence of their tasks to impress monitors and supervisors than genuinely delivering services for the welfare of students. For example, meditation, one of the indicators of the School Self-Assessment, is practised by schools as a compliance exercise, merely fulfilling the requirements of the policy directive (Kaka et al., 2022). Teachers have expressed disappointment over the absence of specific guidelines and materials to help infuse GNH values into their daily lessons (Sonam Zangmo, 2014).

There is a need for frequent orientation and professional development to integrate GNH values into teachers' daily lessons (Kezang Sherab, 2013; Kezang Sherab et al., 2016). Pema Tshomo (2016) contended that the EGNH initiative appears to have little focus on promoting enabling conditions. Research has also revealed that teachers are, at times, impolite to their students (Kezang Sherab, 2013), providing inappropriate feedback and lacking kindness and compassion; courtesy is not expected of teachers to promote GNH values (Kezang Sherab, 2013; Kezang Sherab et al., 2016).

There is a need for EGNH approaches to include educational aspects, such as access and supportive and enriching environments (Pema Tshomo, 2016). Kezang Sherab et al. (2016) found that assessment practices in schools were overshadowed by cognitive aspects through unit tests and examinations, although EGNH is intended to institute an holistic assessment system. These findings indicate that GNH practices by teachers in schools are yet to be fully established. Therefore, the validity of the Performance Management System, supposedly intended to infuse GNH practices in teachers, is in question (Kaka et al., 2022). Empirical evidence is needed to promote an effective and valid assessment of the EGNH initiative in schools.

The theory of practice architectures by Kemmis and Grootenboer (2008) and Mahon et al. (2017) provides a lens to examine the assessment of EGNH practices in Bhutan. This theory is a resource for understanding educational and professional practice, an analytical tool for revealing the way practices occur, and a transformational resource for finding ways to change education and professional practice (Kemmis & Grootenboer, 2008; Mahon et al., 2017). The theory has been used widely across educational sites to understand professional practices (see, e.g., Bahdanovich Hanssen, 2019; Edwards-Groves & Grootenboer, 2015; Hemmings et al., 2013; Petrie, 2016; Powell, 2020; Salamon et al., 2016; Sjølie & Østern, 2020; Uchida et al., 2020).

In the following section, we unpack the Bhutanese religious, social, and cultural dimensions of practices that influence educational policies. Furthermore, we apply the theory to analyse the alignment of the Performance Management System indicators to practice architectures in Bhutanese schools.

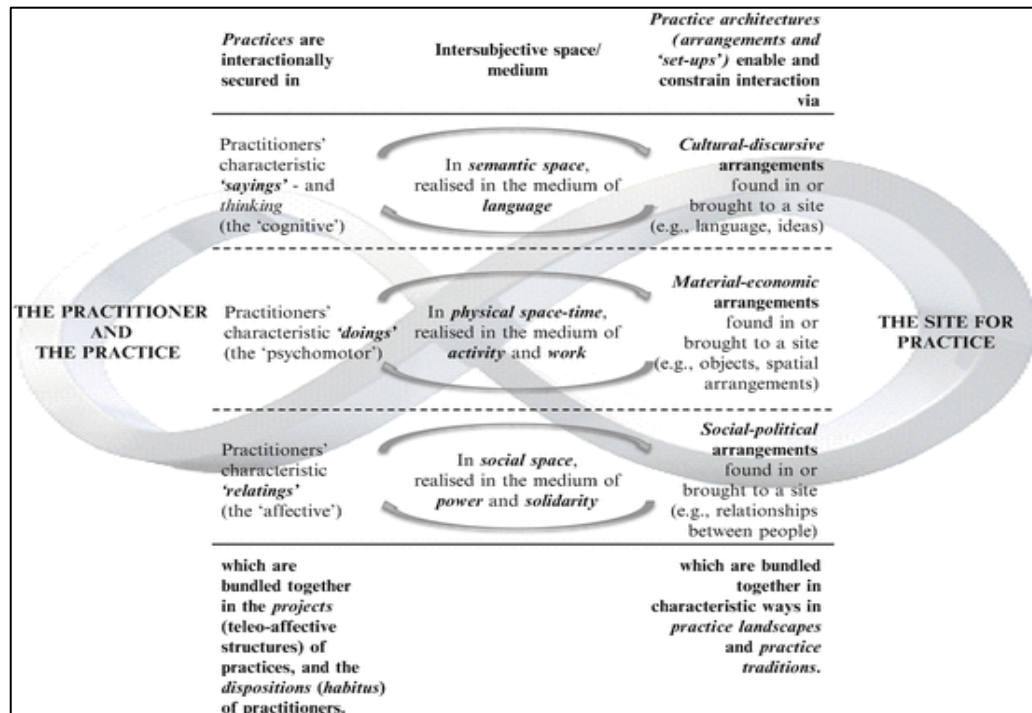
Theory of Practice Architectures

The theory of practice architectures by Kemmis and Grootenboer (2008) is used in this study to scrutinise the Performance Management System used in Bhutan to evaluate schools'

performances. Figure 2 presents the key concepts that underpin the theory of practice architectures and illustrates how activities mesh within contextual arrangements through three intersubjective dimensions: language, activity and work, and power and solidarity.

In what follows, we apply these theoretical concepts to the context of Educating for GNH practices in Bhutanese schools.

Figure 2: *The Theory of Practice Architectures*



Source: Mahon et al. (2017, p. 13). Reproduced with permission from Springer Nature.

Practices

According to Mahon et al. (2017), practices comprise three socially established practices or activities that happen concurrently: “sayings, doings and relatings” (p. 10). The ‘sayings’ are “utterances and forms of understandings”; the ‘doings’ are “mode of actions,” and the ‘relatings’ are “ways in which people relate to one another and the world” (p. 8). Practices are also dependent on “experience, intentions, dispositions, habitus, and actions of individuals” (p. 9). Mahon et al. explained that “practices are shaped and prefigured intersubjectively by arrangements” (p. 9), circumstances and conditions “beyond each person as an individual agent or actor,” that exist in, or are brought to, particular sites of practice (Kemmis & Grootenboer, 2008, p. 8).

EGNH practices in Bhutan are shaped by Buddhist values and principles, the culture, and social systems. EGNH was conceived to put the philosophy of GNH into practice, effectively and comprehensively (MoE, 2011). In order to define EGNH practices in schools, we refer to the five EGNH pathways that teachers are expected to implement: “meditation and mind training, infusing GNH values into the curriculum, holistic assessment of students, broader learning environment, and media literacy and critical thinking skills” (MoE, 2014, p. 84). The activities of sayings, doings and relatings in relation to education policies and religious, cultural and social dimensions are now explained further.

Sayings

Sayings are utterances and forms of understandings that occur “*in the semantic space, in the medium of language*” (Mahon et al., 2017, p. 11). Sayings are the main form of verbal communication on a day-to-day and one-on-one basis. In the Bhutanese school context, the students and teachers begin the school day by greeting each other, “*Good morning, Sir/Madam.*” The school day is full of verbal communication sayings. Therefore, the medium of communication—the language—plays an important role. Teachers are expected to demonstrate strategies that are appropriate for learners’ language development (MoE, 2020, 2021). The language subjects of English and Dzongkha are assessed for both writing and speaking skills (MoE, 2014).

The Bhutanese culture, influenced by Buddhist values, has 10 conducts, of which four are speech sayings: (1) speaking the truth, (2) avoiding divisive speech, (3) avoiding harsh speech, and (4) avoiding pointless gossiping (The Dalai Lama, 1995). The *Code of Conduct for Teachers* (MoE Policy and Planning Division, 2012) expects teachers to set themselves as a model for reading, writing, and communicating. Specifically, focus area 2.12 of the code expects teachers to “*refrain from ... use of improper language*” (p. 35). Students are also expected to maintain decorum while talking with others, and to use decent language.

Doings

Doings are the mode of actions that occur “*in physical space-time, in the medium of activity or work*” (Mahon et al., 2017, p. 11). Almost all the descriptors of the *Bhutan Professional Standards for Teachers* (MoE, 2020, 2021) contain verbs such as *demonstrate, implement, develop, lead, identify, apply, model, and collaborate*. However, it is important to understand that these action words cannot be reduced to actions only (i.e., doings) without words or speeches (i.e., sayings), as they are inextricably enmeshed (Edwards-Groves & Grootenboer, 2017; Kemmis & Grootenboer, 2008).

Of the 10 Buddhist conducts, three are related to actions (i.e., doings). They are: (1) not harming and taking life, (2) not taking anything that is not given, and (3) avoiding sexual misconduct (The Dalai Lama, 1995). The rationale for the *Code of Conduct for Teachers* (MoE Policy and Planning Division, 2012) states:

With the infusion of GNH in school curricula, the demand for teacher professionalism has received even more attention. They are the role model, mentor, and the architect. This places Teachers in a special position of responsibility, which requires [an] exceptionally high standard of behavior and conduct. (p. 34)

Schools also expect students to be punctual and to be present in all school activities, follow a dress code, keep rooms and surroundings clean and green, and display the best behaviours (MoE Policy and Planning Division, 2012).

Relatings

Relatings are “ways in which people relate to one another and the world” (Mahon et al., 2017, p. 8). They occur in social space, in the medium of “solidarity and power” (Mahon et al., 2017, p. 8). A student greeting their teacher in the morning by saying “*Good morning, Sir/Madam*” also bows to the teacher. This is driven by the teacher-student relationships (i.e., relatings). Other forms of body language would accompany this, such as a smile and a caring and loving gesture. If we go deep into the nuances of teacher-student relationships, the language—tone and intonation—and the body language used by both the teacher and students will vary according to the quality of their relationship, such as love and trust between the two. Mahon et al. (2017) suggested that activities of “*sayings, doings and relatings happen together*” (p. 8). It means that activities cannot be reduced to any one of these actions on their own.

Of the 10 Buddhist conducts, three are of the mind that shapes or enables the relationships or relatings. They are: (1) avoiding greedy thoughts, (2) avoiding harmful intention, and (3) avoiding a wrong view (The Dalai Lama, 1995). Indeed, the *Code of Conduct for Teachers* (MoE Policy and Planning Division, 2012) is founded on the principles that teachers have “(1) *an abiding love for children*, (2) *a deep passion for learning*, and (3) *a heightened sense of the importance of education as a powerful tool for the transformation of individuals, societies and nations*” (p. 34). Therefore, teachers are expected to “*treat all colleagues fairly and with respect, without discrimination*”; “*work with team spirit and cooperation*”; “*respect students’ views and feelings*”; “*cater to the varied needs of diverse students*” (p. 35); “*maintain a harmonious relationship with the community,*” and “*show respect to values, customs and norms of the community*” (p. 36). Similarly, schools also expect students to cooperate with teachers and friends, and expect healthy relationships between teachers/staff and students and amongst students.

The Ministry of Education’s (2014) vision aspires to create “*an educated and enlightened society of GNH, built and sustained on the unique Bhutanese value of the dam-tshig ley gyu-drey*” (p. 63). This traditional value has interdependency as its core value, which addresses not only self-discipline and the conduct of interpersonal relationships, but also defines the responsibility of all sentient beings (Tashi Wangyel, 2001).

Arrangements

The activities of sayings, doings, and relatings are shaped by the “*cultural-discursive, material-economic, and social-political arrangements*” (Mahon et al., 2017, p. 11) that exist simultaneously in any site of practice (Kemmis & Grootenboer, 2008).

Cultural-discursive Arrangements

The ‘cultural-discursive arrangements’ make sayings possible in an activity. They consist of resources that can “*constrain and/or enable what is relevant and appropriate to say ... in performing, describing, interpreting, or justifying*” the activity (Mahon et al., 2017, p. 9). The *Bhutan Professional Standards for Teachers* (MoE, 2020) have two specific focus areas that enable cultural-discursive arrangements. Focus area 3.6 expects distinguished teachers to exhibit exemplary practice in the use of effective verbal and non-verbal communication strategies to support learners’ understanding, participation, engagement and achievement in different learning contexts. Similarly, focus area 3.7 expects distinguished teachers to provide leadership in supporting colleagues to achieve a high level of proficiency in using Dzongkha and English (MoE, 2020). The *Bhutan Education Blueprint 2014–2024: Rethinking Education* (MoE, 2014) makes specific reference to communicative competency as one of the nine student attributes, and demands that students must develop mastery of languages, especially Dzongkha, the national language, and English as the medium of instruction. The Ministry of Education in Bhutan instituted English as a medium of instruction from 1964. Tashi Wangyel (2001), however, argued that English as the medium of instruction in the Bhutanese education system has deterred intergenerational transmission of values in Bhutan.

Material-economic Arrangements

The ‘material-economic arrangements’ are resources that shape and make doings possible. These arrangements include the physical environment, finance, human and non-human entities. They support or affect what, when, how and by whom something can be done (Mahon et al., 2017). Standard 2 of the *Bhutan Professional Standards for Teachers* (MoE, 2020) is “*Learning Environment*” (p. 40). This standard refers to the physical space and psycho-social ambience that facilitate effective teaching and learning practices (MoE, 2020, 2021). The *Bhutan Education Blueprint 2014–2024: Rethinking Education* (MoE, 2014) has also recommended numerous interventions on teaching-learning materials, teacher competency, infrastructure development, and the learning environment. The Buddhist does not encourage giving too much attention to

the external material aspects of life. However, this is not to deny the importance of material factors to people's wellbeing. Without a certain level of material comfort, people cannot live with the dignity that they deserve (The Dalai Lama, 2011).

Social-political Arrangements

The 'social-political arrangements' are resources that shape how people relate in an activity to other people and to non-human objects. These arrangements are "*organisational rules; social solidarities; hierarchies; community, familial, and organisational relationships,*" that enable and/or constrain relationships (Mahon et al., 2017, p. 10). In the Bhutanese educational context, the essence of the vision statement, "*tha dam-tshig ley gju-drey*" (MoE, 2020, p. 11; MoE, 2021, p. 63), guides the overall social-political arrangements in schools. The concept of *ley gju-drey* (also written as *ley gju-drey*) essentially states that good begets good. The idea of *tha dam-tshig* outlines the sacred commitments to others in society.

Standard 7 of the *Bhutan Professional Standards for Teachers* (MoE, 2020) is "*Professional Engagement and Bhutanese Values*" (p. 50). All four focus areas under this standard aspire to enable social-political arrangements. This standard emphasises "*the importance of teachers collaborating with parents and community,*" the "*moral and professional conduct expected of teachers,*" the teachers' code of conduct and school policies, and upholding "*the unique Bhutanese values of tha dam-tshig ley gju-drey*" (p. 50). Schools are expected to create an atmosphere of love and care, with every member acting as a part of the family by respecting each other's welfare and interests (MoE, 2017, p. 20).

In summary, GNH practices which are evaluated through the Performance Management System need to be examined. The validity of the Performance Management System, including the School Self-Assessment and School Improvement Plan questioned by Kaka et al. (2022), needs thorough scrutiny. Further, the lack of motivation to create enabling conditions that promote the practice of GNH (Pema Tshomo, 2016) warrants a thorough examination of these assessment tools, which is the focus of this study. The methods for this research are detailed next.

Methods

This research is situated in the pragmatic paradigm and presents the outcomes of a qualitative content analysis carried out on the School Self-Assessment tool and two of the School Performance Scorecards of the Ministry of Education in Bhutan. The research design was framed by the theory of practice architectures (Kemmis & Grootenboer, 2008) to determine what activities and arrangements supported the assessment of Bhutanese schools. Content analysis was conducted to determine the conceptual and thematic features of the School Self-Assessment. This process enabled the researchers to determine concepts, themes, and conceptual relationships (Weber, 1990). Leximancer facilitated both conceptual and relational analysis (Leximancer, 2021; Smith & Humphreys, 2006). A quantitative analysis based on the frequency of indicators and the corresponding percentage assigned through manual coding was also incorporated.

The data comprised documents from Bhutan's Performance Management System. The first was the School Self-Assessment document from the Ministry of Education, consisting of 98 indicators. The data analysis was carried out in two stages, firstly through manual coding and, subsequently, using Leximancer Version 4.5 text mining software (Leximancer, 2021). For the initial analysis, the 98 indicators of the School Self-Assessment were coded into one of six categories, which represented three activities and three arrangements: (1) sayings, (2) doings, (3) relating, (4) cultural-discursive arrangements, (5) material-economic arrangements, and (6) social-political arrangements.

Based on the definitions of these themes, the three authors coded the first 15 indicators together through discussions, negotiations and agreement. This process helped the coders establish a common understanding of what constituted each of the six possible codes. The remaining indicators were coded independently. After the individual coding was completed, the researchers came together to share their codes. The differences that arose were negotiated and agreement was reached. Based on manual coding, all the 98 indicators of the School Self-Assessment aligned to one of the six categories of the theory of practice architectures. This allowed the researchers to have overall insight into the relative prevalence of the various activities and arrangements in the School Self-Assessment.

For the second part of the analysis, the first author carried out content analysis using Leximancer version 4.5. Leximancer (2021) identifies concepts as a collection of words that “*travel together throughout the text*” (p. 9). These are represented by dots on concept maps. The size of the dots is an indication of the connectivity or co-occurrences of particular concepts. Based on the co-occurrence of these concepts, the software generates themes. Themes are represented by coloured circles, which are heat-mapped to indicate their relative importance. The most important theme appears in red, while the next most important appears in orange, and so on, according to the colour wheel (Leximancer, 2021). The theme size slider allows researchers to determine the number of themes which is defaulted at 33%. Depending on how broad or tight the researchers determine the themes to appear, the theme size can be adjusted relative to answering the research questions. The Leximancer analysis includes a concept map of the School Self-Assessment, analysis based on the practice architectures, and analysis of the two School Performance Scorecards (the Enabling Practices Scorecard and the Gross National Happiness Scorecard).

Findings

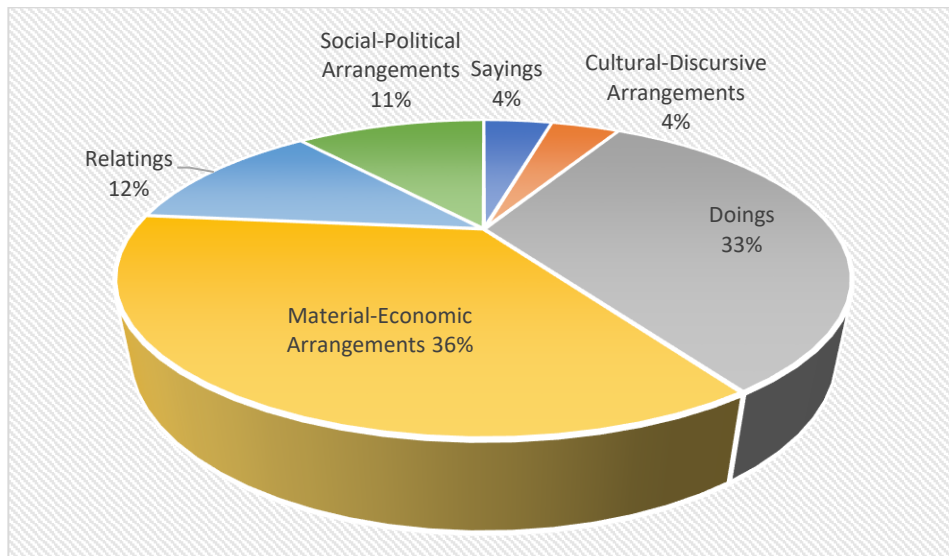
The findings are organised in two sections: the first comprises the manual coding and the second presents the outcomes of the Leximancer analysis.

Manual Coding of the School Self-assessment

Figure 3 displays the percentage of School Self-Assessment indicators for each of the six activities and their corresponding arrangements. Overall, there were 48 indicators (49%) for activities and 50 indicators (51%) for arrangements. Additionally, the sayings and relatings activities and their corresponding arrangements—cultural-discursive and social-political—were not as evident as the doings activities and the corresponding material-economic arrangements.

Material-economic arrangements were the dominant element of the School Self-Assessment Indicators with 36% of the items coded into that category, followed by the doings at 33%. The relatings category (12%) was closely followed by the socio-political arrangements (11%). The sayings and cultural-discursive arrangements categories were each assigned 4% of the School Self-Assessment indicators.

Figure 3: Percentages of School Self-Assessment Indicators for Activities and Arrangements



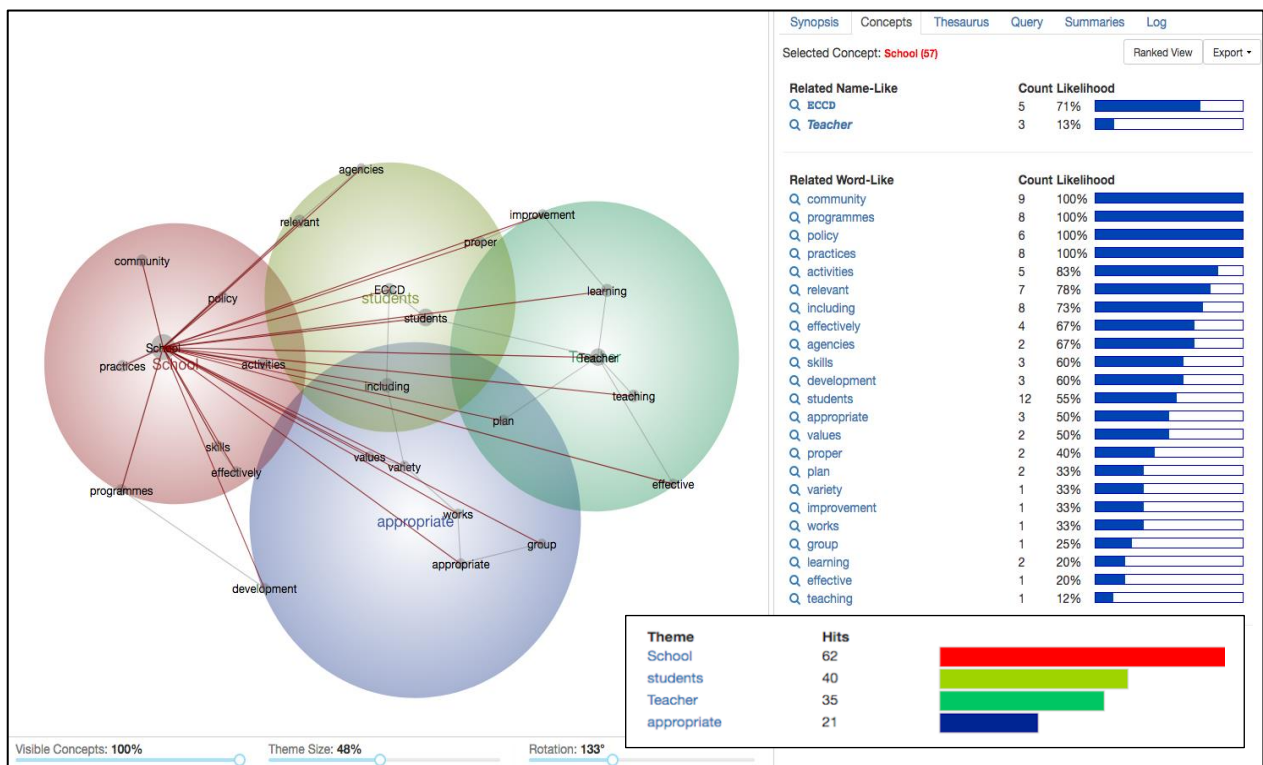
Leximancer Analyses

The Leximancer findings comprised three outcomes. The first was a conceptual map of themes identified in the 98 indicators of the School Self-Assessment. The second comprised six maps corresponding to the three activities and three arrangements categories, and the third consisted of the maps pertaining to the Enabling Practices Scorecard and GNH scorecards.

Conceptual map of the School Self-assessment Indicators

The four prominent themes in the School Self-Assessment, derived by Leximancer at 48% theme size, are displayed in Figure 4.

Figure 4: Concept Map for the School Self-Assessment



The most dominant theme was 'school', which had the highest connectivity with other concepts. Reading through the linked text (the Related Word-Like list in Figure 4) that matches this theme provided an understanding that it referred to leadership roles that school principals and managers were expected to demonstrate in their school and community. Schools are required to develop policies for effective implementation of curricular and extra-curricular activities and programmes. They are also required to practise healthy food habits, positive disciplining techniques, life skills, conservation ethics, mind training, and inclusiveness.

Similarly, the second theme, 'students', indicates that students are the ultimate beneficiaries of efficient and proper management and support systems, including non-formal education learners, Early Childhood Care and Development children, and Special Education Needs students. Few designated schools in each district cater for students with special education needs. The schools that do have the responsibility to make adjustments for these students.

The third theme, 'teachers', refers to effective teaching and professional practices that teachers are expected to use for improving students' knowledge and learning. Teachers are expected to deliver their curriculum with professionalism by preparing good plans.

The fourth theme, 'appropriate', refers to the appropriateness of leadership and teaching practices that school principals and teachers need to demonstrate. Teachers are also expected to use a variety of strategies and techniques and integrate GNH values in their lessons and school development programmes.

Analysis Based on Practice Architectures

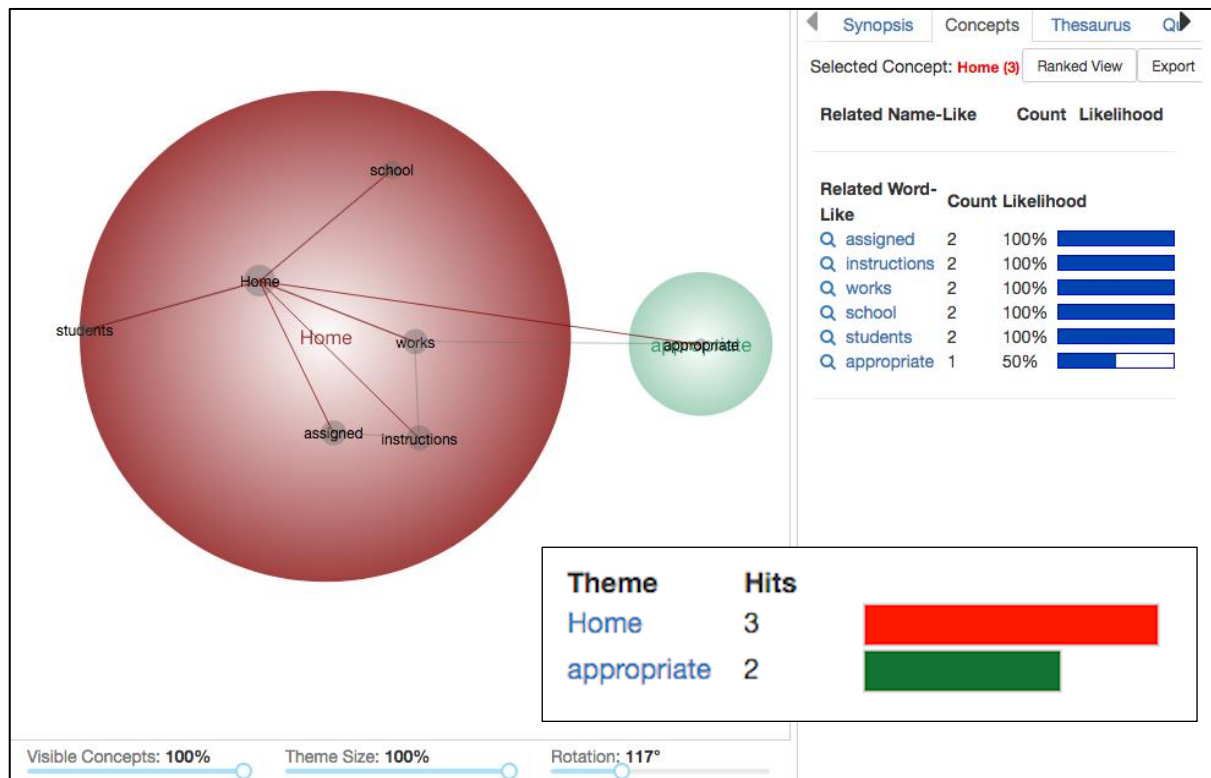
In the following, we present the analysis of activities (sayings, doings and relatings) and arrangements (cultural-discursive, material-economic and social-political). Each activity is followed by the corresponding arrangement that enables or hinders it. The themes are presented in the order of importance as identified by Leximancer. As in the previous section, the examples from the Related Word-Like lists in Figure 5 (sayings), Figure 6 (cultural-discursive arrangements), Figure 7 (doings), Figure 8 (material-economic arrangements), Figure 9 (relatings) and Figure 10 (social-political arrangements) are shown in italic font and underlined.

Sayings

The School Self-Assessment has only four indicators that correspond to the activity, sayings. Due to the limited number of indicators, the researchers decided to view the overall theme at 100% size as shown in Figure 5 (next page).

The major theme, 'home', shows the maximum connectivity within the four School Self-Assessment indicators. Home refers to homework(s) that teachers are expected to assign to students with clear instructions. The principal and staff members are also expected to communicate effectively with students both inside and outside the school. The second theme, 'appropriate', refers to the appropriateness of homework and tasks as per the school homework policy.

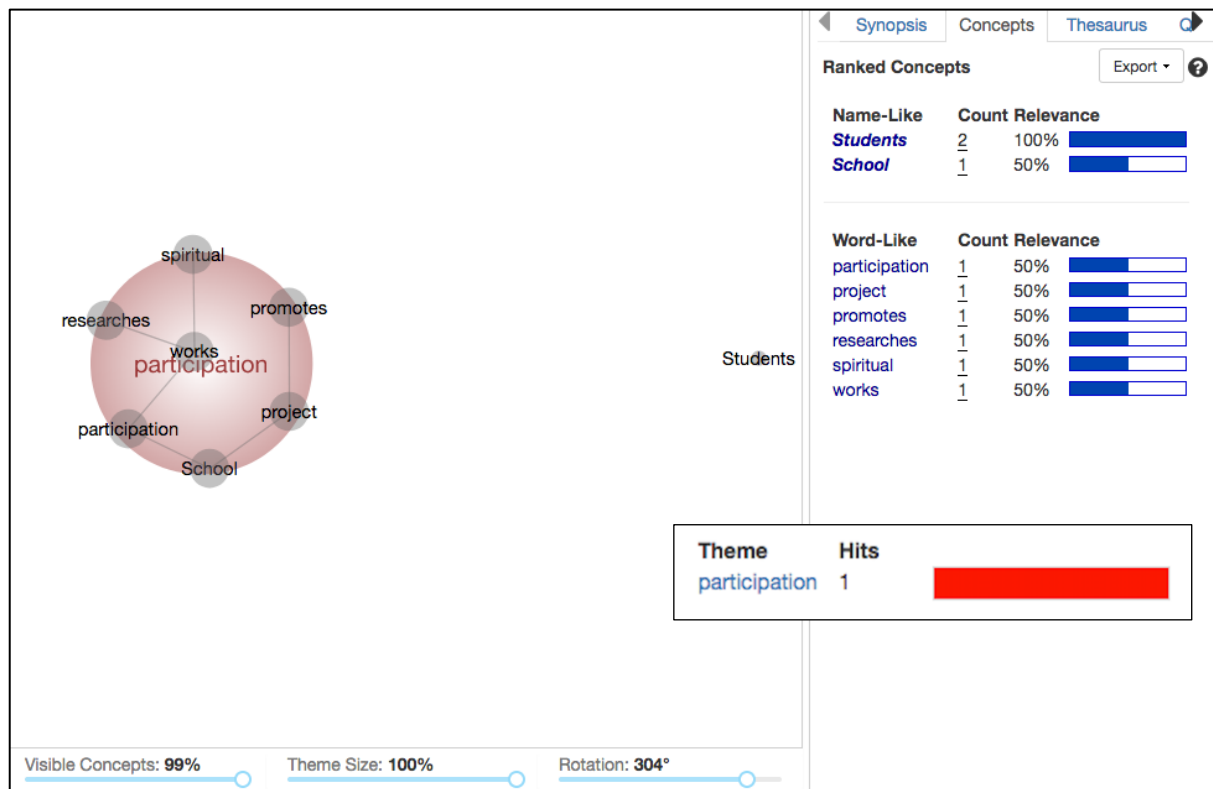
Figure 5: Concept Map for Sayings



Cultural-discursive Arrangements

The School Self-Assessment had four indicators that corresponded to cultural-discursive arrangements. Due to the limited number of indicators, the researchers set the theme size at 100% as shown in Figure 6. Leximancer identified ‘participation’ as the only theme. The list of concepts (participation, school, project, promotes, spiritual, researchers and work), are observed with the co-occurrences of the concepts showing that all the concepts are weighted the same (see Figure 6). Leximancer identified only one of the four indicators coded for cultural-discursive arrangements to generate concepts: School promotes the cultural and spiritual dimension through community participation, project works, research, and other event/functions (see Figure 6). No relationships are mapped between students and the other concepts. Referring to the linked indicators, it was found that the other three indicators are disconnected from this indicator.

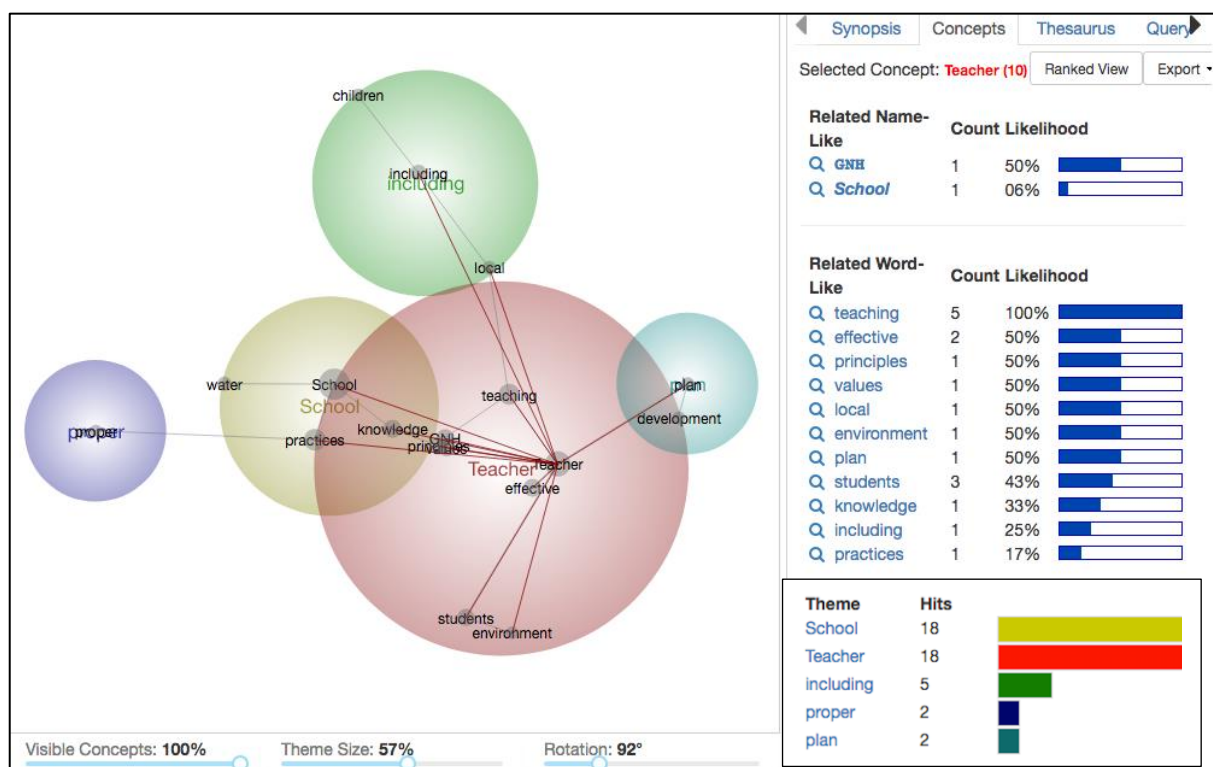
Figure 6: Concept Map for Cultural-Discursive Arrangement



Doings

The School Self-Assessment has 32 indicators that correspond to the activity, doings. Leximancer generated five themes at 57% theme size (see Figure 7).

Figure 7: Concept Map for Doings



The major theme, ‘teacher’, has the maximum co-occurrences with other concepts, making it the most prominent theme. The practices of teaching are related to effective teaching of GNH principles and values and creating a conducive learning environment for students.

The second theme, ‘school’, refers to the role of school leadership to promote and demonstrate knowledge on eco-literacy, like climate change; and practices of strong conservation ethics such as waste management, water, electricity, rivers, streams and forests. School leaders are also expected to promote mind training and mindfulness practices as a normal part of school life.

The third theme, ‘including’, refers to the role of schools to include and cater for students with special education needs, children in the Early Childhood Care and Development centres (which, in Bhutan, are managed, supported and monitored by schools) and learners in Non-Formal Education (also managed, supported and monitored by schools). Schools are also expected to include varieties of teaching strategies appropriate to the needs of the learners and the subject.

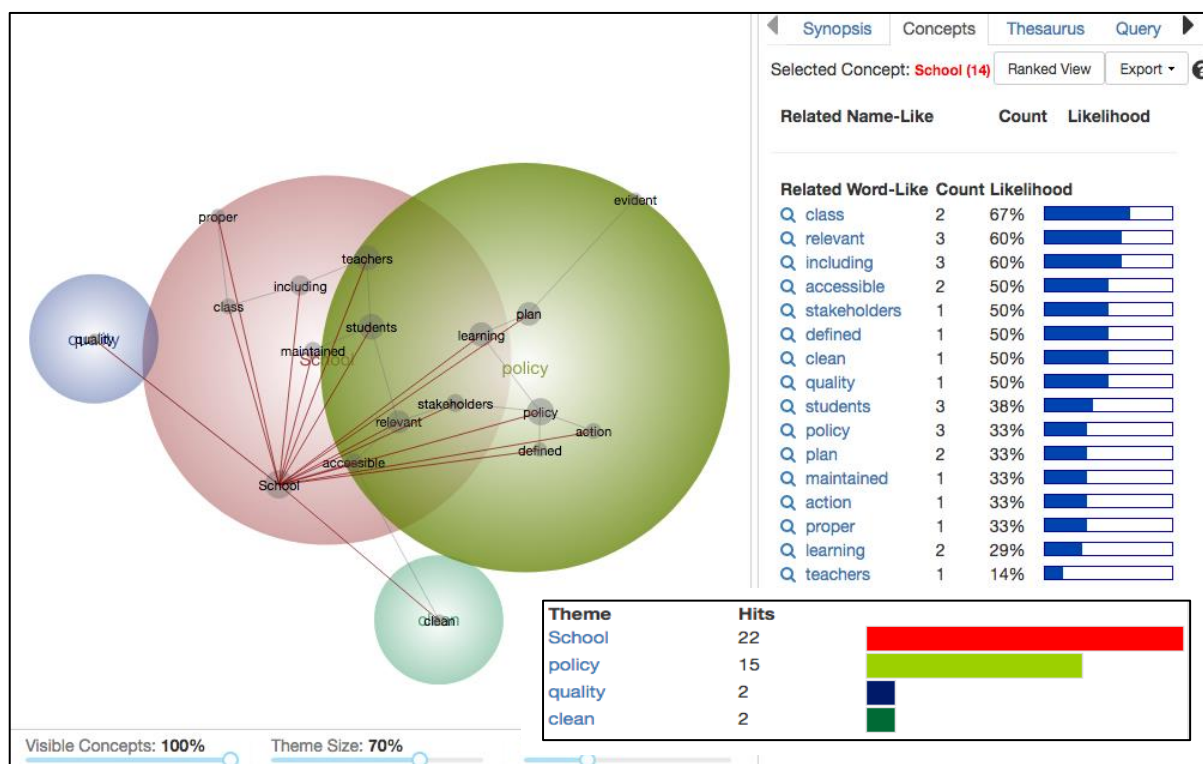
The fourth theme, ‘plan’, is interrelated to the first theme, *teacher*. It refers to the need for teachers to have an instructional plan and a professional development plan.

The fifth theme, ‘proper’, is related to the second theme, school, referring to proper school management practices, such as finance, human resource, materials and school wastes. The authors are aware of the value-laden nature of the term proper. The term was identified by Leximancer as it appeared in the data documents.

Material-economic Arrangements

The School Self-Assessment has 35 indicators that were coded as material-economic arrangements. Leximancer generated four themes as shown in Figure 8 at 70% theme size.

Figure 8: Concept Map for Material-Economic Arrangements



The first theme, 'school', is the most important theme. The theme refers to the concepts of relevant and accessible arrangements that school leaders need to put in place for the benefit of teachers and students. This includes learners and instructors of Early Childhood Care and Development and Non-Formal Education centres. The school leaders are also expected to institute proper monitoring and feedback systems; and maintain facilities and records that are accessible to students, teachers and stakeholders.

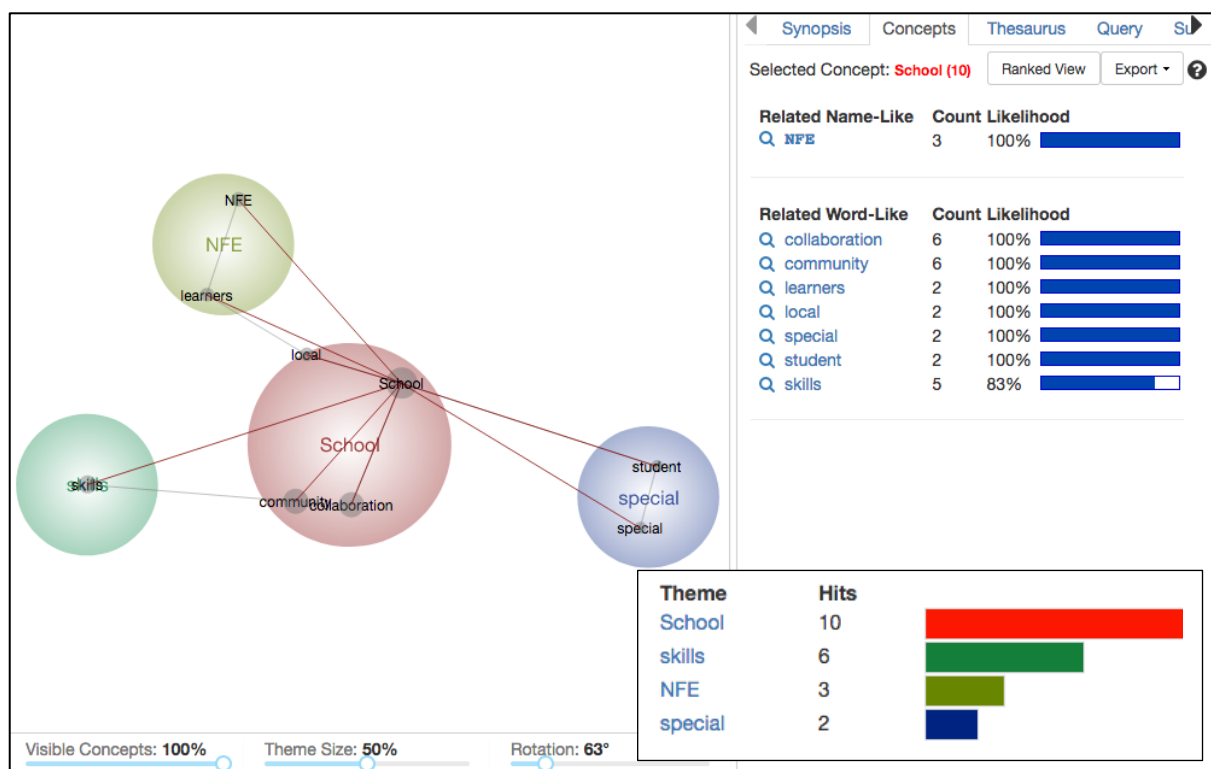
The second theme, 'policy', refers to the role of school leaders to put in place well defined policies in the form of guidelines, action plans, and regulations to enhance students' learning. Schools are expected to develop policies in collaboration with relevant stakeholders.

The third and the fourth themes, 'quality' and 'clean', are related to the first theme, school. They refer to the role of school leaders to provide quality infrastructure and teaching learning materials and to ensure that they are adequate, accessible and clean. However, access and adequate infrastructures and facilities referred only to toilets, classrooms, and sports facilities.

Relatings

Leximancer derived four themes for relatings when the theme size was set to 50%, as shown in Figure 9. The first theme, 'school', had the highest co-occurrences with other concepts and themes. It refers to the role of school leadership to extend education beyond the academics and boundaries of school. Teachers are expected to collaborate with and cater for the communities, as well as promote local and traditional games, advocate environmental education, and promote a healthy lifestyle.

Figure 9: Concept Map for Relatings

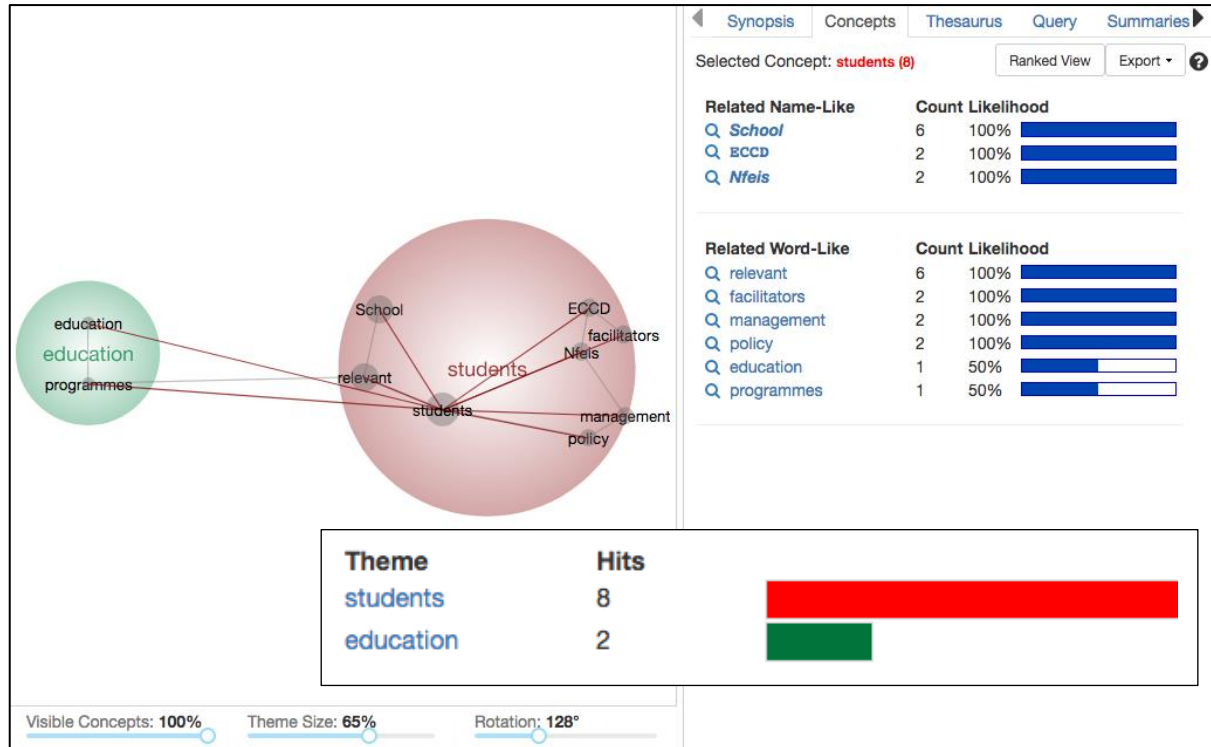


The second theme, 'non-formal education', refers to the role of school leaders to cater to Non-Formal Education learners, Early Childhood Care and Development centres and parents. The third theme, 'skills', refers to the need for school leaders to strengthen life skills, values and attitudes for students and out-of-school youths. The fourth theme, 'special', refers to the role of school leaders to extend support to students with special needs.

Social-political Arrangements

Leximancer derived two themes at 65% theme size for socio-political arrangements. This is shown in Figure 10.

Figure 10: Concept Map for Social-Political Arrangements



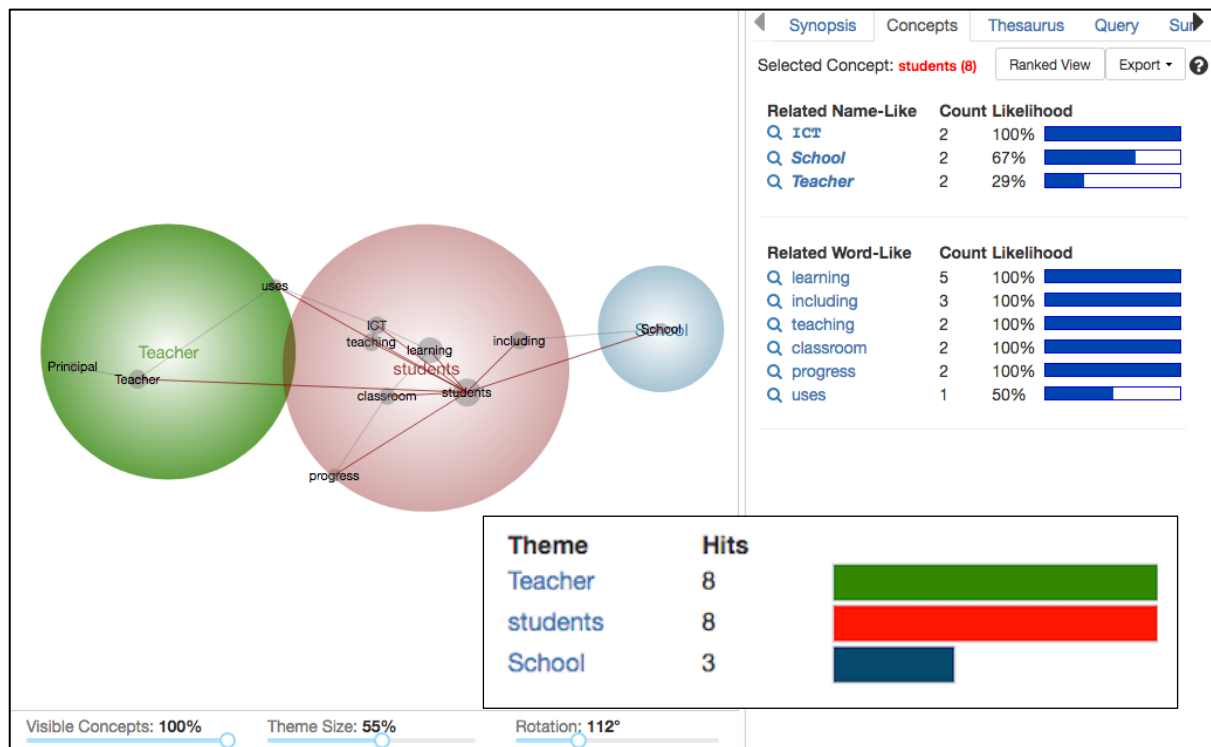
The first theme, 'students', refers to the role of schools to put in place written management policy in consultation with relevant stakeholders. The theme also refers to the role of schools to ensure that teachers, Non-Formal Education instructors, Early Childhood Care and Development facilitators and Special Education Needs Co-ordinators are provided relevant and effective support. The second theme, 'education', refers to ensuring educational programmes that are beyond academic curriculum, such as scouting, and education pertaining to citizenship, life skills, values and parenting.

In the following sections, we explore two of the three scorecards that are used as part of the Performance Management System: the Enabling Practices Scorecard and the Gross National Happiness Scorecard. Each comprises 16 indicators. These scorecards are analysed using the theory of practice architectures.

Enabling Practices Scorecard

Based on our manual coding, five of the sixteen indicators (31.25%) were coded as doings. This was surprising as the name of this scorecard, Enabling Practices, suggests that these indicators are more about arrangements than activities. Interestingly, Leximancer derives students as the most important theme, referring to the classroom practices of teachers who will have learning impact on students. The theme included teaching strategies, assessment practices to gauge student progress, and the use of ICT, lesson planning, and remedial programmes by the teachers. This theme had the highest co-occurrences with other concepts, making it the most important theme, as shown in Figure 11. The remaining 11 indicators (68.75%) were material-economic arrangements (9 indicators) and social-political arrangements (2 indicators). There were no indicators for cultural-discursive arrangements.

Figure 11: Concept Map for the Enabling Practices Scorecard



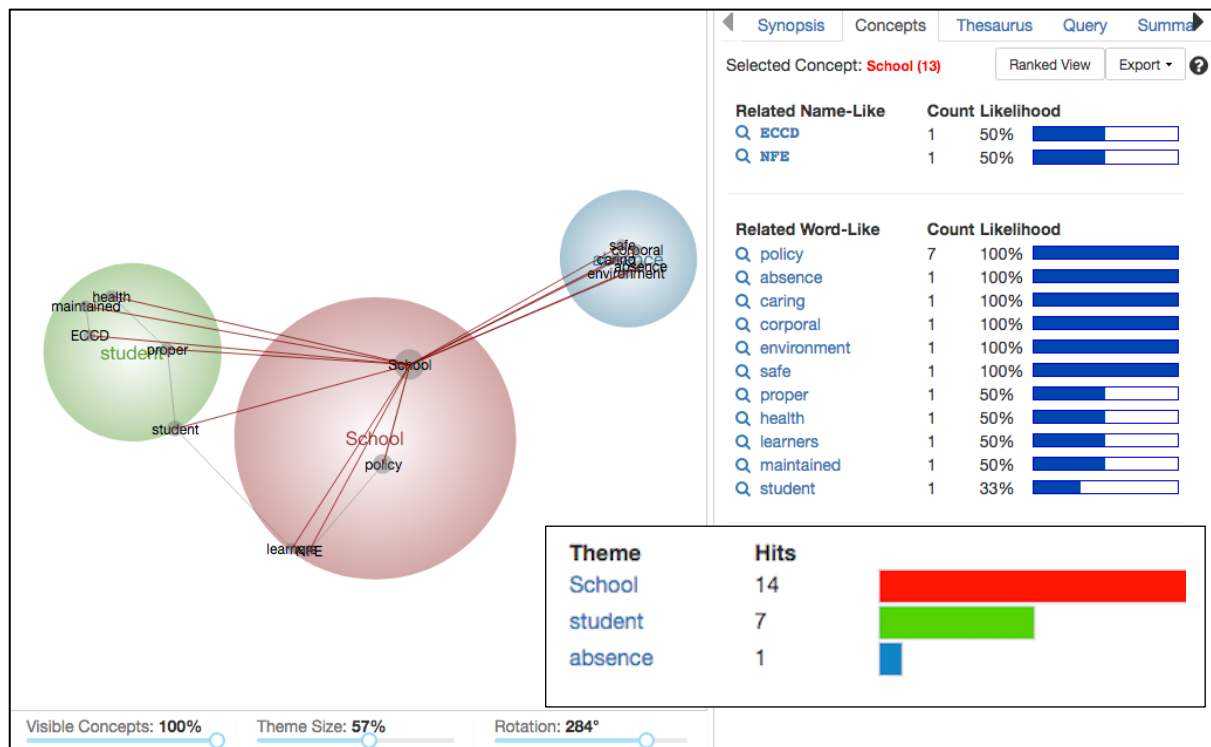
The Leximancer analysis derived three themes: ‘ICT’, ‘teacher’ and ‘school’. The theme teacher refers to the concepts that identify the support that the school principals will need to provide for the teachers, Non-Formal Education instructors and Early Childhood Care and Development facilitators in terms of teaching-learning materials and professional development. It also refers to role of teachers to use quality teaching-learning material and ICT for day-to-day teaching-learning purposes.

The third theme, ‘school’, refers to the leadership practices of schools that warrants arranging facilities that would indirectly enable or contribute to teachers’ teaching and curriculum practices and/or enhance the school ambience. They include: arrangements of adequate, accessible and clean toilets; adequate, safe and sufficient drinking water; and arranging relevant remedial programmes for students scoring less than 45% in test scores.

Gross National Happiness (GNH) Scorecard

Based on the manual coding, seven of the 16 indicators (44%) were coded as activities. Ideally all the GNH indicators should be activities as they are supposed to be indicators of GNH practices. It is interesting to note that all 16 GNH indicators assess the leadership performances of schools in non-academic educational domains. The Leximancer analysis triangulated these findings (see Figure 12).

Figure 12: Concept Map for the Gross National Happiness (GNH) Scorecard



The first theme, ‘school’, referred to concepts of school leadership practices in order to enhance other educational domains besides academics and curriculum. The concepts ranged from policies related to physical and psychological ambience to health, discipline, life skills, GNH values, cultural and spiritual practices, mindfulness practices and co-curricular and extra-curricular activities. Schools are also expected to extend and involve education to parents and non-formal education learners in the community.

The second theme, ‘students’, referred to school leadership practices that would empower students and student leaders, including non-formal education learners, Early Childhood Care and Development children, parents and community for school development affairs, and social and cultural events. The school leadership practices also need to ensure that proper health records for students are maintained. There were also indicators requiring schools to be litter free with proper waste management practices and to maintain beautiful flower gardens, hedges and plants in the school campus/environment.

The third theme, ‘absence’, refers to the role of school leaders to create a safe, caring and supportive environment, such as making sure there is an absence of abuse, bullying, corporal punishment, humiliation, and harassment.

Discussion

The theory of practice architectures offered three key insights into the assessment of Educating for Gross National Happiness (EGNH) practices in Bhutan. First, the indicators were not equally represented in terms of practice architectures; second, the indicators under-emphasised the centrality of teachers’ role in EGNH practices; and finally, the GNH scorecard did not holistically assess GNH practices. These three findings are discussed next.

Unequal Representation of Practice Architectures

The number of indicators for activities and arrangements indicated that the School Self-Assessment has placed most importance on the doings (33%) and its corresponding material-

economic arrangements (36%). The sayings (4%) and relatings (12%), as well as their corresponding cultural-discursive (4%) and social-political (11%) arrangements, are underrepresented compared to doings and material-economic arrangements. The disregard of sayings and cultural-discursive arrangements is surprising in the context of Bhutan, which has a culture rich with oral traditions and given the extent to which Bhutanese cultural perspectives and worldviews are influenced by Buddhist values and principles. Indeed, the ethics of speech (Tashi Wangyel, 2001; The Dalai Lama, 1995) and language are quintessential cultural pillars in Bhutan. Similarly, core Bhutanese values (*tha dam-tshig ley gju-drey*), as stated in the vision statement and other policy documents of the Ministry of Education (2014, 2017, 2020, 2021), mandate stronger representation of activities and arrangements for relatings and social-political arrangements.

There is an absence of relationships between the indicators of sayings and cultural-discursive arrangements. The four indicators of sayings relate to how appropriately teachers communicate with students and whether homework and assignments were provided, which is limiting the essence of sayings of the theory of practice architectures. While cultural-discursive arrangements should make sayings possible (Mahon et al., 2017), the four indicators of the cultural-discursive arrangements in the School Self-Assessment do not relate to the indicators of sayings in those ways.

These findings suggest that the School Self-Assessment does not align with the aims set out by the Ministry of Education (2014), stipulating that teachers should exhibit exemplary use of verbal and non-verbal communication strategies to support learning. The School Self-Assessment deviates from the recommendations of the *Bhutan Education Blueprint 2014–2024: Rethinking Education* (MoE, 2014) that declares communicative competency as one of the nine student attributes and declares that students develop mastery of Dzongkha and English.

The Ministry of Education (2014) in Bhutan also overemphasises the importance of Dzongkha and English, to the extent that some schools penalise students for using their own local dialect in the school. The researchers view this practice as culturally and socially damaging. English as the medium of instruction since 1964 (Kezang Sherab, 2013) has proven to be of benefit to the Bhutanese, but there are challenges when it comes to the preservation of unique Bhutanese culture and traditions (Kezang Sherab, 2013; Tashi Wangyel, 2001). Tashi Wangyel (2001) also asserted that the Bhutanese value English language more than Dzongkha, and Kezang Sherab (2013) suggested there is a need for teachers to model effective classroom use of language and feedback.

The lack of emphasis on sayings is also apparent in the Enabling Practices Scorecard. The themes derived for the Enabling Practices Scorecard were mostly concerned with academic and instructional indicators (12 indicators). The two indicators on infrastructure were for drinking water and toilets. Academic infrastructure like classrooms, library, and laboratories appeared to be missing. We contend that the Enabling Practices Scorecard should address indicators that enable GNH practices. These could include plans and policies, infrastructure and physical environment, finance, human and non-human resources, and organisational rules and regulations. While eleven of the 16 indicators were coded as arrangements, there was no indicator for cultural-discursive arrangements, indicating a lack of support or importance for practices of language sayings.

The School Self-Assessment appears to have provided considerable emphasis on doings and material-economic arrangements (69% of the 98 indicators). From an academic and a management perspective, the indicators under doings and material-economic arrangements appear comprehensive. The arrangements also appear to correspond to the activities of doings. The dominance of doings and material-economic arrangements can be partly attributed to the influence of the modern education system, economic modernisation and materialism that have drifted focus away from traditional values, attitudes and expectations (Tashi Wangyel, 2001).

The activities on relatings and social-political arrangements comprised 23.4% of indicators, compared to 68.4% of indicators coded as either *doings* or material-economic arrangements. The relatings (12 indicators) and social-political arrangements (11 indicators) were underrepresented in the School Self-Assessment. This unequal allocation of indicators does not align with the vision of the Ministry of Education (2014) with *tha dam-tshig ley gyu-drey* as the core values of interdependency and relationships.

The standards of the *Bhutan Professional Standards for Teachers* (MoE, 2020, 2021) articulate the need for teachers to collaborate with parents and community. Therefore, there is a basis to balance the number of indicators from the practices of sayings and relatings and their corresponding arrangements, since “*Bhutan’s development philosophy based on the idea of enhancing GNH requires that development must be both economically as well as socially sustainable*” (Tashi Wangyel, 2001, p. 106). The themes derived by Leximancer for both relatings and social-political arrangements were dominated by themes of leadership and management practices. The researchers also argue that the School Self-Assessment could benefit by including additional indicators to assess teachers’ roles for relatings and social-political arrangements.

Underemphasis of the Centrality of Teachers’ Roles

The two most important themes of the School Self-Assessment were school and students, referring to the leadership roles of schools, and students as the ultimate beneficiaries of the school system. The theme, *teacher*, received the third importance. This implies that the School Self-Assessment indicators are more focused on the leadership and management practices of schools. While the importance of leadership cannot be denied, effective teaching and learning are directly impacted by teachers. Considering 35 indicators out of 98 (35.7%) were of material-economic arrangements, this finding is strengthened, as the resource management of schools is predominantly the role of school leaders. It is timely to consider how to improve the School Self-Assessment to include more indicators for teachers, to balance the focus between school leadership and teachers.

The teaching practices by teachers was the dominant theme under *doings*. However, we found that the emphasis is on school leadership and management activities. Four of the five themes under *doings* were related to leadership and management. To fulfil EGNH goals, without denying the need for effective leadership, the focus on teacher-activity *doings*—to bring positive impacts to student-practice *doings*—could be given equal emphasis.

All the themes under material-economic arrangements are related to school leadership and management, as per the interpretation of the indicators identified by the Leximancer software in the original data. While it is understandable and appropriate to see that all indicators under material-economic arrangements could be achieved through leadership and management practices, more indicators or emphasis on *doings* through teaching and its related practices may be more promising and may bring more positive outputs, since teachers play a significant role in infusing GNH values to students in all domains of school programmes.

It is also worth noting that, although the indicators through the theme overview appear to be comprehensive, on closer examination of the specific indicators, quality of infrastructure and cleanliness referred only to sports facilities and toilets respectively, and not the academic infrastructures, which may be equally important to enable the activities of *doings*. There is also room to include indicators of *doings* based on Bhutanese values (MoE, 2014), such as role modelling physical conduct based on cultural and traditional etiquettes of the country, as these should not be ignored in order to fulfil the goals of GNH.

Limited Scope of the GNH Scorecard

The GNH scorecard is designed to measure achievement on GNH values and practices in schools (Education Monitoring Division, 2020). It includes co-curricular activities, stakeholder

involvement in schools, student health, cultural and spiritual promotion, school-community relations, student personal development, and school environments. The Leximancer findings aligned with the purposes of the GNH Scorecard. The three themes, *school*, *student* and *absence* indicated leadership practices for enhancing other educational domains, such as health, discipline, life skills, GNH values, cultural and religious values, mindfulness, and co-curricular and extra-curricular programmes.

We argue that the GNH Scorecard could comprise additional indicators to assess principals' and teachers' GNH activities in terms of sayings, doings and relatings. The GNH Scorecard could contain indicators that mandate, encourage, promote and enhance school principals' and teachers' (1) educational and communication activities (sayings), (2) educational actions or doings in terms of their daily habits (doings), and (3) relationships within school, outside and in the wider environment (relatings) (Kemmis & Grootenboer, 2008; Mahon et al., 2017).

Conclusion

Using the theory of practice architectures, we examined the Performance Management System, the main tool for assessment of EGNH practices in Bhutan, and two of the School Performance Scorecards. The study has provided valuable insights into reviewing the educational practices of Bhutan. The School Self-Assessment indicators were outnumbered by doings and material-economic arrangements, which was possibly the result of economic modernisation, industrialisation, the modern and secular education system, democratisation and mass media (Tashi Wangyel, 2001). While policies and practices concerning economic development are important, the Ministry of Education needs strategies and interventions to equally ensure prosperity of the other practice architectures, namely, the sayings and relatings, to ensure social sustainability in disseminating GNH values.

Tashi Wangyel (2001) proposed reviving earlier Dzongkha courses with modern teaching pedagogy based on Buddhist philosophy and promoting Buddhist values emphasising virtues like altruism, reciprocity, and interdependence among others. Alternatively, Tashi Wangyel's (2001) proposal may be repackaged to introduce a subject called GNH Value Education, as recommended by Pema Thinley (2016), to provide time and space for students to deepen their understandings of GNH Values as they live their lives. While these suggestions among others may seem promising in terms of improving GNH infusion within schools, our research suggests that any such initiative must first and foremost address all three practices—sayings, doings and relatings—which should be embedded in the initiatives and their monitoring plans.

This study identified areas for future development to ensure that the Performance Management System enhances GNH practices. This is imperative for Bhutan to enable cultural sustainability which is one of the pillars of GNH. The analysis techniques of manual coding and Leximancer revealed that the major focus of the School Self-Assessment indicators is on school leadership. The Ministry of Education commissioned the *Bhutan Professional Standards for Teachers* in 2019 (MoE, 2020), recognising teachers as the most important factor contributing to the quality of education. The review of the School Self-Assessment indicators could benefit from being aligned with the teacher standards. There is also potential value in ensuring that assessment involves all stakeholders, including managers, teachers, students, and community members. The methods employed here could be used to examine educational practices beyond those of Bhutan.

References

- Bahdanovich Hanssen, N. (2019). Using the theory of practice architectures to articulate special educational needs practices in Belarusian and Norwegian preschools. *European Journal of Special Needs Education*, 35(2), 188–202. <https://doi.org/10.1080/08856257.2019.1643149>

- Education Monitoring Division. (n.d.). School performance management system. http://202.144.155.183/EMD/index.php/welcome/find_content/
- Edwards-Groves, C., & Grootenboer, P. (2015). Praxis and the theory of practice architectures- Resources for re-envisioning English education. *Australian Journal of Language and Literacy*, 38(3), 150–161. <https://search.informit.org/doi/abs/10.3316/informit.480213065682061>
- Edwards-Groves, C., & Grootenboer, P. (2017). Learning spaces and practices for participation in primary school lessons: A focus on classroom interaction. In K. Mahon, S. Francisco, & S. Kemmis (Eds.), *Exploring education and professional practice* (pp. 31-47). Springer. <https://link.springer.com/book/10.1007/978-981-10-2219-7>
- Gross National Happiness Commission. (n.d.). 9th Five year plan (2003–2008). Gross National Happiness Commission. https://www.gnhc.gov.bt/en/?page_id=15
- Hemmings, B., Kemmis, S., & Reupert, A. (2013). Practice architectures of university inclusive education teaching in Australia. *Professional Development in Education*, 39(4), 470-487. <https://doi.org/10.1080/19415257.2013.796293>
- Kaka, Miller, J., & Rizk, N. (2022). Assessing Educating for Gross National Happiness in Bhutanese schools: A new direction. *Bhutan Journal of Research and Development*, 11(1), 22-41. <https://doi.org/10.17102/bjrd.rub.11.1.024>
- Karma Ura, Alkire, S., Tshoki Zangmo, & Karma Wangdi. (2012). *An extensive analysis of GNH index*. Centre for Bhutan Studies. <https://doi.org/10.35648/20.500.12413/11781/ii036>
- Kemmis, S., & Grootenboer, P. (2008). Situating praxis in practice: Practice architectures and the cultural, social and material conditions for practice. In S. Kemmis & T. J. Smith (Eds.), *Enabling praxis* (pp. 37–62). Brill Sense. https://doi.org/10.1163/9789087903275_004
- Kezang Sherab. (2013). *Gross National Happiness education in Bhutanese schools: Understanding the experiences and efficacy beliefs of principals and teachers* [Doctoral dissertation, University of New England]. Research UNE. <https://rune.une.edu.au/web/handle/1959.11/16997>
- Kezang Sherab, Maxwell, T. T., & Cooksey, R. W. (2016). Teacher understanding of the Educating for Gross National Happiness initiative. In M. J. Schuelka & T. W. Maxwell (Eds.), *Education in Bhutan: Culture, schooling, and Gross National Happiness* (pp. 153–168). Springer. https://link.springer.com/chapter/10.1007/978-981-10-1649-3_10
- Leximancer. (2021). *Leximancer user guide: Release 4.5*. <https://doc.leximancer.com/doc/LeximancerManual.pdf>
- Lhawang Ugyel. (2017). A decade of performance management reforms in Bhutan: Problems and prospects. *South Asian Journal of Human Resources Management*, 4(2), 185–190. <https://doi.org/10.1177/2322093717736640>
- Mahon, K., Kemmis, S., Francisco, S., & Lloyd, A. (2017). Introduction: Practice theory and the theory of practice architectures. In K. Mahon, S. Francisco, & S. Kemmis (Eds.), *Exploring education and professional practice: Through the lens of practice architecture* (pp. 1–30). Springer. https://link.springer.com/chapter/10.1007/978-981-10-2219-7_1

- Ministry of Education. (2011). *Educating for GNH: Refining our school education practices*. Department of Curriculum Research and Development.
- Ministry of Education. (2013). *Educating for Gross National Happiness* [Training manual]. Ministry of Education.
- Ministry of Education. (2014). *Bhutan education blueprint 2014–2024: Rethinking education*. <http://www.education.gov.bt/wp-content/downloads/publications/publication/Bhutan-Education-Blueprint-2014-2024.pdf>
- Ministry of Education. (2017). *General guidelines for school management*. <http://www.education.gov.bt/wp-content/uploads/2021/09/A-Guide-to-School-Management-Contents.pdf>
- Ministry of Education. (2020). *Bhutan professional standards for teachers*. <http://www.education.gov.bt/wp-content/uploads/2020/09/BPST.pdf>
- Ministry of Education. (2021). *Illustrations of practice: Bhutan professional standards for teachers*. <http://www.education.gov.bt/wp-content/uploads/2021/04/Illustrations-of-practice-website.pdf>
- Ministry of Education Policy and Planning Division. (2012). *30th Education policy guidelines and instructions*. <http://www.education.gov.bt/wp-content/uploads/2021/09/EPGI-2012.pdf>
- Pema Thinley. (2016). Overview and “heart essence” of the Bhutanese education system. In M. J. Schuelka & T. W. Maxwell (Eds.), *Education in Bhutan: Culture, schooling, and Gross National Happiness* (pp. 19–37). Springer. https://link.springer.com/chapter/10.1007/978-981-10-1649-3_2
- Pema Tshomo. (2016). Conditions of happiness: Bhutan’s Educating for Gross National Happiness initiative and the capability approach. In M. J. Schuelka & T. W. Maxwell (Eds.), *Education in Bhutan: Culture, schooling, and Gross National Happiness* (pp. 139–152). Springer. https://link.springer.com/chapter/10.1007/978-981-10-1649-3_9
- Petrie, K. (2016). Architectures of practice: Constraining or enabling PE in primary schools. *Education* 3–13, 44(5), 537–546. <https://doi.org/10.1080/03004279.2016.1169484>
- Powell, D. (2020). In-service teachers’ practice of learning to teach, the theory of practice architectures and further education-based teacher education classes in England. *International Journal of Training Research*, 18(1), 8–21. <https://doi.org/10.1080/14480220.2020.1747787>
- Salamon, A., Sumsion, J., Press, F., & Harrison, L. (2016). Implicit theories and naive beliefs: Using the theory of practice architectures to deconstruct the practices of early childhood educators. *Journal of Early Childhood Research*, 14(4), 431–443. <https://doi.org/10.1177/1476718X14563857>
- Schuelka, M. J., & Maxwell, T. W. (2016). Education in Bhutan. In M. J. Schuelka & T. W. Maxwell (Eds.), *Education in Bhutan: Culture, schooling, and Gross National Happiness* (pp. 1–15). Springer. https://link.springer.com/chapter/10.1007/978-981-10-1649-3_1

- Sjølie, E., & Østern, A. L. (2020). Student teachers' criticism of teacher education – through the lens of practice architectures. *Pedagogy, Culture & Society*, 29(2), 263–280. <https://doi.org/10.1080/14681366.2020.1729842>
- Smith, A. E., & Humphreys, M. S. (2006). Evaluation of unsupervised semantic mapping of natural language with Leximancer concept mapping. *Behavior Research Methods*, 38(2), 262–279. <https://link.springer.com/content/pdf/10.3758/BF03192778.pdf>
- Sonam Zangmo. (2014). *A Gross National Happiness infused curriculum: The promise of a more meaningful education in Bhutan* [Doctoral dissertation, Western Michigan University]. ScholarWorks@WMU. https://scholarworks.wmich.edu/masters_theses/536/
- Tashi Wangyal. (2001). Ensuring social sustainability: Can Bhutan's education system ensure intergenerational transmission of values? *Journal of Bhutan Studies*, 3(1), 106–131.
- The Dalai Lama. (1995). *The world of Tibetan Buddhism: An overview of its philosophy and practice* (Thupten Jinpa, Trans.). Wisdom Publications.
- The Dalai Lama. (2011). *Beyond religion: Ethics for a whole world*. Houghton Mifflin Harcourt Publishing.
- Uchida, M., Cavanagh, M., & Lane, R. (2020). Analysing the experiences of casual relief teachers in Australian primary schools using practice architecture theory. *British Educational Research Journal*, 46(6), 1406–1422. <https://doi.org/10.1002/berj.3653>
- Weber, R. P. (1990). *Basic content analysis* (2nd ed.). Sage.