IN THIS ISSUE

bjrd
Bhutan Journal of Research & Development

BHUTAN JOURNAL of
RESEARCH & DEVELOPMENT

bjrd
Bhutan Journal of
Research & Development

bjrd

Bhutan Journal of
Research & Development

CONTENTS

Reading Attitude of Students of a Middle School and Effects of a Two-year In-class Reading Intervention on Them

Chencho Wangchuk and Choney Zangmo

Abstract

This study investigated the attitude of the students of a middle school towards reading and examined the effects of a two-year in-class reading program on them. Adopting a mixed-method research design, this study involved a class of students of a middle school in Bhutan. Data were collected by means of Elementary Reading Attitude Survey (ERAS) and semi-structured interviews. While the ERAS revealed positive attitude towards reading, there was not statistically significant relationship between gender and attitude towards reading. The qualitative data revealed four positive effects of the two-year in-class reading on them, however. The two-year in-class reading has seemingly improved participants' speaking and writing skills, enhanced their learning of subjects studied in English, broadened their minds, and assisted their character and personality developments. These findings strongly suggest teachers and parents to institute reading programs both at schools and at homes so that the reading habits contribute to learning of academic subjects and their academic achievements. The habit also expects acceleration of acquisition of English language skills, both productive and receptive skills.

Keywords: Reading attitude, Bhutanese students' attitudes towards reading, impacts of reading

Introduction

English language teaching primarily focuses on reading, writing, listening, and speaking. Of these skills, scholars consider reading as the most important skill (Chettri & Rout, 2013; Farzaneh & Nejadansari, 2014; Guvenc, 2017; Harmer, 2001; Huang, 2015; Yusof, 2010) because of positive effects it has on students'

academic achievement (Chotitham & Wongwanich, 2014; Egong, 2014; Issa et al., 2012; Owusu-Acheaw & Larson, 2014; Senturk, 2015), writing style (Krashen, 1993, as cited in Annamalai & Muniandy, 2013), and communicative competence (Baruah, 2006). In line with these benefits, Bhutan's English curricula also regard reading as key to ". . . unlocking the vault of the wisdom of the race" (Royal Education Council [REC], 2020, p. xxi) from pre-primary through grade twelve. Accordingly, they mandate both teachers and students to fulfill the prescribed standards for reading.

Despite such requirements, the Bhutanese high school students were found to be performing poorly in English. For example, both Royal Education Council [REC] and Education Initiatives Private Limited [EIPL] (2011) and Bhutan Council for School Examinations and Assessment [BCSEA] (2015) reported low performances among Bhutanese students in English. Similarly, according to BCSEA (2019), the average literacy among Bhutanese students in the PISA-D was reported at 45.34%. Although it was 4.08% higher than the averaged PISA-D solution rates (41.26%) of other participating countries, her average was found below the average of Organization for Economic Cooperation and Development [OECD]. The report attributed it to Bhutanese students' inability to perform tasks that demanded higher cognitive skills. Other reasons may include poor comprehension ability (BCSEA, 2013), reading difficulties (Rasinski et al., 2005), and negative attitude towards reading (Senturk, 2015; Worthy & Broaddus, 2001/2002). Decline in reading culture with maturity (Choezom, 2013; McKenna et al., 1995; Sainsbury & Schagen, 2004), watching home videos (Adetunji, 2007), poor parental role in children's education (Wangchuk & Zangmo, 2019), and wasting time on internet and social media may be other contributing factors.

With reference to students' attitude towards reading, previous studies show some inconsistencies in their findings. For example, McKenna et al. (1995) and Sainsbury and Schagen (2004) found their respondents' attitude towards reading declining as they progressed from low to higher grades. No or little guided reading practice during formative ages of these respondents could have caused this decline. Finding reading a difficult activity and availability of other learning avenues

such as internet, computer, mobile games, and music may be its other possible causes (Annamalai & Muniandy, 2013).

Some studies, however, reported otherwise. A study by McQuillan (2013) found no evidence of decline in students' attitude towards reading with age, for instance. Instead, it found students' attitude positive towards reading. As in it, some studies also found reading attitude of females more positive than their male counterparts (e.g., Mohd-Asraf & Abdullah, 2016; Wangchuk et al., 2020), implying that reading was more a habit among females than males. While in some studies, interventions appeared to have influenced students' attitudinal inclination towards reading. Hurst et al. (2010), Lee (2014), and Sheu (2004), for instance, observed significant increase in their subjects' attitude towards reading after the administration of reading graded readers and books for native English-speaking children, freedom to choose books and availability of dictionaries, attendance in a qualified reading-teacher's class, and peer-assisted learning strategies, respectively.

Findings of these studies reveal attitudinal variations between primary and university students. However, little is known about middle school students' attitude towards reading. Neither is there an evidence of a study that investigated the impacts of reading on Bhutanese students. This study, therefore, investigated the Bhutanese students' attitude towards reading as "emotional response to reading . . . is the primary reason most readers read, and probably the primary reason most nonreaders do not read" (Smith, 1988, p. 177). Learners' attitude also influences learning a second language (Savignon, 1997) and determines positive reading experiences (Annamalai & Muniandy, 2013). Such attitudinal evaluation may, therefore, offer insights into whether or not Bhutanese learners' attitude hinder or facilitate learning (Farzaneh & Nejadannsari, 2014) English through reading. Besides developing life-long readers (Lee, 2014; McKenna et al., 1995), positive attitude towards reading can enhance students' academic potential (Owusu-Acheaw & Larson, 2014). Therefore, unless reading is developed and sustained in students as a lifelong habit, they may neither be able to ". . . participate meaningfully in a knowledge-based society" (REC, 2012, p.38) nor can the schools

raise their learning outcomes (Ministry of Education [MoE], 2014). Hence, this study investigated the Bhutanese high school students' attitude towards reading and examined the impacts of scheduled in-class reading on them.

The findings of this study would inform both teachers and parents the importance of instituting reading program and the positive effects it would have on students' academic achievements in English and other English-medium subjects and in accelerating acquisition of English language skills.

Research Questions

What is the general attitude of students of a middle school towards reading?
What is the relationship between participants' attitude towards reading and their gender?
What are the effects of a two-year in-class reading program on students?

Methods

This study employed a mixed-methods research design. It is a design that employs both quantitative and qualitative approaches in understanding a phenomenon in a single study (Creswell, 2003; Fraenkel et al., 2012), that is the reading attitude of students studying in a middle school and the effects of a two-year in-class reading program on them. The combination of these methods expected the study to provide a complete understanding of the phenomenon (Creswell, 2012; Fraenkel et al., 2012; Racco et al., 2003). Moreover, as the strengths of one approach compensate the weaknesses of the other (McDowell & MacLean, 1998), this design reduces biases but increases reliability and trustworthiness.

Participants

Thirty-one (12 males and 19 females) students studying in grade 10 in a middle school participated in this study. While all these students responded to the survey questionnaire, only six of them (three males and three females) participated in the semi-structured interview. They are named as I1, I2, I3, I4, I5, and I6.

As the researchers taught these students English as a second language in their ninth and tenth grades respectively, they were aware of their strengths and weaknesses in English language. Due to this awareness, the researchers could easily employ different reading strategies such as reading aloud, guided reading, structured independent reading, wide reading, assisted reading, and deep reading (MoE, 2005; Paige et al., 2012; Rasinski et al., 2005; Worthy & Broaddus, 2001/2002) within that 15-minute in-class reading schedules. To ensure seriousness during reading classes, timely interventions such as written and oral reviews and in-class book-talks were also inserted as part of formative assessment.

Instruments

McKenna and Kear (1990)'s Elementary Reading Attitude Survey (ERAS) which consists of 20 items catering to recreational and academic reading was administered to collect quantitative data. It investigated the participants' attitude towards reading. Qualitative data were collected through semi-structured interviews, and they examined the effects of in-class reading program on them. Further, in order to confirm the observable effects of in-class reading on them, the analyses of interviews were later crosschecked with their three-year examination results.

To validate and contextualize the survey questionnaire and interview questions, the researchers requested three English language lecturers, who have knowledge about research, to provide suggestions regarding their content relevancy, contextual appropriateness, and linguistic ambiguity. Neither did they suggest any changes in the ERAS nor did it need pilot-testing. According to McKenna and Kear (1990), the reliability coefficients of the two subscales ranged from .74 to .89. However, some changes were made in the interview questions as per their advice.

Data Collection Procedures

Prior to the data collection, the researchers sought permission from the participating students. The main aim of it was to strictly monitor the scheduled 15-minute in-class reading program and to provide necessary assistance throughout the two-year period. Next, the researchers distributed each interested student a participant information sheet and an informed consent sheet to be read, signed, and returned to them prior to their participation in this study. All participants were given freedom to withdraw their participation at any moment.

Both the survey and the semi-structured interview were administered on three Saturdays to avoid regular classroom-teaching disruptions. Regarding the reading attitude survey questionnaire, the researchers surveyed it only once at the beginning of the academic year in February 2019 soon after their return from the winter vacation. Then, the researchers initiated a15-minute in-class reading everyday during their English language periods for two years until their graduation from that middle school in December 2020. The interviews were conducted at the end of the academic sessions, but before their examinations, in November of 2020.

Data Analysis

Quantitative data were analyzed by means of descriptive statistics: mean scores and standard deviation. Descriptive statistics computed for the participants' ratings on each item were interpreted as per the following interpretation scale values.

Table 1 Interpretation of the Scale Values

Scale	Range	Attitude
4	3.26-4.00	Very Positive
3	2.51-3.25	Positive
2	1.76-2.50	Negative
1	1.00-1.75	Very Negative

Interview transcriptions were analysed using content analysis technique. Content analysis, according to Hsieh and Shannon (2005), is "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (p. 1278). From the three approaches they discuss in their paper, this study adopted the conventional approach because it allows the categories to emerge from the text data (Hsieh & Shannon, 2005). Following this definition and, as stated by Fraenkel et al. (2012), the researchers coded the descriptive information into categories. Then, the researchers used students' examinations scores to crosscheck and confirm whether the two-year in-class reading has impacted the participants.

Results

This section is divided into two sections. The first section presents the results of the survey questionnaire while the following section discusses the results of the interviews.

Result I: Survey Questionnaire

This section presents the numeric data obtained from the ERAS questionnaire. First part of it discusses the participants' general attitude towards reading followed by their attitude towards recreational and academic reading. The final part of it examines the relationship between participants' gender and their attitude towards reading.

The Participants' Attitude Towards Reading

This section reports the overall ratings of the students' attitude towards reading, and it answers the first research question: *What is the general attitude of students of a middle school towards reading?* As shown in Table 2, from the two reading types, the students' reading attitude was positively inclined towards recreational reading (mean = 3.20, SD=.86) than academic reading (mean = 3.11, SD=.88). From this it could be understood that the participants were interested more in extensive than intensive reading.

Table 2 Participants' Overall Attitude Towards Reading Dimensions

Reading Attitude	M	SD
Recreational	3.20	0.86
Academic	3.11	0.88
Total	3.15	0.87

Still, if interpreted as per the scale values given in Table 1, the participants' attitude (mean = 3.15, SD=.87) was *positive* towards reading.

The Participants' Attitude Towards Recreational Reading

As can be seen in Table 3, all items of recreational reading received good attitudinal ratings ranging from 2.77 to 3.55, indicating *very positive* and *positive* attitude towards recreational reading.

Table 3 Participants' Recreational Reading Attitude

Items of Recreational Reading	N	M	SD
How do you feel about reading different kinds of books?	31	3.55	.72
How do you feel about getting a book for a present?	31	3.55	.81
How do you feel about reading for fun at home?	31	3.48	1.00
How do you feel about starting a new book?	31	3.42	.85
How do you feel about going to a bookstore?	31	3.23	.96
How do you feel about spending free time reading a book?	31	3.16	.86
How do you feel when you read a book in school during free time?	31	3.03	.60
How do you feel when you read a book on a rainy Saturday?	31	3.00	1.00
How do you feel reading during summer vacation?	31	2.81	.95
How do you feel about reading instead of playing?	31	2.77	.84
Total	31	3.20	.86

Further, from the ten items under recreational reading, *How do you feel about reading different kinds of books?* and *How do you feel about getting a book for a present?* received the highest ratings while *How do you feel about reading instead of playing?* the lowest (mean = 2.77, SD=.84) rating. This means, according to the scale values shown in Table 1, the participants displayed *very positive* and *positive* attitude towards four and six items, respectively. However, the differences in SD levels among the items indicate differing attitudes among the participants. For example, although *How do you feel about reading different kinds of books?* (SD= .72) and *How do you feel about getting a book for a present?* (SD=.81) were rated the highest, their SDs were higher than the SD of the item *How do you feel when you read a book in school during free time?* (SD=.60). From this, it must be noted that the participants agreed more on reading a book in school during free time than reading different kinds of books and getting books as presents.

The Participants' Attitude Towards Academic Reading

Table 4 discusses the participants' attitude towards academic reading. The overall attitude of the participants towards academic reading is *positive* (mean=3.11) as the average of the ten academic reading items fall between 2.51-3.25.

Table 4 Participants' Academic Reading Attitude

Items of Academic Reading	N	M	SD
How do you feel about stories you read in reading class?	31	3.58	.67
How do you feel about learning from a book?	31	3.52	.89
How do you feel when it is time for reading in class?	31	3.39	.95
How do you feel about using a dictionary?	31	3.32	.75
How do you feel about reading your schoolbook?	31	3.06	.89
How do you feel when you read out loud in class?	31	3.00	.97
How do you feel about reading in school?	31	3.00	.73
How do you feel about taking a reading test?	31	2.90	1.2
How do you feel when a teacher asks you questions about what you read?	31	2.87	.92
How do you feel reading workbook pages and worksheets?	31	2.45	.85
Total	31	3.11	.88

However, if interpreted as per Table 1, first four items received high ratings between 3.26 – 4.00, indicating *very positive* attitude towards them while the ratings of five other items fell between 2.51 – 3.25. This result indicated a *positive* attitude towards them. However, as *How do you feel reading workbook pages and worksheets?* received the lowest rating (mean = 2.45, SD=.85), the participants' attitude towards it was *negative*. This means the participants were *little upset* when it came to reading workbook pages and worksheet while they were *very happy* and *little happy* doing other activities in four and five items, respectively.

However, as SD differs from one item to another, there are differences in attitude towards academic reading as well. For example, the participants' attitudinal deviation is more on items *How do you feel about learning from a book?* (SD = .89) and *How do you feel when it is time for reading in class?* (SD = .95) than on *How do you feel about using a dictionary?* (SD = .75) although the former two items received higher average ratings. Similarly, although the average rating of *How do you feel about taking a reading test?* (mean = 2.90, SD=1.2) is higher than the mean of *How do you feel reading workbook pages and worksheets?* (mean = 2.45, SD=.85), the participants' attitudinal deviation is more on the former item than the latter. These differences indicate differing attitudes among participants when it came to reading academic materials.

Relationship Between Participants' Gender and Their Attitude Towards Reading

Tables 5(a) and (b) display the results of independent *t*-tests, and they answer the second question: *What is the relationship between students' gender and their attitude towards reading?*

Table 5 (a) Relationship Between Gender and Participants' Attitude Towards Reading

Group Statistics			N	M	SD	Std. Error Mean
Gender			N	M	SD	Std. Error Mean
Recreational Reading _Score	Male		12	2.98	0.65	0.19
	Female		19	3.34	0.58	0.13
Academic Reading _Score	Male		12	3.00	0.56	0.16
	Female		19	3.18	0.58	0.13

With regard to participants' attitude towards recreational reading, the independent *t*-test result showed no significant statistical difference (p .113>p .05) in mean recreational scores between the two groups. This indicates that neither the females nor the males showed more positive attitude towards recreational reading.

A similar independent *t*-test was also performed to confirm statistical difference between participants' attitude towards academic reading and gender. As in the former, this test result also observed no significant difference (p .402>p 0.05) in mean academic scores between males and females, suggesting that neither of the groups possessed more positive towards academic reading.

Table 5(b) Relationship Between Gender and Participants' Attitude Towards Reading

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Recreational Reading_Score	Equal variances assumed	.459	.503	-1.634	29	.113	-.367	.225	-.827	.092
	Equal variances not assumed			-1.589	21.434	.127	-.367	.231	-.847	.113
Academic Reading_Score	Equal variances assumed	.014	.906	-.851	29	.402	-.179	.210	-.609	.251
	Equal variances not assumed			-.855	23.940	.401	-.179	.209	-.611	.253

Generally, independent *t*-test results showed no significant difference in scores between respondents' gender and their attitude towards both recreational and academic reading. Because the *p*-values in both the reading scores were above the cutoff of .05, there was no statistically significant relationship between gender and attitude towards reading.

Result II: Findings from the Interview Transcriptions

This section presents the findings of the semi-structured interviews, and it answers the third question: *What are the effects of a two-year in-class reading program on students?* Conventional content analysis of the six interview transcriptions revealed four broad benefits of in-class reading program.

Improving Speaking and Writing Skills

According to the participants, the 15-minute in-class reading and practice of numerous reading techniques assisted them in developing their speaking and writing skills. All six participants were grateful to the teachers for sacrificing their teaching time for this initiative. For example, I1, in his interview, shared,

> . . . I am grateful to my English language teachers of both grades nine and ten for initiating a 15-minute in-class reading every day during their periods. Honestly, they have lost their teaching and syllabus coverage time, but me [I] have benefited a lot from that initiative. I can now speak fluently, confidently as compared to my previous years' experiences. . ... My English writing style and standard has also improved a lot . . . other teachers compliment me. (November 7)

A similar view was also shared by another participant:

> Comparatively, I can now speak fluently in a confident manner in morning assemblies and classroom discussions and presentations. Initially, I could never do these things. I have now reduced the use of *ahhs*, *hums*, *such stuff* [fillers] when speaking because my vocabulary has become rich due to reading. I also feel proud of [being] able to write better essays than before,

for instance. Reading made a high [huge] difference in both my speaking and writing skills. (I4, November 15)

Drastic improvements in the three-year comparison results of this group of students strongly approve of improvements in their speaking and writing skills are also evident. In other words, as extensive reading was believed to be the foundation for building and strengthening language skills, this finding strongly suggests both schools and homes to create environments that could develop and promote a culture of reading.

Enhancing Learning of other Subjects

The participants suggested the in-class reading be instituted as an in-school reading program in all schools. Reasons for this suggestion was based on their ability to ". . . understand subject-related concepts quicker" (I5), ". . . explain the concepts in my own words, not needing to retell an idea through rote learning" (I2), and ". . . easily score comparatively higher marks in tests or exams in all subjects" (I3). One participant proudly exclaimed,

I am now better off with this habit [reading]. I have no worries of failing in any subject because I just have to read them as I do other books. In two years, I have read over 40 books from our library in addition to reading for my academic subjects. (I5, November 15)

The participants have also experienced learning of other subjects such as sciences, economics and geography, for instance, easier due to improved comprehension ability after acquiring the habit of reading. One of them recalled,

Previously, I had difficulty learning other subjects because I had difficulty reading and understanding them. Now, learning them has become a little easier. I am happy that I can score a little more in the subjects studied in English. (I6, November 21)

As claimed by all the participants, the scheduled in-class reading has enhanced their academic learning and progress as evident in the means of examination results of the three consecutive years.

Broadening Mind

As opined by some participants, reading has engaged them in productive activities during leisure time. In fact, the participants acknowledged those positive changes in their feelings, thinking and behaviors after reading books. I2 put it succinctly:

> Books have changed my outlook. I see myself think, feel and behave differently considering the experiences shared by the authors. In fact, whenever the teachers give us group assignments or presentation topic[s], I can have multiple [referenced] ideas that effectively strengthen our learning beyond whatever information was available in the textbooks. (November 7)

Similarly, another female participant observed a change in herself:

> Authors have nourished both my thinking and feelings. Books have restructured my 3H's – head, heart and hands. Experiences I have witnessed in the books often have remind[ed] me to relook into a situation whenever I was required to make decisions. (I4, November 15)

> In brief, the participants, as they claimed in the interviews, expressed their ability to think, feel and do certain activities differently after learning new experiences from the books. As a result, they strongly believed in sustaining the habits through planned reading activities.

Developing Personality and Character

Books, according to some participants, have also nurtured and strengthened good personalities and characters and corrected their flawed characters.

> . . . books that cater to personal development or, in other words self-help books change the outlook of a reader. I have personally become considerate. For example, Robin Sharma's book titled *The monk who sold his Ferrari* taught me lessons which I would not have learned from any academic subjects. Thus, after see [-ing] books improve my effective [affective] state; I

decided to spend my time reading books whenever I am free. (I5, November 15)

In addition, I1 noted how engaging reading was,

Books have kept me focused on gathering information that helps me to grow personally through learning of good behaviors and characters. In fact, they did not offer me a single opportunity to engage in unsocial practices such as doing drugs or drinking alcohol, for instance. Instead, they simply encouraged me to discuss ideas and share knowledge. (November 7)

Therefore, it is understood that the participants, due to their engagement in reading good books, have learned to improve their personal and social wellbeing. Reading books have not only diverted them from socially unacceptable engagements, but also built and strengthened their characters that seemingly contributed to becoming good human beings.

Discussion and Conclusion

Supporting the finding of Wangchuk et al. (2020), the participants of this study also perceived reading as an important activity through their positive attitude towards reading. Specifically, as in Wangchuk et al. (2020), the attitude of the participants of this study was slightly more inclined towards recreational than academic reading. This could be due to the perceived notion that the latter is "instrumental and pleasurable" (Harmer, 2001, p. 200) in acquiring other language skills (Harmer, 2001; Stanovich, 1986), improving comprehension skills, and advancing vocabularies (Davis, 1995; Guerrero & Rodriguez, 2009). Unlike in McKenna (1995), McQuillan (2013), Mohd-Asraf and Abdullah (2016), and Wangchuk et al. (2020), no statistically significant attitudinal difference was observed between the two groups.

They also noticed some consequential effects of in-class reading on their overall development and examination results. These findings which resulted from the 15-minute in-class reading substantiate the findings of Hurst et al. (2010), Lee (2014), and Sheu (2004). Such improvements seen in participants' academic achievements besides their positive attitude towards reading could have resulted

from two factors. The first could be reading strategies (see MoE, 2005; Paige et al., 2012; Rasinski et al., 2005; Worthy & Broaddus, 2001/2002) that they practiced under the supervision of the researchers during the entire in-class reading duration. The other could be their engagement in extensive reading in the absence of possible distracters such as access to internet and other electronic devices during the academic sessions. As evident in the three-year comparison results, this timely "exposure, motivation and opportunities" (Harmer, 2001, p. 70) seems to have assisted the participants achieve good academic grounds (Owusu-Acheaw & Larson, 2014). Now that they have gained a stable academic footing, the researchers expect them to continue reading as their lifelong habit.

Supporting Krashen (1993 as cited in Annamalai & Muniandy, 2013) and Baruah (2006), the participants of this study also found reading impactful in improving their speaking and writing skills. Improved production skills (Savignon, n.d.) and reduced errors in English (see Harmer, 2001) seem to have facilitated participants' academic performances resulting in better academic achievements as evident in their three-year comparison results. Therefore, it could be concluded that in-class reading has increased their English language competency, aided decoding concepts and articulating ideas, and quickened learning of other academic subjects. This finding strongly suggests schools and homes to initiate a culture of reading among students as it accelerates acquisition of English as a second language, quickens mastery of both productive and receptive skills (Savignon, n.d.), and raises their academic standards. Consequently, this initiative may address concerns of comprehension ability of Bhutanese students (BCSEA, 2013) and their performance in English subject (BCSEA, 2015; REC & EIPL, 2011).

In-class reading, according to the participants, has also positively reshaped their personal characteristics. Though reading might not have directly affected the participants' physical behaviors but its impacts on their psychological and emotional states could have brought changes in their behaviors as claimed by Annamalai and Muniandy (2013). For example, the participants explicitly stated how reading had positively affected their cognitive, affective and psychomotor skills. The ideas they gathered from and the experiences they witnessed in good

books have seemingly influenced their thinking, feelings and behavioral actions as it is thinking and feelings that often influence individuals' behavioral displays, either good or bad. This finding reveals how impactful reading good books were in addition to emulating and learning these skills at homes and schools. Thus, as Cook et al. (1998) and Green (2002) assert, these findings also advise parents and teachers to inspire and motivate students to read good books especially during their leisure time so that their anti-social behaviors may be reduced (see Rubin, 2002).

In summary, the participants of this study possessed positive attitude towards reading with slightly higher preference for recreational over academic reading. In addition, they also revealed four positive experiences of the two-year in-class reading. The researchers expect the participants to sustain their positive attitude towards reading and strengthen their habit of reading as it tellingly influences them. An independent *t*-test found no significant difference in scores between respondents' gender and their attitude towards both recreational and academic reading.

Recommendations

Based on the findings of this study, the researchers offer two recommendations. First, they suggest English language teachers to promote a culture of in-class reading among students. The earlier would definitely be better in accelerating acquisition of language and behavioral skills and enhancing their academic performances. The other one is the institution of an in-school reading that gives all students equal opportunities to acquire the habit. This could be done in partnership with parents so as to ensure parental involvement in their children's reading at homes.

References

Adetunji, A. (2007). Factors affecting reading habit of secondary school students in Osogbo metropolis. *The Social Sciences, 2*(1), 102-105.

Annamalai, S., & Muniandy, B. (2013). Reading habit and attitude among Malaysian polytechnic students. *International Online Journal of Educational Sciences, 5*(1), 32-41.

Baruah, T. C. (2006). *The English language teacher's handbook (3rded.).* New Delhi: Sterling Publishers Private Limited.

Bhutan Council for School Examinations and Assessment (2013). *National education assessment 2003.* Thimphu: Bhutan Council for School Examinations and Assessment.

Bhutan Council for School Examinations and Assessment. (2015). BCSEA journal of educational assessment. Thimphu: Assessment and Monitoring Division, Bhutan Council for School Examinations and Assessment.

Bhutan Council for School Examinations and Assessment (2019). *Education in Bhutan: Findings from Bhutan's experience in PISA for development.* Thimphu: National Project Center.

Chettri, K., & Rout, S. K. (2013). Reading habits: An overview. *IOSR Journal of Humanities and Social Sciences, 14*(6), 13-17.

Choezom, S. (2013). Bhutan's reading culture fades with the advent of net. *The Bhutanese. https://thebhutanese.bt/bhutans-reading-culture-fades-with-the-advent-of-the-net/*

Chotitham, S., & Wongwanich, S. (2014). Reading attitude measurement for enhancing elementary school students' achievement. *Procedia-Social and Behavioral Sciences, 116*, 3213-3217.

Cook, A. E., Halleran, J. G., & O'Brien, E. J. (1998). What is readily available during reading? A memory-based view of text processing. Discourse Processes Journal (Special Issue): *Memory-Based Text Processing, 26*(2 & 3), 109-129.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approach* (2nd ed.). New Delhi: Sage Publications India Pvt. Ltd.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). New Delhi: Pearson Education.

Davis, C. (1995). Extensive reading: An expensive extravagance? *ELT Journal,49*(6), 329-336.

Egong, A. I. (2014). Reading culture and academic achievement among secondary school students. *Journal of Education and Practice, 5*(3), 132-136.

Farzaneh, N., & Nejadansari, D. (2014). Students' attitude towards using cooperative learning for teaching reading comprehension. *Theory and Practice in Language Studies, 4*(2), 287-292.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). New York, NY, USA: McGraw-Hill.

Green, P. (2002). Teachers intervention in children's reading. *Journal of Childhood Education, 46*(3), 147-149.

Guerrero, N. Y. R., & Rodriguez, G. L. A. (2009). Reading beyond the classroom: The effects of extensive reading at USTA, Tunja. *HOW, A Colombian Journal for Teachers of English, 16,* 71-91.

Guvenc, G. (2017). The effect of awareness raising about using cognitive strategies in foreign language teaching on students' development of reading comprehension skills. *SHS Web of Conferences, 37*, 1-7.

Harmer, J. (2001). *The practice of English language teaching* (3rd ed.)*.* English: Pearson Education Limited.

Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288.

Huang, Y. C. (2015). Why don't they do it? A study on the implementation of extensive reading in Taiwan. *Cogent Education, 2*, 1-13.

Hurst, B., Franklin, K., & Scales, K. B. (2010). How does a high school reading class influence students' reading levels, habits, and perceptions? *Journal of Reading Education, 35*(3), 10-18.

Issa, A. O., Aliyu, M. B., Akangbe, R. B., & Adedeji, A. F. (2012). Reading interests and habits of the federal polytechnic, OFFA, students. *International Journal of Learning & Development, 2*(1), 470-486.

Lee, Y. (2014). Promise for enhancing children's reading attitudes through peer reading: A mixed methods approach. *The Journal of Educational Research, 107*, 482-492.

McDowell, I., & MacLean, L. (1998). Blending qualitative and quantitative study methods I health services research. *Health Informatics Journal, 4*, 15-22.

McKenna, M. C., & Kear, D. J. (1990). Measuring attitude toward reading: A new tool for teachers. *The Reading Teacher, 43,* 626-639.

McKenna, M. C., Kear, D. J., & Ellsworth, R. A. (1995). Children's attitudes toward reading: A national survey. *Reading Research Quarterly, 30*(4), 934-956.

McQuillan, J. (2013). Urban middle and high school students' reading attitudes and beliefs: A large-sample survey. *Global Journal of Human Social Science Linguistics & Education, 13*(7), 31-49.

Ministry of Education (2005). *Reading and Literature (X).* Paro: Curriculum and Professional Support Division.

Ministry of Education. (2014). *Bhutan education blueprint 2014-2024.* Thimphu: Ministry of Education.

Mohd-Asraf, R., & Abdullah, H. (2016). Elementary schoolers' attitudes toward reading in English: How boys feel relative to girls. *English Language Teaching, 9*(6), 134-140.

Owusu-Acheaw, M., & Larson, A. G. (2014). Reading habits among students and its effect on academic performance: A study of students of Koforidua Polytechnic. *Library Philosophy and Practice (e-journal),* 1-23.

Paige, D. D., Rasinski, T. V., & Magpuri-Lavell, T. (2012). Is fluent, expressive reading important for high school readers? *Journal of Adolescent & Adult Literacy, 56*(1), 67-76.

Rasinski, T. V., Padak, N. D., McKeon, C. A., Wilfong, L. G., Friedauer, J.A., & Heim, P. (2005). Is reading fluency a key for successful high school reading? *Journal of Adolescent & Adult Literacy, 49*(1), 22-27.

Racco, T. S., Bliss, L. A., Gallagher, S., & Pérez-Prado, A. (2003). Taking the next step: Mixed methods research in organizational systems. *Information Technology, Learning, and Performance Journal, 21*(1), 19-29.

Royal Education Council & Education Initiatives Private Limited. (2011).*Bhutan's annual status of student learning 2010*. Thimphu: Royal Education Council.

Royal Education Council (2012). *The national education framework: Shaping Bhutan's future.* Thimphu: The School Education and Research Unit.

Royal Education Council. (2020). *Curriculum guide for teachers.* Thimphu: Ministry of Education.

Rubin, D. (2002).*Diagnosis and correction in reading and guiding reading instruction* (4th ed). Boston: Allyn and Bacon.

Sainsbury, M., & Schagen, I. (2004). Attitudes to reading at ages nine and eleven. *Journal of Research in Reading, 27*(4), 373-386.

Savignon, S. J. (1997). *Communicative competence: Theory and classroom practice* (2nd ed). New York: The McGraw-Hill Companies.

Savignon, S. J. (n.d.). Communicative language teaching for the twenty first century. 13-28.

Senturk, B. (2015). EFL Turkish university students' attitudes and motivation towards reading in English. *Procedia-Social and Behavioral Sciences, 199*, 704-412.

Sheu, P. H. (2003). Extensive reading with EFL learners at beginning level. *TESL Reporter, 36*, 8-26.

Sheu, P. H. (2004). The effects of extensive reading on learners' reading ability development. *Journal of National Taipei Teachers College, 17*(2), 213-228.

Smith, F. (1988). *Understanding reading: A psycholinguistic analysis of reading and learning to read* (4th ed.) Hillsdale, NJ:Erlbaum.

Stanovich, K. (1986). Matthew effects in reading: Some consequences of individual differences in acquisition of literacy. *Reading Research Quarterly, 21*, 360-407.

Wangchuk, C., & Zangmo, C. (2019). *Consequences associated with parental divorce and their effects on children's academic performances and achievements at a boarding school in Punakha: A case study.* Paper presented at the *6thRatchasuda International Conference on Disability 2019: Creating a World of Opportunities for All.* Mahidol University, Thailand.

Wangchuk, C., Wangchuk, N., Sharma, D., & Dorji, P. (2020). Reading habits of freshmen of Gedu College of Business studies. *Asian Journal of Advanced Research and Reports, 13*(1), 1-9.

Worthy, J., & Broaddus, K. (2001/2002). Fluency beyond the primary grades: From group performance to silent, independent reading. *The Reading Teacher, 55*(4), 334-343.

About the authors

Chencho Wangchuk is a lecturer at Gedu College of Business Studies, Royal University of Bhutan. He has a master's degree in Applied Linguistics from Mahidol University, Thailand. Currently, he teaches English as a second language and academic skills to undergraduates. His research interests are in applied linguistics, education and social sciences.

Choney Zangmo is a teacher at Gedu Higher Secondary School, Ministry of Education. She completed her Bachelor of Arts in English from Sherubtse College and Postgraduate Diploma in Education from Samtse College of Education, Royal University of Bhutan. She teaches English as a second language to high school students.

Professional commitment among Secondary School teachers of Bhutan: An exploratory study

Dorji N and Sonam Wangchuk

Abstract

The study was conducted to investigate the professional commitment of teachers of secondary school teachers in Bhutan on the five dimensions: commitment to the learners, commitment to the society, commitment to the profession, commitment to achieve excellence and commitment to basic human values. For this, 308 teachers, consisting of equal numbers of male and female (104 each) working in Secondary Schools of two Dzongkhag of Sarpang and Zhemgang. The Descriptive survey method was employed for the present investigation and the result reveals that in all the dimensions there is high distribution of scores in average commitment which is alarming. The distribution is negligible in other categories. Thus, it is an indication that the teachers of Bhutan show positive commitment towards their profession which is necessary for the development of the individual and school as a whole. Growth in profession does take place when the teachers are not committed to learners, society, do not exhibit love for profession, and not work to achieve excellence and basic human values. All these five dimensions generate excellent teacher who are much inspired and exemplary to other fellow mate.

Keywords: professional commitment, society, learners, profession, excellence, human values

Introduction

Professional commitment is accepted as a natural component for the teaching. It is closely associated to teachers' work routine, absenteeism, stress and income as well as requiring a vital stimulation on students' success in the school (Louis,

1998). The quality of teacher is not only seen as the acquaintance on knowledge and skill competence of individual teachers but also their passion and assurance in teaching (Rikard, 1999). In fact, teachers' commitment and their engagement are branded as one of inevitable factors in the accomplishment in the field of education (Huberman, 1997; Nais, 1981).

There are also other areas that are pertinent to the teacher's professional commitment. The first area is the competency in different subject. The subject competency pertains to planning and teaching of the course. It is mandatory for each teacher to keep well-informed to the current incursion of acquaintance in the subject chosen to teach. Second is the participation and peer sharing of professional skills which plays an important role in contributing towards professional commitment. One main factor that contributes towards professional commitment is maintaining a good rapport within the colleagues which will generate good result or achieve the institutional goals. Third is activeness of the group that will boosts the status of the teachers and also the institution as well. It all shows the essence of collaborative work which have positive contribution towards professional commitment. Lastly, the types of workplace or environment also affect the employee's commitment. Functional environment involves administration structure, support from the authority and colleague, incentive and payment. Un-satisfaction of the above environment will lead one to quit the job and move out in search for the better one.

Review of the literature

According to Faiza et.al (2012), the study on academic optimism and professional commitment done on 509 pre-service secondary school teachers in United State shows a significant relationship among the two variables; academic optimism and professional commitment. The finding reveals that one possible avenue to consider in training effective teachers involve helping teachers learn more about themselves and how their personalities and belief systems may contribute to their development.

A similar study was conducted on professional commitment among secondary school teachers in relation to location of their school on 113 Total Government Teacher (TGT) and Partial Government Teacher (PGT) teachers in Landran and Sohana schools in Punjab. The finding showeds that there exists no difference in the rural and urban government secondary school teachers in respect to the professional commitment. Based on the results, it can be determined that government secondary school teachers are equally devoted toward their career as private secondary school teachers (Sawhney, 2015).

The study on Professional Commitment of School Teachers in the State of Punjab on 200 school teachers revealed that female teachers demonstrate significantly higher level of professional commitment than male teachers. The possible reason may be that for female teachers, teaching occupation is considered the most contented profession. Generally, men opt for teaching profession only; when they find themselves incompetent for other fields. Similarly, female teachers in larger number are found not so focused on personal life rather they are more focused on their professional works, while men are frequently found to be diverted by many social goings of life (Khalsa, 2017). Teacher commitment for their profession is a motivational potency that stimulates teachers to devote more time and dynamism in student accomplishment. This inclination of indorsing student accomplishment instigates teachers to pursue ways to heighten teaching profession and create an effective learning atmosphere to allow students to grasp their goals.

Etom (2017), conducted study on school climate related to Professional commitment of teachers on 313 schools teachers in Philippines. The result showed that organizational climate is satisfactory however, it also showed significant difference among the school administrators and teachers' awareness on teachers' professional commitment. It was also found that there are other potent factors such as age, educational achievement, teaching capability, school's climate significantly influences the professional commitment of teachers.

Dhar (2018) conducted a study on professional commitment of effective and less effective 800 secondary school teacher in Kashmir. The finding obtained from the study shows that the effective secondary school teachers have supplementary professional commitment concerning to their teaching profession as compared to less effective teachers. The results also show that effective teachers are more dedicated to their profession and also exhibit positive commitment both towards students and to work harder for the progressive benefit of the society.

Hypothesis

Ho1 - There exist no significant difference in professional commitment with respect to commitment to learner, commitment to society, commitment to profession, commitment to achieve excellence and commitment to basic values among teacher.

Objective

This study aimed to discover the level of professional commitment among the teachers of secondary schools in Bhutan.

Sample

The study involved sample size of 308 teachers (154 of equal genders) from various secondary schools using convenient sampling technique from two different Dzongkhags of Zhemgang and Sarpang.

Methodology

The study employed descriptive survey method and aimed at finding the effect of commitment to learner, commitment to society, commitment to profession, commitment to achieve excellence and commitment to basic values among teacher on professional commitment.

Tool used

To measure the professional commitment of the teachers the researcher used the tools that was prepared by Sarbjit Kaur Ranu, Sarvjeet Kaur Brar and Ravinder Kaur (2011) comprising of five dimensions: commitment to learner, commitment to society, commitment to profession, commitment to attain excellence and commitment basic human values, consisting of 45 items. All the five dimensions are inter related and are efficient in measuring the professional commitment of teachers.

ANALYSIS

Table 1.1: Commitment to the Learner.

Commitment to the learner	Scores	Frequency	Percentage
Above Average	40 – 45	49	15.9%
Average	29 – 39	227	73.7%
Below Average	22 – 27	29	9.4%
Low	16 – 21	03	1%
Total		**308**	**100%**
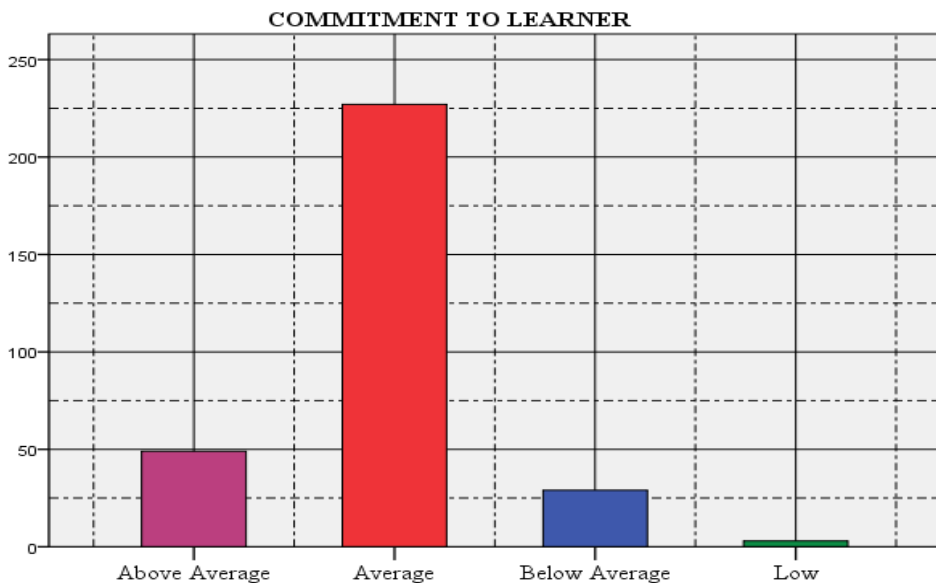
Fig. 1.1: Graph showing the teachers commitment to the learner

Figure 1.1 and Table 1.1 depict that out of 308 teachers of secondary school 73.7% (227) teacher shows average commitment to the learners under professional commitment. The data also reveal teachers' shows the above average 15.9% (49), below average 9.4% (29) and low 1% (3) in commitment to learners respectively. It is an indication that the maximum teachers have average commitment towards their learners. Their attachment shows there is more bonding between students and the teacher in average. It indicates that still there are children whose commitment falls below average and low which will bring negative result to professional commitment. More the teachers' commitment towards learners the greater will be the impact towards the professional commitment.

Table 2.1: Commitment to the Society.

Commitment to the Society	Scores	Frequency	Percentage
Above Average	42 – 47	20	6.5%
Average	30 – 41	237	76.79%
Below Average	24 – 29	48	15.6%
Low	18 – 23	03	1%
Total		**308**	**100%**
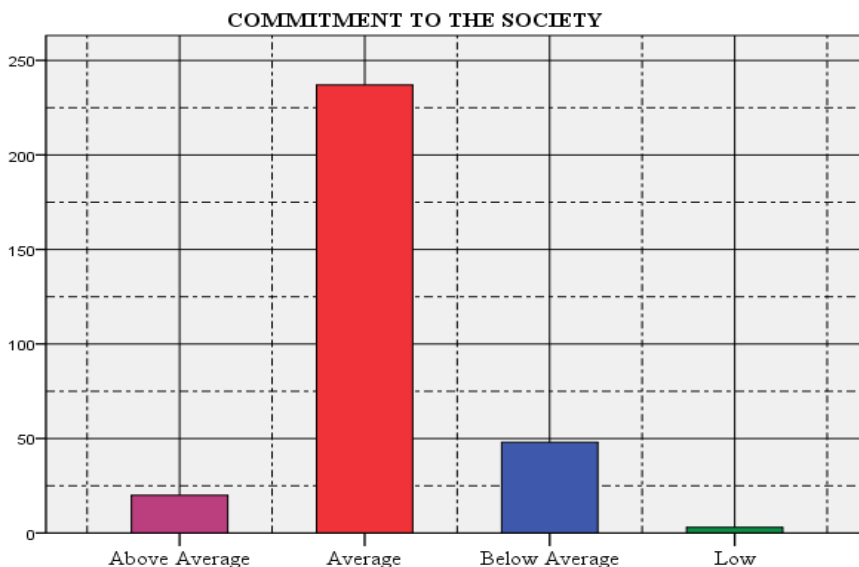
Fig. 2.1: Graph showing teachers commitment to the society

Figure2.1 and Table 2.1 depict that out of 308 teachers of secondary school 76.79% (237) teacher shows average commitment to the society. The data also reveal that 6.5% (20) teachers shows the above average, below average 15.6% (48) and low 1% (3) in commitment to the society. The average number of teachers feels that the society is very important for them. The teachers' relationship with the community also falls greater in average and still few teachers' commitment with society falls below average and low. Those teachers need to be motivated and taken care by the schools to socialize them with the society. Professional commitment also includes community vitality.

Table 3.1: Commitment to the Profession.

| Commitment to the Profession	Scores	Frequency	Percentage
Very High	45 – 49	01	0.3%
High	40 – 44	02	0.6%
Above Average	35 – 39	32	10.4%
Average	25 – 34	235	76.3%
Below Average	20 – 24	36	11.7%
Low	15– 19	02	0.6%
Total		**308**	**100%**
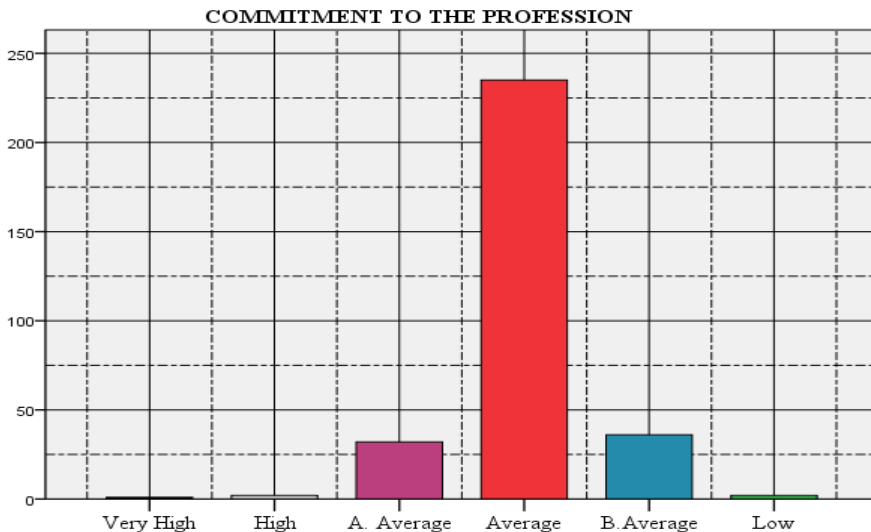
Fig. 3.1: Graph showing teachers commitment to the profession.

Figure 3.1 and Table 3.1 depict that out of 308 teachers of secondary school 76.3% (265) teacher shows average in commitment to their profession. The data also reveal that 0.3% (1) teachers show very high in commitment, high and low level have the equal number of teachers of 0.6% (2) in commitment. The percentage of above average is 10.4% (32) and below average is 11.6% (37) in commitment to the profession respectively. There is very high numbers of teachers in average commitment which is an indication that almost all the teacher has the average devotion towards their profession. There are also number of teachers whose teachers' commitment to the profession falls below average and low which is an indication there are few teachers who are not committed to the profession. These few teachers need to be taken care and make them love their choice of profession through various scaffoldings activities.

Table 4.1: Commitment to Achieve Excellence.

Commitment to Achieve Excellence	Scores	Frequency	Percentage
High	44 – 49	02	0.6%
Above Average	38 – 43	35	11.4%
Average	27 – 37	239	77.6%
Below Average	21 – 26	29	9.4%
Low	15 – 20	03	1%
Total		**308**	**100%**
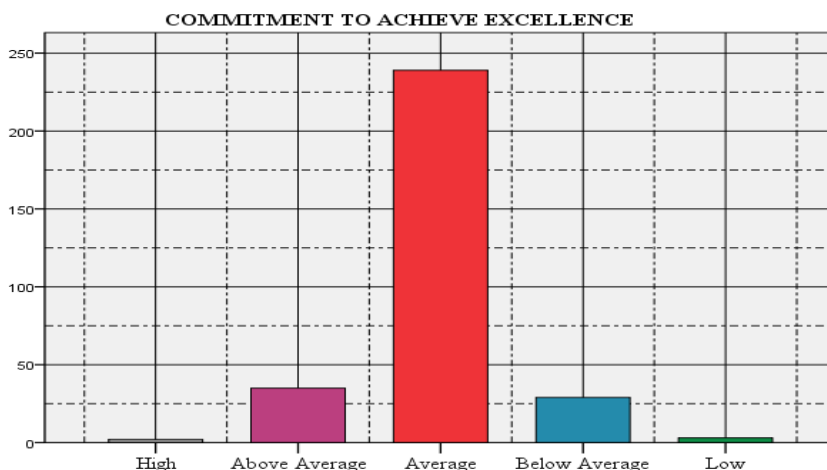
Fig. 4.1: Graph showing teachers commitment to achieve excellence.

Figure 4.1 and Table 4.1 reveal that out of 308 teachers of secondary school 77.6% (239) teacher shows average in commitment to achieve excellence. The data also shows that 0.6% (2) teachers shows very high 1% (3) low in commitment to achieve excellence. The above average is 11.4% (35) and below average is 9.4% (29) in commitment to achieve excellence respectively. The achievement excellence is concentrated more in average which is an indication that there are larger numbers of teacher who are concerned about paving their ways towards the excellence with their setting of individual achieving goals. Their focus on achieving the goal is pretty much normal and they bother more on self-driven process that motivates and encourage their commitment. There are also few who have above average drive towards excellence who are very much concerned about their achieving results in their profession and also there are few teachers who are below average which is an indication that they are least bothered about their success in their life.

Table 5.1: Commitment to Basic Human Values

Commitment to Basic Human Values	Scores	Frequency	Percentage
High	42 – 45	03	1%
Above Average	38 – 41	44	14.3%
Average	31 – 37	219	71.1%
Below Average	27 – 30	35	11.4%
Low	23 – 26	07	2.3%
Total		**308**	**100%**
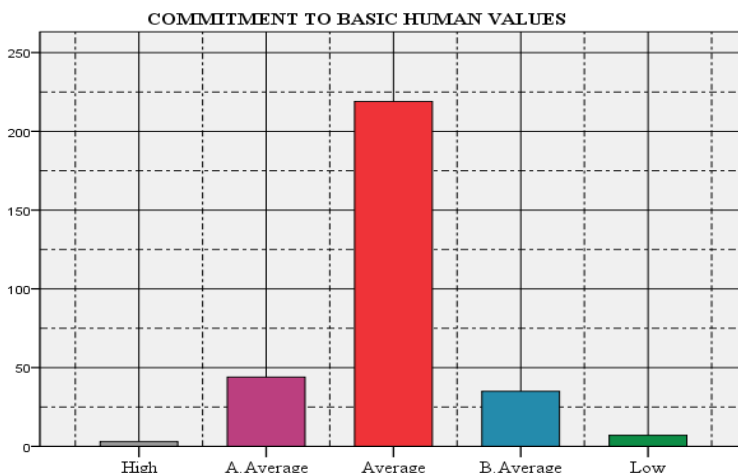
Fig 5.1: Graph showing teachers commitment to basic human values

Figure 5.1 and Table 5.1 indicate that among 308 teachers of secondary school 71.1% (219) teacher shows average in commitment to basic human values. The data also shows that 1% (3) teachers show very high, low of 2.3% (7) in commitment to basic human values. The above average is 14.3% (44) and below average is 11.4% (35) in commitment to basic human values respectively. Maximum numbers of teacher fall in average and these indicate that large number of teachers consider the commitment to human values as very important and they take trouble to institute the values in their student as well as inculcate by self. But there are also teachers who fall below average and low. It is an indication that there are few numbers of teachers who doesn't give importance to the basic human values and least bothered about the inculcating values in their students.

Discussion

As a whole, maximum scores fall in the average category in all the five dimensions that contributes towards the professional commitment. There are also some in the above average. However, there are a few in the; below average and low categories. In general, it indicates that the majority of teachers are committed towards their profession under different dimensions but still there are teachers who are not even committed towards their own profession, less concerned about community relationship, commitment towards their learners, less concern about achieving excellency, less bothered about basic human values. The management of the school need to put extra effort to motivate those teachers who are care free and don't at all bother about their profession. Professional commitment is one of the areas that will geared towards achieving common goal set by the institute. But it is good to see the large number of teachers falling under average scores which will bring a forward move by dominating other weaker groups. They are self-motivating and pro-active to move forward by taking care of all the dimensions of the professional commitment and contributes towards creating good organizational climate. The values, social concern, commitment and ethics are the concerned of the committed teachers which as a result generate the forward move in the profession. According to Dar (2018), study done among secondary school

teachers of Kashmir found out that all the dimensions equally contribute to the professional commitment. It indicates that there is no differences between teachers which will divide them under effective and ineffective teachers. All the teachers are equally important and fall under effective teachers.

Conclusion

The study conducted on 308 teachers of secondary school in Bhutan, on professional commitment shows some positive impacts that predict the future move of the teachers. Five dimensions that contribute towards the professional commitment; commitment to the learners, commitment to the society, commitment to the profession, commitment to achieve excellence and commitment to basic human values all show highest scores in average commitment which is very prominent in predicting the future progress. It is to believe that the teachers of Bhutan do have positive commitment towards their profession and it implies that they are concerned about their professional growth. Growth in profession doesn't take place in where the teachers are dormant, not committed to learners, not concerned for society relationship, love for profession, to achieve excellence and basic human values. All these five dimensions generates excellent teacher who are much inspired and exemplary to other fellow mate.

References

Dhar, T. N. (2018). Unit 5-Personality of a Teacher. Teachers Roles and Development, (1-12)

Etom, R. (2017). School Climate as it Relates to Organizational Commitment of Teachers,

The Asian Conference on Cultural Studies.

Faiza, M., J, Jason, T., Downer, & Robert, P.C. (2012). Association of Pre-Service Teachers' Performance, Personality, and Beliefs with Teacher Self-Efficacy at Program Completion. Teacher Education Quarterly, 39 (4).

Huberman, M. (1993). The lives of Teachers. London: Cassell Villiers House.

Khalsa, G.T.B. (2017). Professional Commitment of School Teachers in the State of Panjab. Scholarly Research Journal for Humanities Science & English Language, 4(22).

Louis, K.S. (1998) Creating Community in Reform: Images of Organizational Learning in Inner-City Schools. In K. Leithwood & K.S. Louis, Organizational learning in schools, 17-45.

Nias, J. (1981). Commitment and Motivation in Primary School Teachers. Educational Review, 33(3), 181- 190.

Rikard, G.L. (1999). Promoting Teacher Commitment in Pre-Service teachers. Journal of

Physical Education, Recreation & Dance. Reston: 70(9). 53 - 56.

Sawhney, N. (2015). Professional Commitment Among Secondary School Teachers in Relation to Location of Their School. Global Journal for Research Analysis, 4(8), 238-239.

About the authors

Dorji N is currently working as a teacher in Zhemgang Lower Secondary School, Zhemgang. He received his PTC (Primary Teaching Certificate) in 2000 from PCE and Bachelor of Education from the same college in 2017. He completed M.Ed from Lovely Professional University, Punjab, India, in 2020 through self-funding. He has published numerous paper in Indian UGC approved journals, few in International Journals and also presented papers in both International and Indian National seminar while perusing his Master's degree in India.

Sonam Wangchuk is currently working as Principal in Zhemgang Lower Secondary School. He received his Bachelors of Education in 2005 and completed M.Ed in Leaderships & Management in 2018 from Paro College of Education, Royal University of Bhutan. He has also attended Young Professional Leadership Program (YPLP) III from Royal Institute for Governance and Strategic Studies, Phuntsholing in 2016. Mr. Sonam is a passionate educationist and a learner. He is keenly delving into research projects for the better performance of his services to his country.

A framework for building research capacity through leadership development, institutional building, and research practice

Jamba Tobden and Kezang Sherab

Abstract

This study examines the research landscape of the Royal University of Bhutan (RUB) between 2014 and 2016. The institute for Gross National Happiness Studies which is a virtual research think-tank of the RUB won a competitive grant from the Global Development Network in 2014. The objective of the grant programme was to strengthen institutional capacities of higher education institutions in Least Developed Countries to design, run and evaluate quality research training opportunities. For two years (2014-2016), series of research development interventions were implemented in four pronged approaches: enhance the capacity of research leadership, develop faculty research, engage students in research, and institutionalise research centres in the colleges of the RUB. Exploratory concurrent mixed method design (Creswell & Creswell, 2018) was applied to evaluate and explore growth, change, and development of research within the timeframe between 2014 and 2016. It is noted that there have been modest achievements in research both in terms of number as well as the intrinsic value it created, establishing a culture of research, and research enthusiasm among faculties as well as students in the colleges of the RUB. The findings show significant achievement in knowledge generation, as well as in policy changes at organisational, institutional, as well as the systemic level in the RUB. This framework could be followed by universities who wish to promote research culture from the base.

Keywords: Research culture, research capacity, research leadership, research centre, policy research

Introduction

A measure of the greatness of a nation is its higher education system which leads to positive will, faith, intelligence and moral force (The Royal University of Bhutan [RUB], 2013; Stankevics, 2015). Accordingly, RUB was established in June 2003, the only university then, in order to consolidate the provision of tertiary education in the country and to efficiently cater to the needs of the nation. Research features as one of the three pillars of RUB's mandate, along with teaching and community services (RUB, 2015; 2018; Tobden, 2020). To reiterate the research mandate and to enable the strategic development of research in the University, the Department of Research and External Relations (DRER) was established in 2005. The Deans of Research and Industrial Linkages (DRILs) were appointed in all the Colleges to carry out the responsibility of research and development. In 2013, the university founded the institute for Gross National Happiness Studies (iGNHaS), a research think-tank mandated to promote research activities, in particular policy relevant research, across RUB's eight colleges, and advance the university's mandate as the prime higher education institution in the country (RUB, 2013). The iGNHaS enjoys a privileged position within RUB, but also serves in many occasions as the interface between the university and governmental, political, media, and community services, in Bhutan and abroad.

RUB has eight constituent colleges (initially 10) spread across the country. These colleges were teaching colleges without any research mandate (Sherab & Greenwood, 2014). According to Sherab and Greenwood (2014, p. 26), "each of the colleges had their own identity and culture and now they are being asked to blend those cultures into the greater culture of RUB." This means that RUB colleges initiate and enhance their research culture not just to enhance teaching and learning processes (Colbeck, 1998; Elen, et al., 2007) but also to inform policymakers (Sherab & Schuelka, 2019) and contribute in Bhutan's development process. Today, one of the indicators of a quality university is its robust research output. However, existing literature cautions that the new universities and colleges experience the inevitable challenge of raising the research culture (Marginson &

Considine, 2000; Pratt, et al., 1999). RUB has been no exception to this as there have been issues related to leadership, research-material, research training, and research funds (Sherab & Schuelka, 2019). Leadership (Pratt, et al., 1999) and training and support (Hanover Research, 2014) in terms of capacity building and funding plays a paramount role in promoting research culture. However, both leadership and training have been identified as issues in the context of RUB (Sherab & Schuelka, 2019). While these issues still exist, there has been some improvement in terms of research culture and productivity due to various efforts put in by the RUB. This paper intends to examine the outcome of an international research grant implemented by the RUB.

In November 2014, iGNHaS, received a grant of US$ 124,791 (Nu.7,734,072) from the Global Development Network (GDN). The goals of the grant received by iGNHaS were to support the development of research at RUB addressing in a coordinated way some of the institutional challenges. This project titled, 'Improving the Quality of Policy Relevant Research in Bhutan through Leadership development, Institutional Building, and Research Practice (programme),' has been highly instrumental in developing the capacity of research in the RUB. The approach, methodology, and delivery were well addressed and therefore achieved various intended as well as the unintended results. The project addressed through the four-pronged approaches were; capacity development of research leadership in the colleges, development of research centres in the colleges, capacity development of faculties, and student engagement in research.

Literature Review

Research is vital for innovation, economic benefits, and social development (Midwives, 2019; OECD, 1996; Yusuf & Nabeshima, 2007), for evidence-based policy (Benton, et al., 2020), and for social work practice (Erbay, 2017). Research is one of the core functions of a University (Brennan & Teichler, 2008). The Royal Charter (2003; as cited in the RUB's Wheel of Academic Law, 2017) mandates the University to promote and conduct research, and to contribute to the creation of knowledge of relevance to Bhutan. Research is also a fundamental aspect of policy

formulation and decision-making, enhancing Bhutan's access to tertiary education programmes, and creating a knowledge-based society. The University's continued endeavour in research and development should be viewed as an opportunity for developing itself as a think-tank in the country that can contribute meaningfully to policy-making processes at various levels through research, scholarly activities, and other academic engagements. The University also aims to enhance innovation through enhancing research, which will benefit the society both socially and also economically in terms of producing various new technologies and prototypes, processes, pedagogies, and paradigms.

However, research development in the university faces a number of challenges (RUB, 2013), the most prominent challenge being the lack of infrastructure to support research (Choeden & Maxwell, 2012). Research infrastructure includes research policy, research fund, research labs, research coordination and collaboration, and research database (Ribes, 2014). In addition, several other challenges such as leadership, research skills and knowledge, and research funds were identified more recently (Gyamtsho, et al., 2020; Sherab & Schuelka, 2019). Despite the uniqueness of Bhutan's context, many of these challenges faced by RUB are common to other higher education institutions in South Asia (Chatterjee, 2002) and also Internationally (Marginson & Considine, 2000; Pratt, et al., 1999). The common challenge faced by the South Asian nations on social science research is the lack of funding, and level of independence of researchers from the management (Hay & Sudarshan, 2010). The challenges faced by RUB are the low level research capacity in the colleges, lack of an enabling research environment, lack of research and scholarly publications by the faculty, lack of faculty knowledge and ability for securing competitive research grants, lack of leadership support; lack of research funds (Resolution of the first annual conference of the DRILs, 2014; Gyamtsho, et al., 2020; Sherab & Schuelka, 2019). Some of these challenges are internal, such as the lack of research policy, research leadership and management, outreach resources and experience, funding mechanisms and incentives, in particular for young lecturers to do research, and an emphasis on teaching and learning. Some are external, such as

the lack of funding, low demand for research by decision makers, regulators, media and other societal actors. Some are a combination of both internal and external factors, such as the lack of a research culture in Bhutan's young higher education system, lack of structured communication channels between higher education institutions and other societal actors (Resolutions of the second annual conference of the DRILs, 2015). Some of the challenges cited in the RUB Strategic Plan (2013 and 2018) are lack of research funding for faculties as well as students; low quality of research proposals for international grants; research papers do not meet the expected publication standards; low level of research culture; and lack of support for research grants from industries. According to Pratt, et al. (1999), leadership plays a paramount role in promoting research culture. Interestingly leadership has been identified as an issue in the context of RUB (Sherab & Schuelka, 2019). Training and support in terms of capacity building and funding has been another crucial aspect of research culture (Hanover Research, 2014).

To address these challenges, iGNHaS developed the research capacity building framework, and presented to its board meeting in early 2014. The framework was also presented to the Research and Innovation committee (RIC) of RUB and shared widely with the DRILs of the colleges for feedback. The framework that won the GDN competitive grant is discussed in the following section.

Research Capacity Building Project Implementation Framework

Building on the research infrastructure established by RUB, the research capacity building project was implemented to support research activities in the colleges, through the following goals, as detailed out in Table 1 below:

Table 1: Research capacity building framework developed by iGNHaS (2014)

Goals	Output
Goal 1: Developed strong research leadership in the eight colleges of the RUB	1.1: Effective research deans who will promote quality research in the colleges
	1.2: Strengthening the institutions and infrastructure of research in the colleges
Goal 2: Build Research Centres of Excellence, actively engaged in promoting research and community linkages	2.1: As centres of excellence, provide effective coordination of research activities
	2.2: Provide the platform for the development of resources and trainings
Goal 3: Enhance the knowledge and capacity of Academic staff to engage in independent research and supervision of student research in the RUB Colleges	3.1: Increase the quality of research instruction, thereby inspiring and improving the quality of teaching
	3.2: Generate a culture of research and enquiry in the colleges of the RUB
	3.3: Contribute to the decision making at the national and local level through policy-relevant research by the academic staff
Goal 4: Instill a culture of discourse, critical enquiry, and practical solutions in undergraduate and post graduate students in all colleges of RUB	4.1: Develop a framework for the support of student research
	4.2: Link classroom knowledge of research with practical applications

As listed above, this project comprises of four separate interventions implemented concurrently over the course of two years.

1) Training of faculty: Series of interventions that build on one another, that weaves well to enhance research competencies were implemented. First, RUB runs its

Annual University Research Grant (AURG), for faculties to compete for funding. Second, the entire grant applicants were invited to a five-day workshop to help strengthen their concept notes. The training included topics such as research methodology, information retrieval and the new RUB research policies. Third, the concept notes were then developed into full proposals under the guidance and mentorship of designated resource persons. The resource persons were drawn from established researchers from Bhutan and primarily other Asian universities. Fourth, the full research proposals were presented at a second workshop together with the resource persons present. At the end of the workshop, the AURG committee made the final research funding decisions. The successful researchers were paired with external or local experts to mentor them throughout the project. During a university breaks, a longer training session (1 to 3 weeks) were conducted for the grantees in research theory and practice tailored to their research projects. Topics such as statistics and statistical software, cost/benefit analysis, GIS tools, interview and survey techniques, discourse analysis, and research communication were presented and discussed. Fifth, the grantees presented their findings to the third workshop and discussed possible policy implications in the presence of their mentors, other grantees and relevant stakeholders, including government, private sector and civil society. Selected projects were then developed into research articles and the authors were assisted in publishing their research in iGNHaS' peer-reviewed Bhutan Journal of Research and Development (BJRD) and quality peer-reviewed international journals. All these workshops were held under the avenue of the Faculty Research Meet (FRM). This cycle repeats annually.

2) Training of DRILs: DRILs generally lacked research leadership experience. To address this, visits to policy-focused centres of excellence in research, primarily in Asia was prioritised. The objective was to shadow and learn the best practice from the research leaders who are innovators in their field. This includes institution-building, human resource development, and seeking and executing externally funded research projects. Upon the return from the visits, they were required to design the strategic plan for the respective research centres in the colleges. The strategic plan encompassed visioning and strategic planning for research centre;

developing research partnerships and networks; explore research grants; mentorship for young researchers and creating incentives for research; and research disseminations and advocacy plans. The exercise took place in several stages, including consultation with relevant stakeholders and staff in the colleges for wider inclusion and ownership.

3) Institutional development of research centres in the colleges: The centre strategic plan which the DRILs developed following their institutional visits and planning exercises in objective 2 above, are anchored in the respective college plans. Ultimately, the research plan becomes the legitimate benchmarks for the assessment of research centre performance to be conducted by the university as per ZHIB 'TSHOL – RUB Research policy. The iGNHaS conducts the annual review of research centres' progress on their action plans, provides financial and technical support and oversight throughout the process, and suggest improvements and solutions where necessary.

4) Creation of a culture of research and inquiry among the undergraduate and post graduate students in all colleges: DRILs, Research Officers and senior faculties with research expertise designed a non-credited research module that will inspire the students to engage in research. The module includes research methods, the RUB research policies as well as the practical application of research to everyday issues and policymaking. The module was delivered through workshops, action research and field studies. The module was designed as per the focus areas of study of the respective colleges.

Currently, the overall state of research in the RUB as well as at some member colleges have been published by a few scholars. However, there is lack of research that specifically looked at the contribution of the GDN International research grant on RUB research culture and its research productivity. Therefore, this study specifically examined how GDN research grant has been instrumental in enhancing the RUB research culture.

Methodology

Exploratory concurrent mixed method design was applied for this study (Cooksey & McDonald, 2011). The mixed methods research which is the integration of qualitative and quantitative data yields additional insight beyond the information provided by either the qualitative or quantitative data alone (Creswell & Creswell, 2018). Further, the purpose of this assessment study was to gather and analyse both quantitative and qualitative data on growth, change and development of research capacity in all of the four objectives of the GDN project over time (Lavrakas, 2008).

Four periodic reports including the financial utilisation statements (FUS) were submitted to GDN during the implementation period. These reports were reviewed both by the team members, the project scientific mentor, and GDN. These reporting ensured the quality of reports from the very beginning. In addition, the on-going progress reports were presented at the mid-term review exercise in Hanoi, Vietnam in January 2016; South Asian Network of Economic Institutions (SANEI) summit in Kathmandu, Nepal, in November, 2016; at the GDN annual General Conference held in Lima, Peru in July, 2016; and to every annual conference of the DRILs in Bhutan. These presentation and discussions provided an opportunity for review and validation for further development and also for other nations to simulate the programme to their institutions.

Data were collected every six months between November 2014 and December 2016 from all the colleges. The final consolidated data for the entire duration of the project was collected in December 2016 on which this report is being constructed. For the quantitative data, survey questionnaires were distributed to the DRILs of all the eight colleges to provide numeric description of growth on each of the indicators of research. The questionnaire consists of four sections emerging from the four objectives of the project. Each section carried five to ten questions, which were further separated into annual data starting 2013 (prior to GDN project implementation) up to 2016 (covering the two years of project cycle). For the qualitative data, in-depth interviews (to explore individual

experiences and perceptions in rich details) were held with the DRILs as well as with a few Presidents and Research Officers of the eight colleges to provide trends, development, attitudes or opinions. The questions were semi-structured open-ended, non-directive, and probing. The themes were drawn as per the four objectives of the project, and the data that emerged from the interview transcripts were coded in accordance with the pre-determined themes.

Furthermore, a short video was produced with the help of GDN team upon the completion of the project in June 2017 titled, 'Research is Development-Testimonies from the Royal University of Bhutan' (video is available at https://www.youtube.com/watch?v=1mWfEgoTbbo) to gather data on the impact of GDN project. For this video, a total of 14 individuals (Director General, Department of Research and External Relations- 1; College Presidents- 2, Deans- 2, Faculty- 2, Research Officer- 1, GDN Project Manager- 1; and students- 5) provided their perceptions about the project. The next section provides results and discussion.

Results and discussion

The results and discussion in this section are presented in terms of the four GDN project objectives as themes. Quantitative data were analysed using simple frequency counts to show the trends of the impact of GDN project. All qualitative data were categorised into themes based on the four project objectives. For ethical reasons, respondents who provided qualitative data are acknowledged in the presentation of results as follows: Director of Research as DoR; College Presidents as CP 1, 2…& 8; Deans as D1, 2…& 8; Faculty as F1 and F2; Project Manager as PM; Students as S1, 2…& 5).

Objective 1 - Training of faculty

Training of faculty through hands-on mentoring and support for the development and execution of small research projects was targeted to build the research capacity of the faculties. As a result of these workshops, trainings and mentoring

programmes implemented through the Faculty Research Meets (FRMS), the results are impressive, as shown in Figure 1.
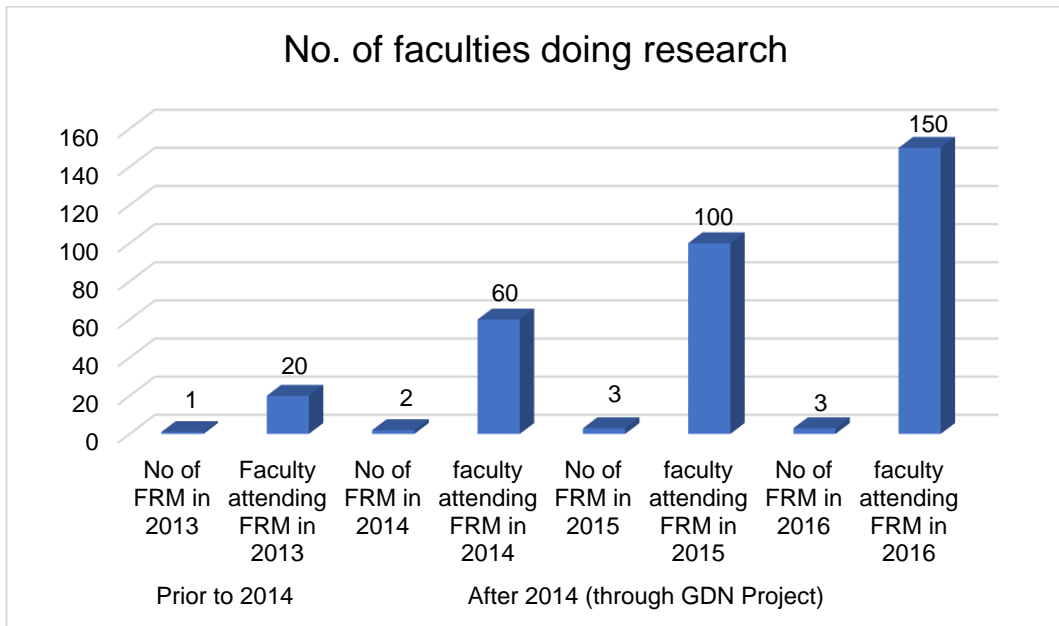
Figure 1. No of faculties engaged in research as per the data received from the colleges.

The number of faculties who attended research forum increased by seven and half times between 2013 and 2016. While there were only 20 faculties who attended the research forum in 2013, the number increased to 150 in 2016. The qualitative data shows that the interventions from the project created an opportunity for the young and novice faculties the skills and confidence to engage in research. The colleges institutionalised the college level faculty research meets; mentorship programmes within colleges; monthly seminar series, and conducted series of trainings on research methods and tools (Final Project Report, 2016), which greatly helped to create research culture and research environment in the college campuses (P1). This has significantly improved faculty engagement in research from almost nil to about 50% faculty engagement and publication both in terms of number and quality (Final Project Report, 2016). For some faculty the very basics such as proposal writing was useful (L1). Another significant achievement

of this project was the enhancement of the ability of the faculty to not only enhance their research knowledge and skills but also to network with academics from other nations. As a result of this, many faculties from different colleges have been able to secure International grants which includes grants from Erasmus+, ESRC (Economic & Social Research Council of UK), British Academy Award, AAF (Australian Awards Fellowship), and Toyota Foundation Award (Japan) (Final Project Report, 2016). This finding corroborates with the existing literature that training and support play a significant role in enhancing research culture (Hanover, 2014). There has been also evidence of different organisations such as the Ministry of Education, Royal Education Council, UNICEF, and UNFPA Bhutan gaining more confidence in RUB research capability as these organisations have started awarding research consultancies to the research centres (PM; Dean 1, 2, 3, 4 &5; RO 1).

Objective 2 - Training of DRILs

Training of college Deans of Research through visits to centres of excellence in research, primarily in Asia, was to build the leadership capacity of the DRILs. The activities included the institutionalisation of Annual Workshop of the Deans and visits to the regional centres of excellence. As a part of this project objective, all DRILs, a few college Presidents and Research Officers from the existing research centres had the opportunity to visit Kyoto University in Japan and TERI University in India (PM, Dean 1). During both these visits, the team visited various centres of excellence to learn best practices about research and innovation. As a result of these interventions, within two years of project implementation (2014-16), there were a total of 34 research collaborations (both national and International) established by the colleges (see Figure 2).
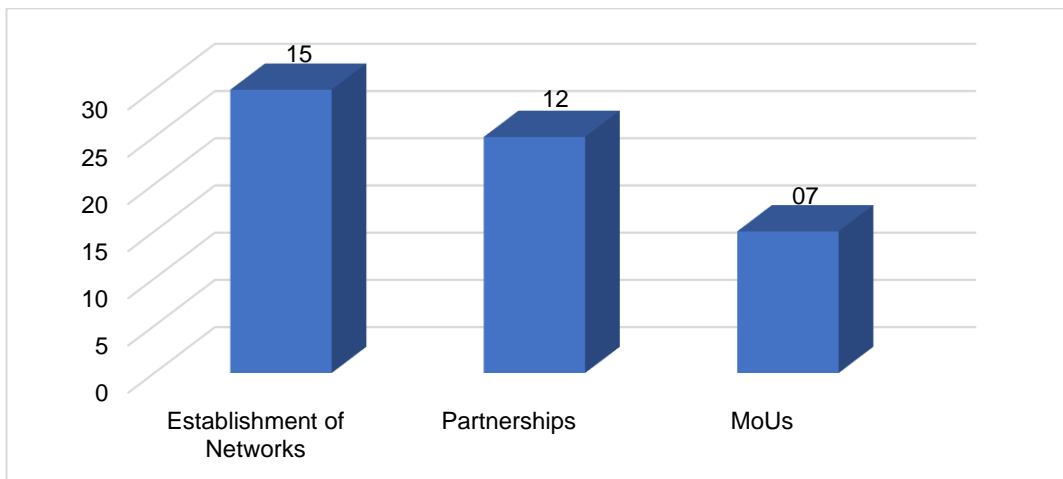
Figure 2. Establishment of research collaborations as per the data received from colleges

Qualitative data revealed that the institution of annual conference of the research deans enabled them to understand internal issues, challenges and opportunities in research (all the eight Deans, as cited in the GDN final project report 2016). The visit to the centres of excellence equipped the deans to develop collaboration, networking and research partnership projects. In addition, the deans gained substantial knowledge and understanding of research leadership, research centre development and management (including policies), mobilisation and management of research funds, development of research partnerships, development of research grants, balancing teaching and research, development of research programmes, and building networks and collaborations (All Deans). The findings suggest that international grants and networks shared above and the enhancement of research activity and publication by the faculty shared under the next objective are the results of the deans' successful leadership in different colleges. This confirms the earlier findings that the leadership plays a crucial role in promoting research culture (Pratt, et al., 1999; Gyamtsho et al., 2020). Some college Presidents have the perceptions that a university cannot survive without research and publication (P1). However, this may not be uniform across all eight colleges as recent research found some colleges to be less successful as well as less support from college

leadership (Gyamtsho et al., 2020; Sherab & Schuelka, 2019). This is something that must be explored in the future.

Objective 3 - Institutional development of research centres in the colleges

As a result of the creation, development and institutionalisation of research centres, the following impacts were created, as illustrated in Figures 3 and 4.
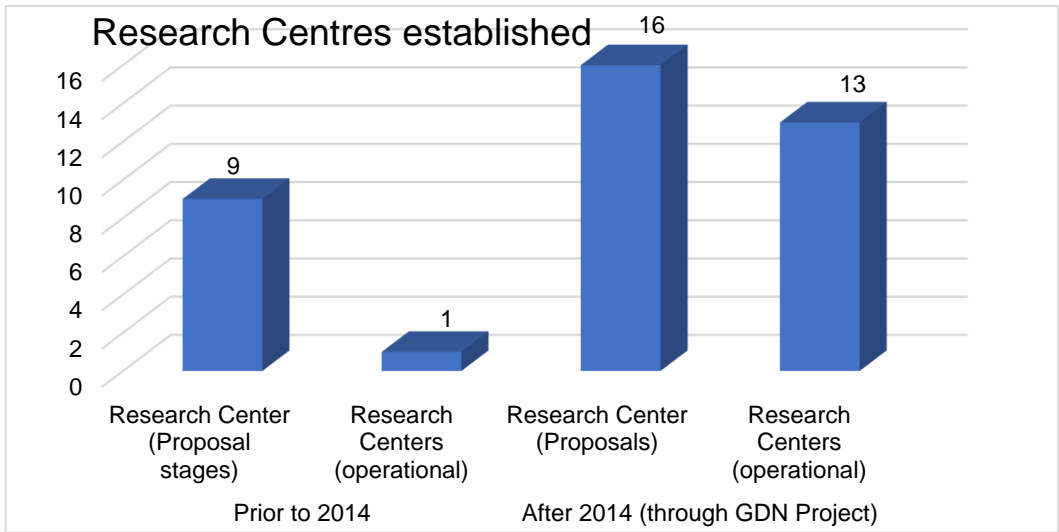
Figure 3. No. of research centres established
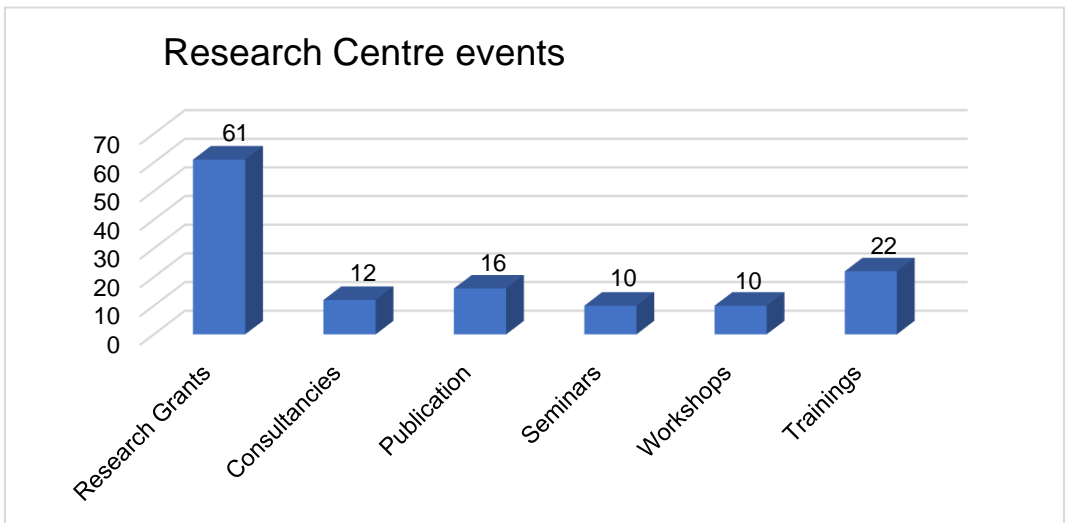
Figure 4. Research centre events as per data received from colleges

There was only one operational research centre in 2013. The number of research centres in operation increased to 13, and another 16 were proposed by 2016. The research events organised by the research centres increased to 131. The research centres embarked into industry consultancies and received numerous research grants (see Figure 4). Qualitative data revealed that the visioning exercise for the creation of research centres, and implementation of action points derived from the DRILs' visit to centres of excellence, and the renewed rigour of the research leadership exhibits of the DRILs enabled the establishment of several research centres in the colleges. Research centres play the key role in providing a platform for faculties to engage in research, and an avenue for national and international partnership programmes. As shown in Figure 4 above, the research centres have started publishing journal articles, hosting national and international seminars, and conducting research trainings for both their faculty and students (All Deans). Prior to the GDN project, there were only two research journals published but today there are seven journals that different research centres publish on a regular basis (Final Project Report, 2016). This has provided opportunities to not only for the RUB faculty but also to other national and International scholars to publish their research works (Dean 8). All the journals initiated during the project still publish and at least two new journals have been added to the list recently.

Objective 4 - Student engagement in Research

As a result of the design and development of non-credited research module and teaching of research to students, the impacts were impressive. There were no student research trainings conducted in any of the eight colleges in 2013, 2014, and 2015. The research training module was developed in 2014–2015 and implemented only in 2016. This module mainly focused on providing students additional knowledge and skills which were mainly hands-on to supplement their learning from the formal credited research module (S1 & S3). A total of 16 research trainings were provided for the students across eight colleges (Final Project Report, 2016). Hundreds of students participated in these trainings. Some colleges

have established student research committee to support student research (D1). Findings from the qualitative data shows that students' interest and enthusiasm for research increased, as many students enrolled for the research optional modules offered by different colleges (S1, 2, 3, & 4, 2017). Some students even embarked on designing interactive application for school students to learn Dzongkha (S1 & S2). As a result of the project support, students performed better in their credited research module courses (Dean 8 & S4)). Research should be part and parcel of any learning activity (P2). This is an indication that some college Presidents are supportive of research activities in their campuses. Furthermore, there has been an increasing trend of students applying for research internship/research assistants, and research funding to carry out their independent research during the semester breaks (PM).

Conclusion and recommendation

The fund received by iGNHaS to improve the Quality of Policy Relevant Research in Bhutan through Leadership Development, Institution Building, and Research Practice, has met its objectives and desired outcomes beyond the expected figures. The GDN grant has enabled iGNHaS, and the colleges of the RUB to address its critical and immediate challenges, ultimately building its long-term research development trajectory. The colleges successfully achieved its indicators on all the intended objectives. Tremendous amount of knowledge has been generated through acquisition of research projects, aggressive mentorship for beginning researchers, scientific publications, and developing a pool of research experts.

At the institutional level, the colleges increased its internal funding for research, instituted college Faculty Research Meets, built capacity to host national and international conferences, seminars and research events, and published college level research journals. All these have resulted to increase in the capacity of the faculty to publish not only in the national journals but also in the international journals. At the systemic level, partnerships and networks were established both nationally and internationally, decision makers approaching the colleges for

research partnership projects has emerged, there has been a growing interest of the policy makers searching for data and evidence from the colleges, and media visibility of the research by engaging in talk series by faculties featuring in the national television is increasing. Today, there is evidence to show that some faculty members have even achieved a ResearchGate score of more than 14 and a Google Scholar h-index of 6. It takes a significant amount of research publication and citations to achieve such scores. While this may not be completely attributable to the GDN project it definitely is an indication of the impact of GDN project. Therefore, it is clearly arguable that this model could be adopted by universities in countries which have similar socio-economic development trajectories to Bhutan. Two years of project implementation cycle was instrumental in developing the research culture in the RUB that is likely to bring in long-term impact. For instance, there have been a greater number of faculty securing International grants (such as Erasmus+ and ESRC) over the last few years. There are also faculties appointed as manuscript reviewers (both national and International journals) and external examiners for the PhD theses by the universities in countries like Australia and India.

However, in spite of all these developments, there are still areas where further interventions are required. College level leadership support, more faculty involvement in quality research and publication, securing international grants would play a crucial role in RUB's emergence as a high-quality university in the region and beyond. Funding is still a problem for RUB (P1 & L2). More specifically, capacity development in Higher Degree Research Supervision training is a new area, as RUB is introducing Master's by research degrees and PhD programmes.

Research has increasingly become central beyond the RUB. There seems to be a gap in terms of dialogue between academic institutions and government institutions. The iGNHaS, RUB should work towards bridging this gap such that this will enhance research and innovation to create a knowledge driven society. The higher education institutions should act as the catalyst of the knowledge driven society and deliver as the social equaliser through evidence-based decision-

making, and interventions. The universities should be prepared to better pitch its intellectual reference in the society, as to turn the challenges into opportunities.

References

Benton, D. C., Watkins, M. J., Beasley, C. J., Ferguson, S. L., & Holloway, A. (2020). Evidence-based policy: Nursing now and the importance of research synthesis. International Nursing Review, 67(1), 52-60. https://doi-org.ezproxy.aut.ac.nz/10.1111/inr.12572.

Brennan, J., Teichler, U. (2008). The future of higher education and of higher education research. High Educ, 56, 259–264 https://doi.org/10.1007/s10734-008-9124-6.

Choeden, P. & Maxwell, T.W. (2012). Improving the research output of academics at the Royal University of Bhutan: A reconnaissance and early initiatives. Bhutan Journal of Research and Development, 1(2), 187-198.

Colbeck, C. L. (1998). Merging in a seamless blend: How faculty integrate teaching and research. The Journal of Higher Education, 69(6), 647-671. Retrieved 18/12/10 from http://www.jstor.org/stable/2649212.

Cooksey, R., & McDonald, G. (2011). Surviving and thriving in postgraduate research. Tilde University Press.

Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th. ed.). Sage.

Elen, J., Lindblom-Ylänne, S., & Clement, M. (2007). Faculty development in research-intensive universities: The role of academics' conceptions on the relationship between research and teaching. International for Journal Academic Development, 12(2), 123-139. DOI: 10.1080/13601440701604948.

Erbay, E. (2017). Importance of research in social work practice: A pilot study from Turkey. Journal of Social Service Research, 43(3), 395-403. https://doi-org.ezproxy.aut.ac.nz/10.1080/01488376.2016.1246401.

Gyamtsho, D.C., Sherab, K., & Maxwell, T.W. (2020). Research at the Royal University of Bhutan and ways forward. Journal of Global Education and Research, 4(2), 154-172.

Hanover Research. (2014). Building a culture of research: Recommended practices. Washington, DC: Hanover Research. Accessed online: https://www.hanoverresearch. com/media/Building-a-Culture-of-Research-Recommended-Practices.pdf.

Hay, K., & Sudarshan, R. M. (2010). Making research matter in South Asia. Economic and Political Weekly, 34-36.

iGNHaS (2016). Report on improving the quality of policy relevant research in Bhutan through leadership development, Institutional Building, and Research Practice. iGNHaS, RUB.

Lavrakas, P. J. (2008). Encyclopedia of survey research methods (Vols. 1-0). Sage Publications, doi: 10.4135/9781412963947.

Marginson, S. & Considine, M. (2000). The enterprise university: Power, governance and reinvention in Australia. Cambridge University Press.

Pratt, M., Margaritis, D. & Coy, D. (1999). Developing a research culture in a university faculty. Journal of Higher Education Policy and Management, 21(1), 43-55.

Midwives (2019). Why is research important? Midwives, 22, 36–40. https://search-ebscohostcom.ezproxy.aut.ac.nz/login.aspx.

OECD (Organisation for Economic Cooperation and Development) (1996). The knowledge-based economy. OECD.

Partha Chatterjee. (2002). Institutional context of social science research in South Asia. Economic and Political Weekly, 37(35), 3604-3612.

Ribes, D. (2014, February). The kernel of a research infrastructure. In Proceedings of the 17th ACM conference on Computer supported cooperative work and social computing (pp. 574-587).

Royal University of Bhutan (2003). The Royal Charter of the Royal University of Bhutan. Thimphu: Royal University of Bhutan. www.rub.edu.bt/downloads.

Royal University of Bhutan (2015). Strategic plan 2013-2020. Thimphu: Royal University of Bhutan. http://www.rub.edu.bt/images/rub/Key-Documents/Strategic-Plan.

Royal University of Bhutan (2018). Strategic Plan 2018-2030. Thimphu: Royal University of Bhutan. http://www.rub.edu.bt/index.php/en/key-documents/strategic-plan.

Royal University of Bhutan (2017). The wheel of academic law. Thimphu: Royal University of Bhutan. http://www.rub.edu.bt/regulation/

Sherab, K. & Greenwood, R. (2014). Developing and nourishing a research culture at Paro College of Education. Rabsel: the CERD Educational Journal, 15, 24-40.

Sherab, K. & Schuelka, M. (2019). The value of research culture. The Druk Journal, 5(1), 72-83.

Stankevics, A (2015). The role of the higher education in the increasing of performance of a region. Social Science Bulletin/Socialo Zinatnu Vestnesis, 20, 100-107.

Tobden, J (2020). Women's Leadership Journeys in Bhutan: A longitudinal study. Bhutan Journal of Research and Development. 9(2) Autumn, 2020. iGNHaS, Royal University of Bhutan.

Yusuf, S. & Nabeshima, K. (Eds.). (2007). How universities promote economic growth. The World Bank.

─────────────────────────────────────

About the authors

Jamba Tobden, Chief Researcher with the Institute for Sustainable Development Research (iSDR), a private research institute based in Thimphu Bhutan. He has Masters in Social Science from the University of Newcastle, Australia and is an independent researcher.

Kezang Sherab is Assistant Professor (PhD in Education) at Paro College of Education. He teaches health and physical education and research methodology courses. Kezang has published on a variety of educational topics and has led many educational consultancies. His expertise and research interest are in the educational evaluation, GNH Education, efficacy beliefs, educational research methods, use of SPSS and MaxQDA for data analysis, action research, educational change, student engagement, non-cognitive skills, and youth fitness. He also serves as the Dean of Research and Industrial Linkages (DRIL) of the Paro College of Education.

How small can be beautiful: Bhutan's journey of self-evolution

Ruchi Payal

Abstract

The article is a qualitative study on Bhutan's political evolution over the years, conducted through secondary sources including various official reports, documents and articles. This first section of the article captures the idea of how a small nation through its experiences and cautious decision-making can evolve into an independent nation with sovereign status. The decisions it had taken, has made all the difference for Bhutan to create its own identity at the international platform. The next section investigates Bhutan's relations with its neighbours. It has never involved into the classical strategy of playing off one neighbour against another. The loyalty in nurturing the relations with its neighbours, and the focus on turning weaknesses into strengths has proved that how a small country with incredibly beautiful values has evolved at the international platforms with recognition and a future for itself in the times to come.

Keywords: Evolution, Decision-making, Sovereign, Classical Strategy, Identity

Introduction

Bhutan, 'the land of Dragon', is a small, peaceful landlocked nation in South Asia. It lies between two giant nations, India and China, and this strategic geographical position influences it's political, economic and foreign affairs. It is a land of rich bio-diversity, spiritual and religious values; a Buddhist kingdom and a spiritual heartland of Mahayana Buddhism in Himalayan regions. In 2016, it ranked first in Economic Freedom, Ease of Doing Business and peace and was the least corrupt nation in the region. Also, the nation that gave the world a new dimension worth measuring, the concept of National Happiness. The Swiss-based International Union for Conservation of Nature while applauding the nation's efforts to keep its

environment intact, said that Bhutan is viewed as a model for proactive conservation initiatives. It has a negative net green-house gas emission. The country gets most of its energy from hydroelectric power and the export of it also brings revenues for the nation.

Approach and Methodology

This is a qualitative paper that involves a mixed approach of reviewing the data from secondary sources and analysing it. First identifying the existing literature and broad canvassing of available materials related to the topic was done. Then it was analysed. After that, review of empirical literature on Bhutan's geography, historical-political-social-cultural developments and it's foreign policies was prepared and analysed. Lastly, the various areas were sorted into categories and organized as per the requirement of the article. that seemed reasonable for present purposes.

Struggle for self-assertion

Although Bhutan has never been colonized directly, but it has seen the consequences of colonization in great closeness. It was always very cautious about securing its territory and had fought seven wars in the northern region and three in the southern region to protect its territorial sovereignty.

During the Colonial time-period in the South Asian region, Bhutan followed a policy of isolation, just like Tibet. It preferred a policy of withdrawal from international politics to preserve its independence and distinct identity. In 1949, by signing a treaty with Independent India, Bhutan agreed to be guided by the advice of Indian Government in external matters, with the condition that India will not interfere in the internal administration of the country. These diplomatic-ties ensured Bhutan a strong friendship with India and its non-interference within the territory.

This treaty was later-on criticised not by Bhutan, but by other nations on the ground that India is dictating Bhutan's external affairs. But one thing that was totally ignored was that India got its hard-earned independence recently after paying prices too high, so it will obviously be in a defence mode vis-A-vis China on the

Himalayan frontier. It will turn every stone to avoid re-colonization by another nation over its territory and is sensitive about keeping an exclusive influence on the Himalayan states south of Tibet. It always respected the nation's autonomy and decisions and remained supportive.

Certain events like China's occupation of Tibet in 1950 and the way it suppressed the Tibetan revolt in 1959 made Bhutan come closer to India in security issues. These situations forced the nation to open-up and leave behind the age-old policy of isolation. What happened with Tibet made Bhutan realize the importance of relations with neighbourhood and international community. In this direction, it entered the United Nations in 1971 and the Non-Alignment Movement and soon became a full member of the South Asian Association for Regional Cooperation (SAARC) and also a member of BIMSTEC. These global associations provided Bhutan a new platform for realizing its equal identity among others. In the1980's Bhutan had diplomatic relations with Switzerland, the Scandinavian countries, Kuwait, Japan, Singapore, and some other nations. It was a member of several U.N. agencies (FAO, IDA, IMF) in 1981. Currently Bhutan maintains diplomatic relations with 52 countries including European union.

The process of modernization started since the 1960s and one thing worth noticing was that its modernization was not copy-pasted from other nations' developmental models. It was not Mac-donalization or westernization, it was simple modernization for its own growth and development, to update itself with the ongoing times. To achieve this goal, it moved toward accepting assistance from India, a friendly neighbour willing to aid Bhutan before the latter sought it. The first Prime Minister of independent India, Pandit Jawaharlal Nehru visited Bhutan in 1958 and persuaded the king to accept India's assistance. India fully financed Bhutan's first (1961-66) and second (1966-71) Five-Year Plans.

From the Third Five-Year Plan (1971-76), the aid began to decline and by the Sixth Plan (1987-92) it was around 42% of the total outlay. By then, Bhutan was able to generate local resources for itself and also had started receiving aid from other countries. This decrease in the aid with time was due to the belief that that the motive behind helping someone should not be to make the receiver

dependent on the giver, but rather to help in learning the techniques that make the recipient self-independent. This is the difference between the aid from China and aid from India. China's aid comes with the cheque-book policy, first it put the receiver in debt and then in-lieu of relieving from debt, shares the equity of the asset and at last captures it. Pakistan and some small island nations are the recent victim of this policy. But Bhutan has followed a very cautious engagement with respect to China.

Another major event that tested the nature of Bhutan was the time of 1962 Sino-Indian war. Initially, it followed a strategy pursued by Nepal, of equal friendship with both the nations. But eventually, Bhutan rejected the Nepal model and followed an approach carefully accommodating India's regional and security interests and simultaneously expanding its own relations with the outside world. (Leo E. Rose, The Politics of Bhutan (Ithaca, N.Y.: Cornell University Press, 1977), pp. 81-83).

The 1949 treaty remained a guiding star in the relationship of both the nations. It was revised in 2007 that called for close friendship and cooperation between both the nations on the issues of national interest, and neither government to allow the use of their territory for activities harmful to the national security and interest. It also reaffirmed respect for each-other's independence, sovereignty and territorial integrity.

Bhutan's actions might have been influenced by the advices from other friendly nations, but it never was a puppet in the hands of big nations. It was evident when Bhutan veered away from its traditional policy behaviour. For instance, once at the Non-Aligned Movement (NAM) conference in Havana, Bhutan departed from India on the issue of the admission of the People's Republic of in the U.N. India favoured leaving the seat vacant, while Bhutan supported the claims of the ousted Pol Pot regime and so did China. It also differed on the issue of the rights of landlocked countries at the Manila Meeting of the U.N. Conference on Trade and Development. And while it usually abstained from U.N. votes on the Afghanistan issue, Bhutan once voted against the presence of Soviet troops in that country. These instances stand as evidences for the quality of politics that Bhutan was

evolving with and its confidence in standing for what it believes at the international platforms.

Bhutan's recognition of Bangladesh in 1971 was another important milestone in it's direction toward self-assertion. Bhutan was the second nation, after India to give recognition to Bangladesh. Moreover, in 1984 both nations signed a protocol on the expansion and regulation of trade and reached to an Agreement on Economic and Cultural Cooperation during King Jigme Singye Wangchuck's visit to Bangladesh. Their relations were complementary to the growth of each other over the years.

Challenges

The nation is facing many challenges in addition to the negative impacts of the India-China tussle for power over the region. Joining hands with India, the nation in order to preserve its territorial unity and integrity for the security of north-eastern region, makes New Delhi very watchful of the Himalayan state because a tiny strip of Indian territory of only 150 miles from Tibet makes India vulnerable to Chinese attack. Chinese control of these 16 miles would cut the Northeast India off from the rest of the country.

Bhutan also faces insurgent problems from the Indo-Bhutan border areas. India may be a good friend and neighbour, but its northeast insurgents are not. These non-state actors include the people from Assam and West Bengal, who fight for their independence from Indian Federation and has the potential to undermine the friendship between both nations.

With respect to China, Bhutan remains vigilant on their activities. In the early 1930s, Chairman Mao, "declared that the correct boundaries of China would include Burma, Bhutan, Nepal…". But later editions deleted the claim after PRC began to form a 'Himalayan Federation' comprising Tibet, Ladakh, Nepal, Sikkim, Bhutan and the North-East Frontier Agency (NEFA) of India to extend its influence in southern Himalayas (In the original version of The Chinese Revolution and the Communist Party openly).

In 1958, another map claimed a large part of Bhutanese lands, and later occupied about 300 square miles of Bhutanese territory in the north and north-eastern Bhutan. The Chinese claim surfaced again in 1960 when it openly declared that Bhutanese, Sikkimese and Ladakhis form a united family in Tibet. The border problem posed a serious security threat after China's September 1979 incursion into Bhutanese territory (Dorji Penjore, Security of Bhutan: Walking Between the Giants, Journal of Bhutan Studies, page115).

Map. 1 Chinese map clearly showing the claims in the west and the north. / Source: weibo

When Bhutan objected this move, China expressed its desire to solve the problem bilaterally through talks. But for years, the talks never yielded any fruitful results. During the seventh round of talks in 1990, the Chinese had offered the Bhutanese a "package proposal" for the Pasamlung and Jakarlung valleys, with a total area of 495 sq km in the north, if Bhutan conceded their western claims. This proposal was rejected by the National Assembly of Bhutan. The Bhutanese position hardened after this. On the 11th round of talks in November 1996, "Bhutan revised its claims in the south and asserted a claim to larger territory than before, leading the talks to break down." In 2006, China constructed three roads that were

crossing the border itself. Between 2006 and 2009, talks were resumed and the Chinese actions further escalated near the border area. In total, China and Bhutan have had 24 rounds of border talks, without reaching any settlement. Overall, border problems continue to be the main area of contestation between the relations of both nations.

Comparatively, Bhutan is well aware of China's inability to become India's substitute. China may become a friend, maybe a good friend, but never a substitute of what India has been for Bhutan. There is a value-difference in the nature and functioning of the two nations. With regard to Nepal, the refugee problem and the insurgency, places serious stress on Bhutan's relations with Nepal. India is not directly involved, but as Bhutan does not border directly on Nepal, the Nepali insurgents use Indian territory as hideouts and launching stations for unleashing violence in the peaceful Bhutan.

Doklam issue and Bhutan
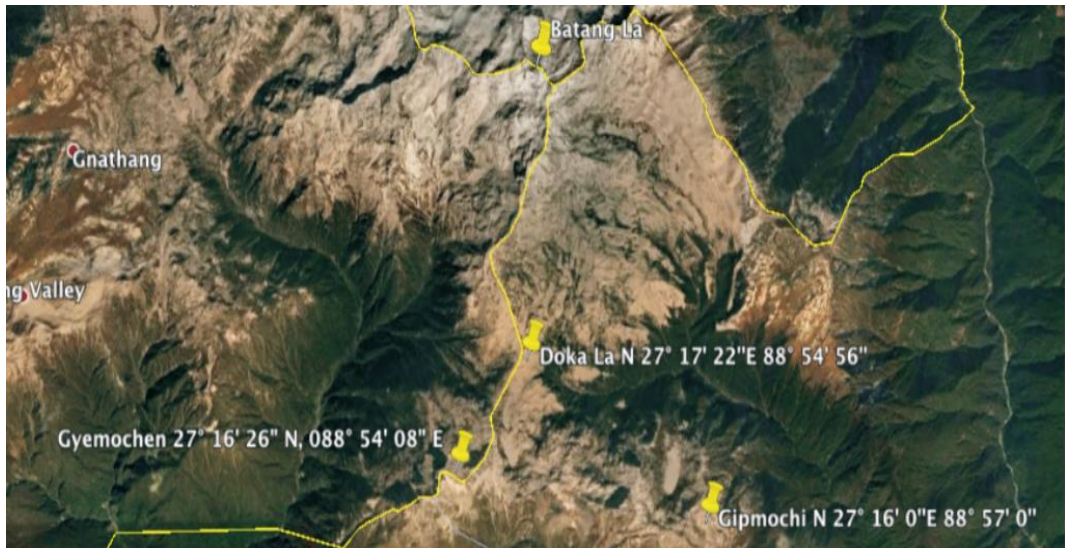
Map. 2 The Chinese claim Gipmochi as the tri-junction, but the Geo Names database shows it as 5 km east of where they place it along with Gyemochen. / Source: GeoNames database

The typical expansionist nature of China, forced it to start claiming regions in the Doklam region. This time, India hardened its stand on this issue, and a stand-off started between both nations. The Bhutanese Ambassador Major Gen. (retd.) V Namgyel, said in New Delhi, "Bhutan has conveyed that the road construction by the PLA is not in keeping with the agreements between China and Bhutan. We have asked them to stop and refrain from changing the status quo."

The Bhutanese government issued a press release on June 29, reaffirming Namgyel's remarks. It provided a backdrop to the events: "On 16th June 2017, the Chinese Army started constructing a motorable road from Dokola in the Doklam area towards the Bhutan Army camp at Zompelri… Bhutan has conveyed to the Chinese side, both on the ground and through the diplomatic channel, that the construction of the road inside Bhutanese territory is a direct violation of the agreements [on maintaining the status quo pending a settlement] and affects the process of demarcating the boundary between our two countries. Bhutan hopes that the status quo in the Doklam area will be maintained as before 16 June 2017 (http://www.mfa.gov.bt/press-releases/press-release-272.html).

The crisis has proved that today and in near future, any resolution of Bhutan's boundary issue must be embedded in the bigger picture of a Sino-Indian border settlement. Another thing to point out is that both India and Bhutan are involved with China in bilateral talks to resolve the border issues, but no settlement is reached, so there is a need to speed-up the process, and to come to a realistic resolution through multilateral talks including all three nations for once and for all. That only can assure peace for a longer term.

Conclusion

Geography locates Bhutan on a sensitive part of the Himalayan belt. Although the giant neighbours always had brought challenges for the nation Bhutan had followed a straight path of development. It has been a loyal friend of India, one of the few nations to recognize Bangladesh as a nation in the initial phase, and also was open to maintain a diplomatic relation with China without involving itself into the classical strategy of playing off one neighbour against another. Bhutan has

always stood by India, for "a strong India means a strong friend of Bhutan". Instead of fearing from its big size, as most other nations in the region do, it accepted India as a part of its strength. This shows that Bhutan is not insecure anymore with regard to India. It's governance has proved that a small country with stable government and right leadership could become an equal partner of giant nations despite asymmetric economic, political, military, demographic and geographic powers.

The possessor of a rich biodiversity, who places happiness as a parameter in the human development, who chooses human values above materialistic benefits, such nation should be acknowledged as a leader for many developing nations. Its achievements should be applauded at bigger platforms, and set as an example of what a nation can achieve in limited resources, limited paths open for development.

References

Ahsan, S. A. A., & Chakma, B. (1993). Bhutan's foreign policy: Cautious self-assertion? Asian Survey, 33(11), 1043-1054.

Ajai Shukla, "Doklam faceoff: The word from Ground Zero," Business Standard, August 4, 2017 http://www.business-standard.com/article/currentaffairs /doklam -faceoff-the-word-from-ground-zero-117080400839_1.html.

Amin Maalouf, In the Name of Identity: Violence and the Need to Belong; Barbara Bray (Trans.) (New York: Thierry Mathou, "Bhutan-China Relations: Towards a New Step in Himalayan Politics", in The Spider and The Piglet: Proceedings of the First International Seminar on Bhutanese Studies (Thimphu: The Centre for Bhutan Studies, 2004) Arcade Publishing, 2000)

Asian Recorder, 36:12 (March 19-25, 1990), pp. 21,061, 21,062

Choden, T. (2004). Indo-Bhutan relations recent trends. Perspectives on Modern South Asia–A Reader in Culture, History, and Representation, 298-302.

Foreign Ministry Spokesperson GengShuang's Regular Press Conference on July 5, 2017 http://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/t1475680.shtml

John W. Garver, Protracted Contest: Sino-Indian rivalry in the twentieth century, (2001, University of Washington Press, Seattle and London) p.176

Joshi Manoj, "ORF Special Report ". August 2017

Leo E. Rose, The politics of Bhutan (Ithaca, N.Y.: Cornell University Press, 1977), (pp. 81-83)

Lt Gen Prakash Katoch, "The India-China border conundrum," Indian Defence Review vol 28,3 July-Sep 2013 http://www.indiandefencereview.com/news/theindia-china-border-conundrum/;

Brig N.K. Gurung, "Strategic importance of Darjeeling, Dooars and Sikkim – For the political settlement of Gorkhaland ?"

Mandavi Mehta, "India's Turbulent Northeast," The South Asia Monitor, Number 35, July 5, 2001

Manorama Kohli, "Bhutan's strategic environment: Changing perceptions," India Quarterly, 42:2 (April-June 1986), p. 231.

Medha Bisht, " Sino-Bhutan boundary negotiations: Complexities of the 'Package Deal'" IDSA Comment January 19, 2010 http://www.idsa.in/idsacomments/Sino-BhutanBoundaryNegotiations_mbisht_190110

Nga, L. T. H., Hiep, T. X., Thuy, D. T., & Huyen, H. L. (2019). India–Bhutan treaties of 1949 and 2007: A retrospect. India Quarterly, 75(4), 441-455.

Penjore, D. (2004). Security of Bhutan: walking between the giants.

Ricardo Hausmann, "Prisoner of Geography – landlocked countries economies" in Foreign Policy, January 2001

Sarkar, R., & Ray, I. (2007). Political scenario in Bhutan during 1774-1906: An impact analysis on trade and commerce.

See Ministry of External Affairs, Government of India, press release, "Recent Developments in Doklam Area," June 30, 2017 http://mea.gov.in/pressreleases.htm?dtl/28572/Recent_Developments_in_Doklam_Area

Sreeradha Datta, "Security of India's Northeast: External Linkages," at www.ciaonet.org/olj/sa/sa_nov00das01.html, November 2000

Srikant Dutt, "India and the Himalayan States," Asian Affairs (London), 11, part 1 (February 1980), p. 78.

Swaran Singh, "Sino-South Asian ties: Problems & prospects," at www.ciaonet.org/olj/sa/sa_apr00sis01.html, April 2000

Syed Serajul Islam, "Bangladesh-Bhutan Relationship: From Isolation to Intimacy," in Bangladesh Foreign Relations: Changes and Directions, Muzaffar Ahmed and Abul Kalam, eds. (Dhaka: University Press, 1989), pp. 50-56

Tashi Choden and Dorji Penjore (2004). Economic and political between Bhutan and Neighbouring Countries, Thimphu: The Centre for Bhutan Studies

Thierry Mathou, "Bhutan-China relations: Towards a new step in Himalayan politics" The spider and the piglet:Proceedings of the first international seminar on Bhutanese studies (Thimphu, Centre for Bhutan Studies , 2004) p. 402

Translation of the proceedings and resolutions of the 73rd session of the National Assembly of Bhutan held from 10 August to 2nd September 1995 Section VII, Bhutan-China Boundary Talk

Translation of the resolutions of the 85th Session of the National Assembly of Bhutan (June 15-July 7, 2006) Section VIII, Border Talks. A translated

summary of the National Assembly resolutions are available on http://www.nab.gov.bt/ en/business/resolutions

Tsering Shakya, "Bhutan can resolve its problem with China-- if India lets it," South China Morning Post July 22, 2017 http://www.scmp.com/weekasia/ geopolitics/article/2103601/bhutan-can-solve-its-border-problem-chinaif-india-lets-it

W. R. de A. Samarasinghe, "The Bhutanese economy in transition," Asian Survey, 30:6 (June 1990), p. 564.

About author

Ruchi Payal is a research scholar in the integrated M. Phil-Ph. D. programme in the National Institute of Educational Planning and Administration, (A deemed to be University under MHRD, New Delhi, Government of India). She holds a Master's degree of Political Science from the University of Delhi, India. Her research interests focus the political science theories, with special emphasis on the impacts of decentralization in the schools of rural areas. She has published an article in the International Journal of Educational Management and Studies.

Enhancing Class X Students Proficiency in Biology using Role Play and Games

Yeshi Nidup, Kezang Choden, Yadu Prasad Luitel and Rupashree Gupta

Abstract

This action research explored the use of role play and games to enhance the proficiency of biology of class X A students from one of the schools under Phuentsholing. Students of class X A were chosen from the school; one group of students were used as control group and another group were used as experimental group. Each intervention was used for two weeks and a pre-test were conducted before and post-test were conducted at the end of each interventions. For the games, the mean marks during pre-test were 8.7 and post-test was 10.4 for control group; pre-test 9.9 and post-test 11.8 for experimental group. There is an increase in mean marks by 0.7. For the role play, the mean marks during the pre-test were 10.4 and post-test 11.1 for the control group; pre-test was 10.6 and post-test was 13.6 for the experimental group. The mean marks increased by 3. Through this study, both the interventions were found to be helpful in teaching of biology since both helped to increase in the mean marks during the post-test. Moreover, role play is found to be much better than the games since the increase in mean marks is more when biology is taught using role play.

Keywords: Role Play, Games, Academic performance, Interventions, Mean score

Introduction

Modern education system was institutionalized since 1960s although few schools were established prior to this. Moreover, Science and other disciplines also appear to have been introduced in the schools with English as the medium of instruction during the reign of the third King of Bhutan (1952-1972), (Rinchen, 2014).

Similar to other developing countries, Bhutan also placed great importance in institutionalizing a relevant and challenging science curriculum for all of its school children. Science was considered important as mentioned in the 'Science Curriculum Framework PP-XII' (Department of Curriculum Research and Development, 2011).

Teaching and learning of science in Bhutan had always been a challenge for both the teachers and learners. According to Rinchen (2014),

> Science education in Bhutan continues to face challenges, which includes cultural inappropriateness, lack of qualified science teachers, resource constraints, science being taught in English (i.e., a foreign language), and the lack of progression in science content across different grades (p.22).

The schools had been marred by the shortages of science teachers especially in the higher class. This has also affected the quality of science education in Bhutan. Therefore, the govt had to depend on teachers hired from neighbouring country, India to fill the gap. As we embark into 21st century which is mostly driven by science and technology, quality of education and quality of science education has become an emerging issue and a concern for the Education Ministry.

The performance of science subjects in class X and class XII board examinations for the last five years (2014-2018) showed low average as compared to rest of the subjects (Bhutan Council for School Examination and Assessment report, 2015-2019). This has affected the country immensely in terms of short supply of scientifically sound graduates ready to take up different professions related to science. There were reports of shortages of doctors and nurses in the hospitals. To make up for the gap 15 specialists were recruited from Myanmar in 2011 and BSc nursing program has been launched to address the shortage of nursing staff; there has been critical shortage of nurse in the field of specialized nursing care services (Ministry of Health, 2011). In 2017, there were only 2143 (19%) students enrolled in the field of science out of 11,259 students enrolled in the tertiary institutes (Department of Adult and Higher Education, 2017). All the high-end jobs in the construction sectors were found to be foreigners. If the quality

of science education is not taken care now, it will have repercussion to our socio-economic development and social development. Therefore, it is very important to improve the quality of science education.

The performance of students score in biology was found to be low as compared to other subjects (Tenzin, Johnson, & Ramachandran, 2006, as cited in Rabgay, 2018). Rabgay (2018) also mentioned that the students average scores in class ten biology has not crossed sixty as reported in Pupil Performance Report (2016, 2015 & 2014) by Bhutan Council of School Examination and Assessment (BCSEA).

Lebata and Mudau (2014) identified the quality of biology teacher, the way biology is taught and assessed, learners' discipline, parental support and guidance to children, and physical resources as some of the factors that affected the learning and performance in biology. Besides, the availability of textbooks, laboratory apparatus and other learning resources are identified as factors that contribute significantly to the performance of students in biology; students with positive attitudes towards the subject were noted to have better performance (Dinah, 2013, as cited in Ali, Toriman & Gasim, 2014).

Therefore, use of games and role play as an alternative teaching strategy for improving the proficiency of biology in class ten can be an experimentation, validation and addition of new knowledge on the works of previous researchers.

Objectives of the study

The objective (s) of the study was to:
   I)   Ascertain if role play and games can be used as teaching strategies to enhance class X student's proficiency in Biology.
   II)   Help students to improve their proficiency in Biology.

Research Question:

Can I improve Class X Student's Proficiency in Biology using Role Play and Games?

Significance of the study

This action research explored to see if role plays (Games, Simulations, Analogy role play, Experiments) can be used as the interventions for teaching and learning of biology in higher class. Moreover, the findings from this study will help other teachers to apply the similar kind of teaching strategies if it is proven to be effective in their daily classroom teaching of biology for higher classes. It will also make significant contribution in improving the quality of teaching-learning of biology across the schools in Bhutan. Further, it will encourage children to develop keen interest to learn science especially biology and contribute to the overall quality of science education in Bhutan.

Scope and limitations

The study explored whether role play and games can enhance class X students' proficiency in biology. Amongst several types of role play; games and analogy role play were used as an intervention to teach biology for class X students. The participating class for this study was class X A students from one of the schools under Phuentsholing Dungkhag.

Literature Review

The theory behind the use of role-play in science teaching and learning – as with 'active', 'experiential' or 'child-centred' learning – is that children are encouraged to be physically and intellectually involved in their lessons to allow them to both express themselves in a scientific context and develop an understanding of difficult concepts (Taylor, 1987, as cited in Sharry & Jones, 2000). The key to role-play, and the reason why role-play can help to make science relevant to many children, is that it is based upon 'play' (Sharry & Jones, 2000). This play activity is found to be very useful for the development of their knowledge and intelligence (Ginsburg & Opper, 1988). The authors also posit that the desire to play, and therefore to learn, is a fundamental part of human psychology and is a potentially powerful resource residing in the children themselves.

According to Desai, Joshi and Tenali (2016), students tend to mechanically write down the material but rarely reflect on it in a passive learning environment. In this context, Role-playing assigns students to think, argue, write and/or behave as if they were a particular person in a particular situation.

Role Play is considered to be effective and useful. Desai, Joshi and Tenali (2016) mention that role play stimulates students' involvement and enhance the learning environment. It is also mentioned that intensive student participation affords unique learning opportunities to students and enhance their communication skills. Moreover, by encouraging experimentation, role-playing helps students discover divergent viewpoints and overcome stereotype mode of learning the concepts as they examine subjects from multiple perspectives.

What are the advantages of role play in teaching of science? Role paly gives students a feeling of ownership of their education (Danby & Upitis, 1988) as (cited by Sharry & Jones, 2000). It is also known to be effective in teaching moral and ethical issues arising from the curriculum (Colby, 1987). It can also help the children across spectrum of educational needs to understand and interpret their relationship with the world (Cayton, 1989). Role Play is also known to help children conceptualise and increase learning (Lawson, 1993).

According to Chesler and Fox (1966), taking role of others and pretending to feel like, think like, and act like another person, students can act out their true feelings without hesitation and fear. The authors also mention that students can examine and discuss private issues and problems without anxiety. Through role play, students can also imagine and feel about other students or adults world. Role Play also gives an opportunity for understanding oneself and others for the behavioural change. It is also used to demonstrate less personal but pervasive problems between and among people and groups. Role Playing may prove to be an instructional technique particularly useful with non-verbal, acting-out students. Analogies and role plays are found to be helpful to conceptualize abstract ideas and things that are microscopic or too big to observe (Aubusson et al., 2006, as cited in Young, 2020). The students feedback gathered indicated that role play was effective and helpful in learning as mentioned in a study by Young (2020):

> It was really fun way to learn about our topic and I will definitely remember our topic a lot better now than I would had just studied it on my own. It made learning extremely fun and unforgettable. I would love if other modules had a similar aspect to the coursework. (p.6)

Similarly, the feedback from the students on the role play being used for understanding protein synthesis done by Sturges, Maurer and Cole (2009) mentioned.

> I found the activity interesting. The activity was educationally attractive due to the novelty of its style. I would recommend the development and utilization of similar activities for other content areas. The activity was fun and I enjoyed the activity. (p.107)

Howes and Cruz (2009) posit that role playing can be enjoyable and students will have a feeling that they are having fun without realizing how much they learn in doing so. Moreover, Howes and Cruz (2009) recognized the potential of role playing in science education as it leads to authentic learning, develop multiple perspectives, and motivate students to take active participation.

Selvi and Cosan (2018) stated that educational games are considered as an effective alternative teaching method to supporting traditional teaching approaches. Selvi and Cosan (2018) also mentioned that students become keen to learn when learning is made fun and interactive.

It is also found that educational games can be a good teaching approach that helps to teach complex molecular biology (Cardona, Spiegel, Alves, Ducommun, Henricques-Pons & Araujo-Jorge, 2007 as cited in Selvi & Cosan, 2018) and educational games they used enhanced learning of basic biology terms (Olimpo, Davis, Lagman, Parekh & Shields, 2010, as cited in Selvi & Cosan, 2018).

Bhasker (2014) mentioned that games helped the students in understanding of blood grouping to review their previous knowledge and (Osier, 2014) also mentioned that it has significant effect on students' performance of genetic terms. Similarly, Carew (2018) said that game was used as a method for understanding of physiology.

The students were very positive and optimistic about the use of games in teaching biology as mentioned in the study (Selvi & Cosan, 2018). The students expressed

The games enabled us to understand and learn the topics better. We did not forget what we have learned in the games for a long time. In addition, the games were colourful and clear. It is sad that it happens only for biology course. Playing the games with our peers also enabled us to correct our mistakes. The games were well designed and were at a level that we can understand.

Our interest in the biology course increased with the visual enriched and entertaining games. We learned the topics more easily. We did not get bored in the lesson. Our motivation increased; therefore, all these reflected our exams well. Our relationship with our friends strengthened. I like to see and play the games once again. (p.2023)

After cross examining the benefits and potential of using games and role play in teaching biology, it is understood that role play and games are a good approach to increase the learning of the students. As shown in Figure 1. Role Play can include play, games, simulation, metaphorical role play and analogical role play (Sharry & Jones, 2000; Craciun, 2010). The learning outcome is expected to be more when teaching is done through role plays as they can provide good learning environments for the students (Bhattacharjee & Ghosh, 2013). Gray (2007) described role play such as games, simulations and dramatisations as part of an interrelated set of learning and teaching methodologies, each one with specific characteristics. More specifically, Craciun (2010) mentioned that in science education role play can be viewed as an interaction between play, games, and simulations; and the student that performs an activity with learning outcomes.
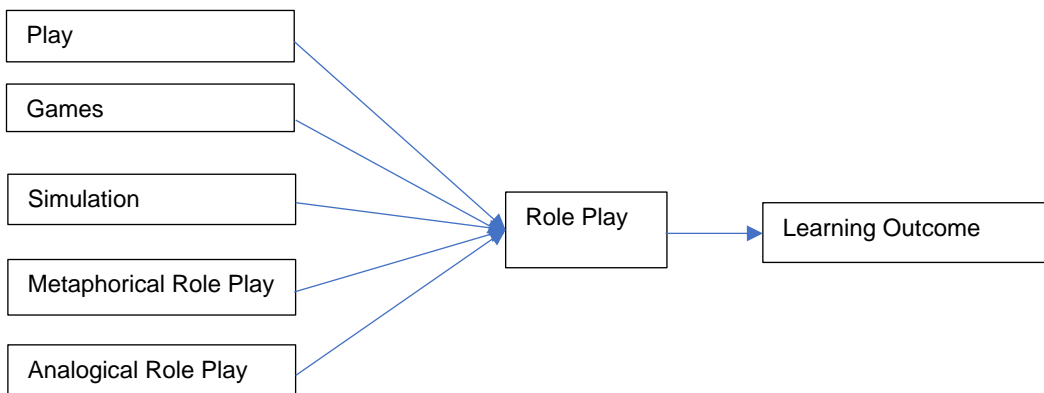
Figure 1*:* Role Play as the Medium of Interactive or Experiential Learning

Table 1*:* Interventions Action Plan

Week	Activity	Group	Remarks
Week 1	Pre-test	Control & Experimental	Researcher analysed the data towards the end of the week
Week 2 & 3	Intervention strategies - Games		
Week 4	Post-test	Control & Experiment	Researcher analysed the data at the end of the intervention
Week 5	Pre-test	Control & Experimental	Researcher analysed the data towards the end of the week
Week 6 & 7	Intervention strategies – Role play		
Week 8	Post-test	Control & Experimental	Researcher analysed the data at the end of the intervention
Week 9 & 10	analysis of Data and report writing		

The Table 1. shows the kind of role plays being used as intervention for this study. For the second week and third week, games such as Crossword puzzle, Bingo and Pair up or Break up were used. For different topics, different games were used as an intervention according to the relevance with the topics to be taught. The result was analysed at the end of week 5 after using the intervention for two weeks. For analogy role play, students were given a set of roles to be played

related to the topics. For instance, students acted as different cell organelles and each student acted as different cell organelles, and described their roles during the role play. The role play intervention was implemented from week 6 and week 7. The data was analysed at the end of week 8 and the report writing was done in week 9 and 10.

Methodology

Action research was considered as research design for this study as deemed appropriate. Amongst several interventions available, games and analogy role play were the two interventions applied at different time intervals. These interventions were evaluated at the end of the implementation period.

For the sample, students from class X A were chosen and used throughout the study. This class was chosen because of the convenience for the researcher as the researcher was teaching biology in that particular class. Convenience sampling was a technique applied for this study.

As an instrument, pre-test and post-test was conducted for both the control group and experimental group for each intervention. The Multiple-Choice Questions (MCQ) were referred from the internet (https://byjus.com/biology/mcqs-on-cell-organelles/) and adopted which were relevant to the topic. The questions were further reviewed by group of science teachers from the school to validate and contextualize according to our use. The control and experimental group were formed randomly from the list of students in the class.

The data was gathered as an ongoing process while implementing the interventions and also while conducting the pre-test and post-test. A descriptive analysis was done for the result of pre-test and post-test conducted at the end of every intervention. The mean, significance level and comparison of the mean marks for both the group (control and experimental) was done for the interpretation of the analysis.

Findings

The data from the pre-test and post-test in both the interventions was compiled and analyzed using excel. The mean score was calculated from the score of 15 students in the control group and 15 students in the experimental group, respectively. This mean score was then used in finding the differences in the mean score of both the control group and experimental group in both the interventions, games and role play.

A simple descriptive analysis was done to describe and interpret the data. Hence, mean marks of both the pre-test and post-test for control and experimental group was calculated and the T- Test was also done to find the significance level in each group.

The findings are all derived from the analysis of the mean score and the significance level testing done for both the interventions and the groups as detailed below.

i)   The test result for both the control group and experimental group increased during the post-test in both the interventions. However, the increase was higher in the experimental group than the control group. For the first intervention, games, the mean marks for control group increased by 1.7 and for the experimental group the mean marks increased by 2.8 as reflected in Table 2 and Figure 2. This increase is slightly higher than the control group. This indicates that there was improvement in their performance after the intervention.

Table 2: Pre-Test and Post-Test Mean Score of Control and Experimental Group

Test	Control group	Experimental group
Pre-test	8.7	9.4
Post-test	10.4	12.2
Difference in mean marks	1.7	2.8
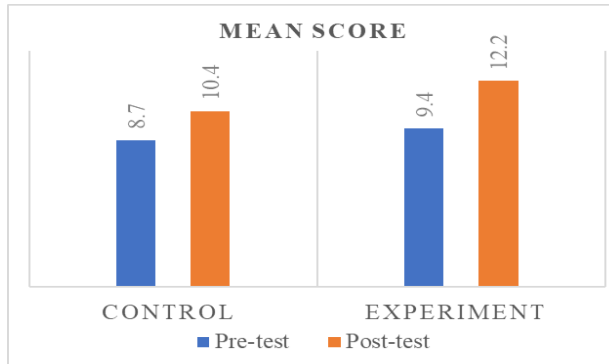
Figure 2*: Mean Score of Pre-Test and Post-Test for Control and Experimental Group

ii) The test result for the second intervention, i.e about the role play showed better result.

In the control group, there is an increase in mean marks by 0.7 and in the experimental group, there is an increase in mean marks by 3 as revealed in Table 3 and Figure 3. There is significant increase in mean marks.

Table 3: Mean Score of Pre-Test and Post-Test of Control and Experimental Group

Test	Control group	Experiment group
Pre-test	10.4	10.6
Post-test	11.1	13.6
Difference in mean marks	0.7	3
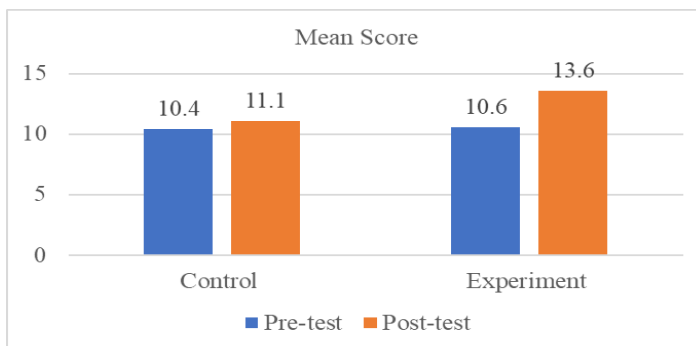
Figure 3*: Mean Marks of Pre-Test and Post-Test for Control and Experimental group

iii) The mean marks increased in both the control and experimental group when the first intervention (game) was implemented. The P-Value was found to be 0.004 and 0.000 for control and experimental group, respectively as reflected in Table 4. The increase in mean score during post-test was found significant in both the groups.

Table 4*: T Test for Pre-test and Post-test Result

Group	Control Group	Experimental Group
P.Value	0.004	0.000
Significance	Significant	Significant

iv) The mean marks increased in both the control and experimental group when the second intervention (role play) was implemented. The P-Value was found to be 0.032 and 0.000 for control and experimental group, respectively as reflected in Table 5. The increase in mean score during post-test for experimental group was significant at p-value 0.000 but for control group the increase in mean score during post-test was not significant at p-value 0.322. Thus, the researcher concludes that the role play has helped in improving the mean score of the students.

Table 5*: T-Test for Pre-test and Post-test result

Group	Control Group	Experimental Group
P.Value	0.322	0.000
Significance	Not significant	Significant

Reflection

The two interventions, games and role play selected for this study was implemented according to the plan and schedule. However, these interventions were implemented only for two weeks; this was found to be short while implementing. The researcher and the participants did not get adequate time to

use these interventions effectively. Moreover, the time gap between the pre-test and post-test was short. There is every possibility that the participants can still remember the questions from the pre-test if the time gap was short. This would consequently impact the mean score.

The interventions were good but some participants did not enjoy especially those participants who are conservative did not like role play. This affected their active participation and it may have also impacted their learning and the test score at the end.

The questions used for the pre-test and post-test was same. It should have been different but the concept and knowledge tested by each question can be kept the same. This would allow the researchers to understand the impact of interventions used and how significant was it for helping the participants to improve their proficiency in learning biology.

Therefore, all these aspects must be given due attention and consider for revision if similar action research is planned by any researchers.

Conclusion

From the two interventions used, it is concluded that both had positive impact in the outcome of the learning of biology since there were increase in the mean marks in both the control and experimental group during the post-test. In particular, role play was found to be slightly better than the games as the increase in mean score during the post-test was greater; the increase was 2.8 for games and 3 for role play, respectively.

However, in the role play, the increase in mean score was not significant for control group but the mean score difference was significant for the experimental group. In general, both the interventions, games and role play, has helped to improve the mean score of the participants.

As a researcher and biology teacher, both the interventions, using games and role play as a teaching strategy was found to be convenient and effective teaching pedagogy that can be applied with any other subjects. It would be of great help in improving the learning of biology for any grade although the study focused on class X.

Through this research, the researcher saw an opportunity for the teachers to shift the teaching pedagogy for biology. But, more in-depth study has to be done to further explore and validate the usefulness and impact of using games and role play in teaching of biology. The duration for the interventions used were very short. Hence, it may not have provided adequate learning opportunities for the learners to really have more impact. Thus, more future study on the similar topic is recommended to validate the findings and also to strengthen the impact of the study.

References

Ali, A. R., Toriman, M. E., & Gasim, M. B. (2014). Academic Achievement in Biology with Suggested Solutions in Selected Secondary Schools in Kano State, Nigeria International Journal of Education and Research. *International Journal of Education and Research*, *2*, 215-224.

Bhaskar, A. (2014). Playing games during a lecture hour: Experience with an online blood grouping game. *Advances in Physiology Education*, *38*(3), 277-278.

Bhutan Council for School Examination and Assessment. (2015). *Pupil performance report (8)*. Bhutan Council for School Examinations and Assessment, Thimphu: Bhutan.

Bhutan Council for School Examination and Assessment. (2016). *Pupil performance report* (9). Bhutan Council for School Examinations and Assessment, Thimphu: Bhutan.

Bhutan Council for School Examination and Assessment. (2017). *Pupil Performance Report* (10). Bhutan Council for School Examinations and Assessment, Thimphu: Bhutan.

Bhutan Council for School Examination and Assessment. (2018). *Pupil Performance Report* (11). Bhutan Council for School Examinations and Assessment, Thimphu: Bhutan.

Bhutan Council for School Examination and Assessment. (2019). *Pupil Performance Report* (12). Bhutan Council for School Examinations and Assessment, Thimphu: Bhutan.

Bhattacharjee, S., & Ghosh, S. (2013). *Associated Schools of Construction Proceedings of the 49th Annual International Conference*. posted by California Polytechnic State University (Cal Poly) in San Luis Obispo, California April 10-13, 2013.

Carew, M. (2018). Using a word game to test physiology comprehension. *Advances in Physiology Education*, *42*(3), 464-465.

Cayton, H. (1989) The contribution of drama to the education of deaf children. *Speech and Drama*, *30* (2), 43–48.

Colby, R. (1987). Moral education through drama: A 'beyond justice' perspective. *Two D Drama/Dance*, *7*(1), 72–80.

Craciun, D. (2010). Role – Playing as a creative method in science education. *Journal of Science and Arts*, *1*(12), 175-182.

Department of Adult and Higher Education. (2017). *State of Tertiary Education in Bhutan 2017*. Ministry of Education, Royal Government of Bhutan, Thimphu.

Department of Curriculum for Research and Development. (2011). *Science curriculum framework classes PP- XII*. Ministry of Education, Royal Government of Bhutan.

Desai, S. V., Joshi, G., Tennalli, G., & Patil, L. (2016). Molecular skit-role-play as a pedagogical tool for teaching molecular biology as an under-graduate

engineering course. *Journal of Engineering Education Transformations*, *29*(3), 138. doi:10.16920/jeet/2016/v29i3/85252

Ginsburg , H. P., & Opper, S. (1988). *Piagets theory of intellectual development*. International   Psychotherapy Institute E-books.

Gray, L. C. (2007). *An inquiry into role-play as a tool to deal with complex socio-environmental issues and conflict* [Doctoral dissertation].

Harrison, E. (2018). Role-playing activity to demonstrate diffusion across a cell membrane. *Journal of Microbiology & Biology Education*, *19*(2), 1-2. doi:10.1128/jmbe.v19i2.1576

Howes, E. V., & Cruz, B. C. (2009). Role-playing in science education: An effective strategy for developing multiple perspectives. *Journal of Elementary Science Education*, *21*(3), 33-46. doi:10.1007/bf03174721

Mark, C. R. (1966). *Role-playing methods in the classroom.* Science Research Associates, Inc.

Ministry of Health. (2011). *Annual Report, 3rd Year of 10th Five Year Plan (2010-2011).* Ministry of Health, Royal Government of Bhutan, Thimphu.

Osier, M. V. (2014). A Board Game for Undergraduate Genetics Vocabulary and Concept   Review: The Pathway Shuffle. *Journal of Microbiology & Biology Education,* 15(2),   328.

Rabgay, T. (2018). The Effect of Using Cooperative Learning Method on Tenth Grade Students' Learning Achievement and Attitude towards Biology. International Journal   of Instruction, 11(2), 265-280. https://doi.org/10.12973/iji.2018.11218a

Rinchen, S. (2014). *A study of the emotional climate of a science education class for pre-service teachers in Bhutan.* Unpublished PhD thesis, Queensland University of Technology, Brisbane, Australia.

Selvi, M., & Cosan, A. O. (2018). The Effect of Using Educational Games in Teaching Kingdoms of Living Things. *Universal Journal of Educational Research*, *6*(9), 2019-2028. https://doi.org/10.13189/ujer.2018.060921

Sharry, G. M., & Jones, S. (2000). Role-play in science teaching and learning. *School Science Review*, *82*(298), 73-82.

Sturges, D., & Cole, O. (2009). Understanding protein synthesis: a role-play approach in large undergraduate human anatomy and physiology classes. *Adv Physiol Educ*, *33*, 103-110. https://doi.org/10.1152/advan.00004.2009

Taylor, C. A. (1987). In *science education and information transfe.* Pergamon (for ICSU   Press).

Young, P. W. (2020). Student-produced video of role-plays on topics in cell biology and   biochemistry: A novel undergraduate group work exercise. *Front. Education, 5,115. doi:10.3389/feduc.2020.00115*

About the authors

Yeshi Nidup is currently working as Vice Principal of Phuenthsholing Higher Secondary school. He has Master's degree in development and management from the Philippines. He has six papers published both national and international journals. His interest is in reading, writing poem, research in education, and art.

Kezang Choden is a Physics teacher who is so much passionate of science education and teaching of science. She also has keen interest in research related to teaching and learning.

Yadu Prasad Luitel is a Chemistry teacher who has keen interest in teaching and learning of science. He also has keen interest and curiosity to explore and learn through research.

Rupashree Gupta is an experienced Biology teacher for higher secondary class. It is her interest to explore, learn and enhance professional growth through research.

Efficiency of school performance from experiential learning through distributed leadership in the selected Lower Secondary Schools in Bhutan

Sherap Dema

Abstract

Distributed leadership sees all members of the staff in a school as expert in their own right. However, there were no studies done in Bhutanese schools on how efficient distributed leadership worked in improving the school performance. An experiential learning process of distributed leadership was undertaken as a case study in two Lower Secondary Schools wherein the author had taken-up the position of school leader. Structured questionnaires and focused group discussions from the selected Lower Secondary Schools in Bhutan were considered to explore effectiveness of distributed leadership. Study findings indicated increased awareness of distributed leadership and effectiveness in improving the overall school performance. Experiential learning processes of the distributed leadership from the two Lower Secondary Schools demonstrated significant overall performance based on sets of assessment guidelines of the school. The scope of this study was limited to selected lower secondary schools only, and similar studies could be undertaken in the Middle and Higher Secondary Schools in Bhutan.

Keywords: Experiential learning; Distributed leadership, Shared responsibilities; Leadership

Introduction

Leadership helps to motivate people to work towards a greater outcome which can benefit the whole group or an institution such as school. There are various responsibilities that need to be carried out by every individual staff based on their job responsibilities. However, it is equally important to have a collective

responsibility in addition to the responsibilities that they have already been assigned. Some schools share responsibilities among teachers who then gain experience while other schools rarely share responsibilities. Experiential learning of distributed leadership sometimes indicates that the teachers focus on their teaching only and other responsibilities are neglected. Sharing responsibilities helps teachers to get experience and opportunity in developing personal leadership qualities. If sharing responsibility is limited, the power of authority will not make one a leader but it simply makes an individual the boss.

All Principals in Bhutanese schools are expected to maintain required instructional hours besides carrying out administrative and managerial tasks. In many schools, Principals find it difficult to complete the required instructional time. This raises the question of the lack of awareness of the strength and support of distributed leadership among teachers in schools in Bhutan. According to Harris (2004), distributed form of leadership can assist capacity building within the school, which contributes to school improvement. Lashway (2003) provides other evidences that suggest the task of transforming a school is too complex to expect one person to accomplish single handedly. Accordingly, leadership should be distributed throughout the school rather than vested in one position. Similarly, there are many other researches that has been conducted that showed distributed leadership help achieve common practices. Nevertheless, there may be few or no such studies conducted in Bhutan. Thus, the research on distributed leadership in lower secondary schools in Bhutan has been put forward to understand distributed leadership through a Bhutanese lens.

The primary research question is to find out what the impact of experiential learning of distributed leadership is, as practiced in the Lower Secondary Schools in Bhutan. More specifically, the study is to explore efficacy of school performance from experiential learning processes by asking on how effectively do our Principals carry out distributed leadership with clear instructions? Do schools involve staff and community in shared decision-making including school vision formulation? and, Do Principals fulfill their required instructional hours?

The hypothesis drawn for this study is that Distributed Leadership enhances leadership capacities, total effectiveness and improvement of the schools.

Literature review

Distributed leadership is an attitude rather than a management technique. It means seeing all members of the faculty and staff as experts in their own right. It is the sharing of responsibilities across the organization and making every individual expert in specific areas of operation (West Chester University, 2004).

According to Harris (2004), a distributed form of leadership can assist capacity building within the school, which contributes to school improvement. This included involving others in decision-making, allocating important tasks to teachers and rotating leadership responsibilities within the school. Evidence also suggests that where teachers share good practices and learn together, the possibility of securing better quality teaching is increased. R&D-NCSL (2004) reports, that they have explored how distributed leadership supports leader style, teams, and how larger numbers of leaders can be developed. According to R&D-NCSL (2004), there is a need for leadership to be shared at all levels and individuals and teams to play a leading part.

Lashway (2003) provides other evidence that suggest that the task of transforming a school is too complex to expect one person to accomplish single handedly. Accordingly, leadership should be distributed throughout the school rather than vested in one position, as leadership plays a crucial role in generating school reform and instructional improvement. McCoy and Felton (2002) corroborate this when they stress that "In a knowledge-intensive enterprise like teaching and learning, there is no way to perform complex tasks without widely distributing the responsibility for leadership among roles in the organization, and without working hard at creating a common culture, or set of values" (p.1).

The theory of distributed leadership, as shaped by the Annenberg Institute for school Reform (2004) is about developing a shared vision for the school or district that focuses on high-level student achievement. They, too, recognize the need of sharing responsibilities for achieving common purpose. According to

Goldsmith (2010), "employees may feel they are more like partners and become more engaged ultimately paving the road for greater success for the organization, the team, and themselves".

As per Blum (n.d.),"the future of our communities depends on a generation, not only skilled in academics, but also excited about belonging to an educated community. That community will arise only if schools engage and connect with today's children. Effective schools create an environment that increases academic, social and emotional success—an environment of strong school connectedness".

According to Lawrence and Vimla (2012), "Environment plays a vital role in the development of the personality of the students. As a student spends most of his life at school, the school environment is highly responsible for the inculcating of great values in him". It is also said that the environment boosts up not only the achievement of students but their social ability, healthy status and moral values.

Kolb and Boyatzis (2011) experiential learning process of "Experiencing – Reflecting – Thinking – Acting" is a powerful approach in the enforcement of distributed leadership in the school. Kolb's experiential learning describes the ideal process of learning, invites one to understand as a learner, and empowers self to take charge of own learning and development. This is in true sense a learning process that empowers all staff in the schools and contribute to efficiency in the annual performance.

Furthermore, a guide to decentralized education monitoring and support services system developed by the Education Monitoring Division (2019) of the Department of School Education require to delegate responsibilities to the teachers. They are also expected to invite teachers into the job delegation processes, implementation, monitoring, reviewing, evaluating, and providing feedback for amendments and improvements. While the Education Monitoring Division (EMD) guidelines/principles (2019) and the importance of distributed leadership are clearly indicated, there is no study that indicates the practices and impact of distributed leadership in the lower schools in Bhutan. Thus, this study proposes to explore Principals' and teachers' perspectives on the distributed

leadership and examine their opinions of the impact of distributed leadership in Lower Secondary Schools in Bhutan.

Study Methodology

A case study of experiential learning of distributed leadership by the author in Lungtenphu Lower Secondary School (LLSS) and Taba Lower Secondary School (TLSS) in Bhutan over the four years period in each school was taken to validate the efficacy of school performance. The Department of School Education, EMD guidelines (2019) for assessing school performance was adopted as a guideline for overall school performance.

A qualitative research approach was used since it required the teachers to put forward their personal interpretations. Creswell's phenomenology approach (2003) was adopted in which the researcher identifies the essence of human experience concerning a phenomenon was used.

Purposive sampling of four Lower Secondary Schools Principals and two teachers each from the same schools around Thimphu and Punakha districts was chosen on voluntary basis to participate for in-depth and detailed information collection. Field notes were used to allow for more open and free discussions among the teachers and school Principals. Interpretations were done qualitatively after sorting out the written information and reading it to draw general themes in narrative form. Triangulation process was adopted to enhance the accuracy of the research by debriefing of the findings with the colleagues by asking the same questions to a number of people in different groups in the locality. All the participants were asked to sign a consent form prior to participating in the interview. Anonymity of their names and school was guaranteed to all the participants.

Leadership responsibilities of past year experiential learning processes at LLSS and TLSS were shared in each year during delegation of distributed leadership by rotating every academic year amongst the teachers. Past year experiential learning observations of LLSS and TLSS teachers were accommodated annually to improve the objectives for the particular academic calendar.

Implementation of 21st Century Transformative Pedagogy strategies were initiated from 2015 in teaching meaningful learning at LLSS and TLSS as initiated nationally by the Ministry of Education. Later part of the experiential learning approaches, teaching learning was also enhanced by focusing through Place Based Education (PBE) combined with Transformative Pedagogy at TLSS.

Secondary data were collected from the Education Monitoring Division (EMD) of the Department of School Education (DSE).

Results and Discussion

Awareness of distributed leadership

The concept of distributed leadership is well understood among the School Principals in the Bhutanese Lower Secondary Schools. The schools' Principals are probably exclusively accountable for the success of the school management and therefore delegate effectively to staff members in carrying out the various tasks.

All the teachers who participated in the survey had great awareness of the knowledge of distributed leadership which was perceived to be very effective in the school. It was evident from the respondent ID03 who explained comprehensively as follows:

Without distributed leadership, I feel that any organization will not able to function properly and efficiently. There are so many advantages in distributed leadership. For example:

> … helps to develop leadership qualities, develop strong interpersonal qualities, instill a sense of competition, responsibility and co-operation, encourages people to work together to share ideas, creates a shared vision, mission and common direction, helps in smooth running of school, ensure quality work, helps in maintaining accountability, transparency and efficiency, people become confident and competent.

Yet, such experiential learning of distributed leadership also required careful shared responsibility based on capacity of the staff. For instance, respondent ID10 opined that "Distributed leadership is good but too much decentralization is not

good. At times certain things need to be retained to avoid loss of time for discussion. Personal interest might override the objective". On contrarily, respondent ID06 illustrated that a shared responsibility to a single games-coordinator may not be able teach all disciplines of games and sports but rather it would be efficient if we distribute among teachers who are capable to lead as a team. Limitation of assigning multifactor responsibility is similar to what Harris (2004) concluded that Head Teachers often approach through assigning a single leadership to staff.

Distributed leadership practices mechanisms in schools

It was evident in most cases, that the individual's hidden talents would not be exploited when Principals shared leadership roles based on the individual teacher's apparent capacity to achieve the common goals of the school. This was shared by respondent ID07 who stated that their Principal distributed leadership in the effective manner by judging the capability of each member of school staff. However, the Principals prioritized to assign responsibilities among the capable ones as expected in most bureaucracies. The Annenberg Institute for School Reform at Brown University (2004) too describes distributed leadership as sharing responsibilities by everyone in the school who can shoulder school's responsibility to achieve the common purpose. All participants felt that they have adequate mechanisms put in place for shared responsibilities in their respective schools. According to respondent ID06, in their school, responsibilities were given to different teachers who have qualities in those particular areas. The respondent ID06 felt that the Principal has been very effective in the distribution of duties.

Many participants considered that school Principals involved them in decision-making processes by bringing the matter to the floor of scheduled meetings. Teachers also felt that the Principals were motivating and involved in the decision-making processes of the school.

While the mechanism of empowering responsibility to deserved candidates served to promote efficient school management, the development of self-confidence in others who were not involved appeared to be minimal. Apparently, it

had not been feasible to delegate additional minor responsibilities to staff due to limitation of specialization.

Although Principals in schools delegate roles and responsibilities and other duties to able teaching staff, active involvement of the local community in enhancing the school development varied from school to school. It was perceived by the participants in the study that in some cases, community involvement was too high while in some, there was little community support especially in the field of long-term planning and setting the vision and mission of the school. For example, respondent ID02 stated:

The School Management Board meeting is conducted twice in a year to discuss about parents' participation in the school. The community participation is less comparing to other societies.

This may be due to the communities not being aware of the needs in their society as they are populated primarily by illiterate people. It all depends on how advanced the understanding of the community is and their willingness to support the school in its development.

Enforcement of shared responsibilities

Shared responsibilities are generally guided by the school's written policy document while some are guided by the yearly calendar. In all schools, they have committees, clubs, in-charges, house masters, coordinators etc. to accomplish the roles and responsibilities entrusted.

Several strategies of shared responsibility in the school were voiced by the respondents. According to respondent ID09, "Responsibilities are equally shared. During the first ten days of school, we workout with the responsibilities, reframe on what we have, and discuss whether there is a need to add on what we already have or remove if not felt important". Likewise, respondent ID03 shared that "To ensure shared responsibilities and also to ensure that the expectations of the systems are fulfilled, we have a clear written policy on the implementation of all school activities. Tasks are carried out as per the school calendar by different clubs

and committees. The Principal acts as the role model and makes it clear that everyone is responsible for his/her work".

Generally, responsibilities were discussed and assigned in the beginning of the session with an instruction to submit the action plans along with clear objectives. This was based on planning exercise carried out soon after the annual examination for the next academic year. Respondents felt that the responsibilities are allotted based on interest and capability and the performances are evaluated on such planned tasks (ID05 and ID08). However, it was also important that resources to carry out their shared responsibilities were made available. Requirement of support from the school leadership was evident as stated by the respondent ID01 in making available resources while assigning the shared responsibilities.

Respondent ID04 felt that the school had a written policy document which contained roles and responsibilities of Principal, Vice Principal, Head of Department, Staff Secretary, Class Teachers, House Masters, Club In-charges, and non-teaching staff with clear instructions. As per the ID04 respondent, the school authority makes sure that every staff member takes certain number of responsibilities.

Effectiveness of distributed leadership

In Bhutan, overall school performances are based broadly on three principles namely 1) academic learning score (ALS) centered around structured curriculum, 2) enabling practices of schools (EPS) dealing with guidelines, physical enabling facilities and monitoring mechanisms, and 3) alignment to GNH principles in areas like community vitality, green school policies, and mindfulness training, etc.

The respondents recognized that distributed leadership helped students to engage actively; transformative pedagogy and placed-based education (PBE) provided every student a chance to participate in the class. It was found that no students were left out and all gained equal attention from the teachers. Transformative pedagogy ensures equal attention in classroom management, with learner centered activities. Likewise, PBE enhanced student teacher engagement

that emphasizes hands-on, connects with community and real world learning experiences.

According the respondent ID02, distributed leadership in an effective manner had facilitated effective management of the school to fulfill the set goal. It was observed that effective managers achieve better results by utilizing the talents of their subordinates. The Principals were seen to act as facilitators in building up the morale of the school. This respondent noted that Principals were ever present and willing to provide advice and assist the different groups (students, staff and parents) to carry out the various tasks and functions for the successful achievement of the school's objectives.

Respondent ID08 shared similar views that distributed leadership was becoming effective as can be deduced from the responsibilities and rights that were given to Head of Departments, Scout Masters, Literary Coordinators etc.

The decentralized operation of school was sounded loud by respondent ID03 who stated that the Principal was just the overall manager in the school. The participant expressed that everything was decentralized. According to this participant, under the Principal, the school had Vice Principals who look after the primary and secondary levels. Varieties of tasks were assigned to different teachers with specific aims, objectives and goals. The school had different clubs, committees, class coordinators, subject departments, monitors, house masters and club in- charges.

Some of the visible impacts of distributed leadership experiential learning was that school had well maintained flower gardens and potted flowers, hedges and plants in all relevant places. School has become litter free with proper waste management practices. The compound walls and paved ground within the school campus have been enriched with educational quotes. They were aligned with the principles of GNH learning as every student and staff get experience in doing specific tasks, reflecting on their tasks and thinking over for improvement. Such experiential learning worked better since the responsibilities have been distributed among the staff.

Efficiency in empowerment of distributed leadership

Most of the present Principals carry out distributed leadership in an effective manner. They are effective managers who achieve better results. They not only attain the major goals expected of them, but they also fully utilize the talents of their subordinates…(ID02).

Studies of distributed leadership in practice by Harris (2004) in National Association of Head Teachers in England and the National College for School Leadership conclude that successful Heads recognized the limitation of the particular leadership approach. It also observed that their leadership role was primarily concerned with empowering others to lead. At times, the Principals of the Bhutanese Lower Secondary schools had retained certain roles to decide unilaterally to avoid domination by personal agendas. The respondent ID10 who was one of the Principals of the Lower Secondary School in Bhutan opined, "*Certain things are needed to be retained*". School Principals prefers experienced and confident teachers for leading roles in their schools to refrain from making mistakes while other interested teachers get experience through assisting the former.

The instructional hours for the respondents in this study varied depending upon the requirement of the school. The teacher's instructional hours varied from 26 to 36 classes of 40 minutes duration while the Principals' ranged 4 to 6 periods per week. The participant who took 36 instructional periods in a week stated:

> I feel that teachers are overloaded. Besides teaching, there are so many other works and responsibilities that we have to carry out. Because of this, we are not able to prepare lesson plans daily and make the teaching aids whenever needed. We do not have time for corrections too. So, I feel that we could manage our work schedule better if are given reasonable number of instructional periods.

The prescriptive instructional hours for the teachers and the Principals were felt to be excessive compared with the shared responsibilities in the schools. The deployment of the teaching staff based on the student numbers alone had been

not conducive in many schools. In some schools with comfortable numbers of teaching staff, the Principals resorted to taking up instructional hour classes such as *Value Education* and *Physical Education* as they warrant no formal assessment.

In most situations, inadequate numbers of teaching staff had led to failure to fully utilize the potential of the teachers in both curricular and co-curricular activities. However, given the requirements to complete the curricular syllabus, some teachers have given up additional time beyond the allotted school hours. In spite of the time pressure, both the class teachers and the Principals endeavored to cover the written syllabus in every academic calendar.

It is therefore of paramount importance to note that the school Principals should be an instructional leader rather than manager or administrator, by considering teaching and learning as core business of school. Experiential learning data of class III from LLSS and TLSS in 2012 and 2016 before the distributed leadership enforcement indicated low ALS in the first year when compared to other two criteria (EPS and GNH) as shown in Table 1 and Table 2. In fact, TLSS academic learning score was below 50% while EPS and GNH percentage were above 90%. Such incidences are expected when an instructional leadership is overlooked by not focusing teaching and learning as the core business of the school.

Table 1. Class III Performance from experiential learning application in LLSS case study school

Year	Academic Learning Score (ALS) (%)	Enabling Practice in Schools (EPS) (%)	Aligned to GNH principles (%)
2012	65.73	73.71	69.45
2013	90.33	85.48	74.40
2014	78.08	85.06	78.75
2015	99.17	89.28	80.85
2016	100.00	98.700	92.50

Source: EMD/DSE 2021

Table 2. Class III Performance from experiential learning in TLSS case study school

Year	Academic Learning Score (ALS) (%)	Enabling Practice in Schools (EPS) (%)	Aligned to GNH principles (%)
2016	47.15	90.62	98.75
2017	85.51	99.38	99.06
2018	99.33	98.86	100.00
2019	99.06	99.68	100.00
2020	100.00	100.00	100.00

Source: EMD/DSE 2021

Likewise, experiential learning data (Table 3 and Table 4) of the class VI performance from the same Lower Secondary Schools also confirms that teaching and learning as the core business of school were not prioritized in 2012 and 2016 year before new leadership took over and enforced distributed leadership in the schools. TLSS academic score of class VI was consistently lower in 2016 despites achieving more than 90% in other criterions indicating overlooking the core business of school.

Table 3. Class VI Performance from experiential learning in LLSS case study school

Year	Academic Learning Score (ALS) (%)	Enabling Practice in Schools (EPS) (%)	Aligned to GNH principles (%)
2012	69.65	73.71	69.45
2013	73.87	85.48	74.40
2014	73.49	85.06	78.75
2015	64.58	89.28	89.28
2016	92.39	98.70	98.70

Source: Adapted from EMD/DSE 2021

Table 4. Class VI Performance from experiential learning in TLSS case study school

Year	Academic Learning Score (ALS) (%)	Enabling Practice in Schools (EPS) (%)	Aligned to GNH principles (%)
2016	45.77	90.62	98.75
2017	75.62	99.38	99.06
2018	88.15	98.86	100.00
2019	100.00	99.68	100.00
2020	100.00	100.00	100.00

Source: Adapted from EMD/DSE 2021

Experiential learning experience of distributed leadership in Lungtenphu and Taba Lower Secondary Schools case studies clearly demonstrates that the overall school performance had a significant improvement from 2013 and 2017 onwards. For instance, when the school management leadership was taken over by the author in 2013 and 2017, the overall performance of school in class III at LLSS and TLSS was 69.63% and 78.84% respectively. At the end of four years of experiential learning processes of distributed leadership with primary focus on core business of school, the overall school performance of LLSS in 2016 and TLSS in 2020 in class III significantly enhanced to 97.07% and 100% respectively. Likewise, class VI overall performance of LLSS in 2012 and TLSS in 2016 were around 70.93% and 78.38% respectively before the author assumed the leadership of the respective schools. Once the experiential learning of distributed leadership was implemented consistently for the duration of four years in both schools from 2013 and 2017, the overall performance of class VI in LLSS in 2016 and TLSS in 2020 had achieved 96.60% and 100% respectively. This could be attributed due to empowering of shared responsibilities while ensuring instructional hours of the teachers are within the upper ceiling, in addition to many responsibilities. Data from the two schools for the EPS and GNH criterion for class III and class VI consistently observed better performance in TLSS compared to LLSS. This is likely that recent establishment of TLSS in 2013 when compared to more than five decades old

LLSS in late 1960s might have enabled to score higher EPS and GNH marks as the varied infrastructures might have contributed enabling conditions for EMD assessment criterion. Other hypothesis for consistent better performance of TLSS from LLSS could be due to enhanced professional development practices such as 21st century transformative pedagogy and place-based education approaches that were initiated from 2015 academic calendar only.

However, the initiatives and enthusiasm to carry out the delegated responsibilities confidently has to be there in teachers to maximize their leadership qualities. According to Elmore (2000, p.14-15), in a knowledge intensive enterprise like teaching and learning, there is no way to perform complex tasks without widely distributing the responsibility for leadership among roles in the organization, and without working hard at creating culture, or set of values. If the teachers don't co-operate actively when given the opportunities, they might not be able to come out of their cocoon of reservation.

Conclusion and Recommendation

The school Heads have a lot of influence in allowing or disallowing teachers in their schools to share responsibilities. School Principals' ability to incorporate shared leadership is hampered and restricted by their personal values, limited familiarity with shared leadership, and the constraints imposed by full schedules and limited resources. In general, the responsibility, accountability and authority do not always go together in Bhutanese civil service administration. As a result, shared decision-making processes face significant countervailing forces due to limitations of accountability.

The aim of this study was to find out how Lower Secondary School teachers, including Principals with five to six years of experience as school managers, felt about distributed leadership. There is an extensive scope to carry out future research to promote the understanding of distributed leadership in all levels such as Lower, Middle and Higher Secondary Schools in Bhutan and also across the country.

It is suggested that school leadership for continuous learning is shared among all staff for efficient management of the school. Rather than being perceived as a place of authority, sharing leadership must be viewed as a dynamic mechanism aimed at achieving common goals. Individuals overseeing hierarchical processes and frameworks should not be understood as distributed leadership, according to the researchers. It is preferable to think of it as a form of collective leadership in which all teachers cooperate to build expertise.

The decentralization policy of the Royal Government of Bhutan in entrusting decision-making processes to the school management has to be understood in right perspective. The policy guidelines and instructions circulated by the Education Headquarters need serious review for implementation by all schools in Bhutan.

Reference

Annenberg Institute for School Reform at Brown University. (2004). *Educational Leadership Frame Work*. AISR_info@brown.

Blum, L. M. (n.d.). *Best practices for effective school*. Retrieved from https://urbanhealth.jhu.edu/_PDFs/media/best_practices/effective_schools.pdf

Creswell, J.W. (2003). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches.* California: Sage Publication, Inc.

Elmore, R. F. (2000). *Building a New Structure for School Leadership*. Washington, DC: Albert Shanker Institute.

EMD (2019). *A guide to school management*. Education Monitoring Division, Department of School Education. Thimphu. Ministry of Education.

Goldsmith, M. (2010). *Sharing Leadership to Maximize Talent*. Retrieved fromhttps://hbr.org/2010/05/sharing-leadership-to-maximize

Harris, A. (2004). Distributed leadership and school improvement: leading or

misleading? *Educational management administration & leadership*, *32*(1), 11-24.

Harris, A. (2004). *Distributed Leadership: Leading or Misleading*. London: SAGE Publications.

Kolb, A. D., & Boyatzis, E. R., (2011). *Experiential learning theory: Previous research and new theories. In*: Sternberg, J. R., Zhang, L. F., ed. *Perspective of Thinking, Learning and Cognitive Styles*. Routledge, Taylor and Francis Group.

Lashway, L. (2003). *Distributed Leadership*. Research Round 19(4), n4.

Lawrence, A. A., & Vimla, A. (2012). *School environment and academic achievement of standard IX students*. Retrieved from https://files.eric.ed.gov/fulltext/ED542331.pdf

McCoy, F. & Felton, P., (2002). *Principals' Recommendations Reform Leadership*. Laboratory for student success, Mid-Atlantic Regional Educational Laboratory.

R&D-NCSL. *Distributed Leadership*. (2004). Retrieved from http://www.ncsl.org.uk/index.cfm?pageid=randd-activities-distributed-leadership

West Chester University. (2005). *Introduction to Distributed Leadership*. Retrieved from http://www.wcupa.edu/_INFORMATION /AFA/DistLead.htm

About the author

Sherap Dema is Principal at Taba Lower Secondary School, Thimphu. She has M.Ed in Leadership and Management from St. Francis Xavier University, Canada. She is involved in facilitating 21st Century Transformative Pedagogy and Place Based Education trainings in various schools in Bhutan since 2012. She taught in Higher Secondary, Middle Secondary and Lower Secondary Schools over the period of 27 years career. Her research interest is in Place-based Education.