

EP

# EDUCATIONAL INNOVATION AND PRACTICE



# Educational Innovation and Practice

**Aims and Scope:** Educational Innovation and Practice (EIP) is an educational journal published annually by Samtse College of Education. The publication generally includes a broad spectrum of empirical and non-empirical research, commentaries, scholarly perspectives, book reviews, and policy briefs and discourses on teacher education and issues related to educational innovation and practice. EIP primarily targets to serve the professional needs of teacher educators, school teachers, educational leaders, students, policy makers, educational researchers, scholars, and others interested in educational developments with particular reference to Bhutan.

## EDITORIAL MANAGER

**Sangay Lhamo**, Samtse College of Education, Royal University of Bhutan

## EDITORS

**Sonam Rinchen**, Samtse College of Education, Royal University of Bhutan

**Tshering Om Tamang**, Samtse College of Education, Royal University of Bhutan

**Tashi Gyeltshen**, Samtse College of Education, Royal University of Bhutan

**Kinley Seden**, Samtse College of Education, Royal University of Bhutan

**Kinley**, Samtse College of Education, Royal University of Bhutan

**Ganeshman Gurung**, Samtse College of Education, Royal University of Bhutan

## REVIEWERS

**Judy Miller**, University of New England, Australia

**Sonam Pelden**, Edith Cowan University, Australia

**Vicki Banham**, Edith Cowan University, Australia

**Cathy Humphreys**, University of Melbourne, Australia

**Jennifer Davidson**, University of Melbourne, Australia

---

Editorial correspondence: Any inquiry related to EIP, including Manuscripts for submission, should be addressed to [sangaylhamo.sce@rub.edu.bt](mailto:sangaylhamo.sce@rub.edu.bt) or at [srinchen.sce@rub.edu.bt](mailto:srinchen.sce@rub.edu.bt)

Copyright ©2022 Samtse College of Education, Royal University of Bhutan. All rights reserved. No part of this publication maybe reproduced, stored, transmitted, or disseminated in any form, or by any means without prior written permission from the Samtse College of Education to whom all requests to reproduce copyright material should be directed in writing.

## **CONTENTS**

---

### **PAPERS**

#### **Flipped Classroom: Prospect in Freeing up Classroom Instructional Hours and Students' Attitude towards Flipped Classroom Strategy**

Pema Jurmey, Tshering Lham, Kelzang Lhaden, Tashi Pema and Bak Bir Rai 1

#### **The Effect of Simulation Games in Improving Grade XII Students' Academic Performance in Economics: An Action Research**

Tshewang Dorji 17

#### **Learners' Preference: A Reason to Use Code-Switching in Teaching and Learning Short Stories in Grade 10 English**

Damchu Dema and Ugyen Dorji 36

#### **The Effects of Using Simulated Role Play in Teaching History to Secondary Students in Bhutan**

Lhatu 61

#### **Students' Perception and Experiences on Emergency E-learning Project amidst Covid-19 Pandemic: A New Paradigm of Bhutanese Education 2020**

Thinley and Dil Maya Ghalley 78

#### **Educational Innovation and Practice Journal Guidelines for Manuscript**

90

## PAPERS

### Flipped Classroom: Prospect in Freeing up Classroom Instructional Hours and Students' Attitude Towards Flipped Classroom Strategy

Pema Jurmey<sup>1</sup>, Tshering Lham<sup>2</sup>, Kelzang Lhaden<sup>3</sup>, Tashi Pema<sup>4</sup> and Bak Bir Rai<sup>5</sup>

---

#### Abstract

Flipped classroom is a pedagogical model that employs video, reading assignments, practice problems, and other digital technology-based resources outside the classroom to introduce the concept for more meaningful learning. In the Bhutanese education system, the conflict between limited availability of time and coverage of large volumes of syllabus material has become a central issue in curriculum design. Therefore, this study explored how flipped classrooms could be mediated to free up of classroom instructional hours without affecting student learning. This study also assessed students' attitudes towards flipped classroom strategy. A total of 83 students participated in this study. A pre-test and post-test experimental research design for classroom instructional hours and survey questionnaire were employed to study students' attitude towards flipped classroom strategy. SPSS was used for statistical analysis of the data on attitude rating and pre-test and post-test difference. Key findings include flipped classroom saved an average of up to 13.29% of instructional hours without affecting students' learning. The difference of pre-test and post-test mean score for learning between the experimental and control group is not significant ( $p>.05$ ,  $t=0.394$ ). However, with a mean score of 4.60 on a five scale Likert scale for positive statements and a mean score of 1.49 for negative statements, students have positive attitude towards flipped classroom.

*Keywords:* flipped classroom, instructional hours, attitude, syllabus

#### Background

Education in Bhutan follows a strict instructional model – students learn new materials in class and, do their homework at home. Teachers then review their homework and this results in repetition of the process. Flipped classroom model, however, presents a new way of engaging students which is based on teachers embracing technology and different strategy in which students can be connected to their learning. Flipped classroom is a pedagogical model that

employs video, reading assignments, practice problems, and other digital, technology-based resources outside the classroom to introduce the concept for more meaningful learning (Bergmann & Sams, 2007). Flipped learning model of education combines face-to-face classroom instruction with computer-based activities, making a point of integrating technology into the lesson, rather than simply having it play a supplemental role. There is no such thing as one definition of flipped classroom. But some commonalities persist across all practices. In a flipped classroom, direct instruction and theoretical content usually delivered face-to-face lectures or classroom settings are delivered online through videos (either created by the teachers or extracted from other sources), and the work traditionally done as homework is brought back into the classroom (Bergmann & Sams, 2014). Flipped classroom model aims to improve student engagement and outcome by mirroring the rapidly developing technologies students will be engaged in other fields (Ozdamli & Asiksoy, 2016). Bergmann and Sams (2014) set out a range of advantages of flipped classrooms including students getting help on difficult topics, enhancing interaction, allowing for differentiation, creating conducive learning atmospheres, and learning at their own pace. Central to the model, however, is that students are encouraged to take initiative when it comes to absorbing new material offered online rather than passively listening to a teacher's lectures. By using online content as the basis for face-to-face classroom interactions, students are encouraged to engage with online content more than they did with lecture content, and to be active participants in the classroom. Although flipped learning model can be used across the age spectrum, we observed that it is particularly suitable for secondary school students who are familiar with technology and can take responsibility to learn more independently.

### **Education in Bhutan and the Opportunities for a Flipped Classroom Model**

One of the pressing issues in Bhutanese education system is the amount of syllabus content that has to be delivered to students in each level of classes. Many teachers complain that they do not get sufficient time to cover the required syllabus in the allocated instructional hours (a situation also aggravated by the removal by the Ministry of Education of Saturday classes since 2019). Utha et al. (2016) also agree that coverage of syllabus is a big hindrance given the limited timeframe. Teachers are concerned with the bulky and rigid syllabus in Bhutanese education system (Gyamtsso et al., 2017). The situation is aggravated by the mandate for teachers to use student-centred teaching learning approaches such as Kagan cooperative, guided enquiry, project based, and discovery learning which require additional instructional hours. Teachers face the dilemma of either forgoing the syllabus completion or employing student-centred teaching learning pedagogies. Strayer (2012) states that teachers often find it difficult to manage their limited classroom period and student-centred pedagogies to have an effective

teaching learning. Gyamtso et al. (2017) have pointed out that exam-oriented syllabus focuses mostly on syllabus coverage. The Bhutanese education system at present is overtly based on academic meriting basis (with summative assessment comprising 80% or more and a mere 20% or less for formative assessment) and as such forgoing syllabus is not a choice for either teachers or students. On the other hand, reducing student-centred teaching and learning pedagogies to the point where teachers' are expected to be just facilitators also distracts from the key aims of teaching and education.

This conflict arises particularly in the context of events which take time away from the academic year. Public holidays, co-curricular activities, literary activities, annual school programmes, national occasions, international day celebrations, and numerous ad-hoc programmes (prescribed by ministry, dzongkhag, departments, schools, corporations, individuals etc.) have to be considered. As of April 26, 2018, Pelbar Higher Secondary School (name changed) missed 18 out of the possible 68 instructional days (9 days for public holidays that includes His Majesty's birthday celebration, Losar-New Year, and Paro Tshechu-local festival; 9 days of school programmes on account of preschool activities, annual school religious ritual, intra-school games and sports competition, annual school marathon, and National Council Member of the Parliament election).. This comes to around 26% of the total instructional days. These do not include missed and shortened classes for meetings and other ad-hoc programmes. These co-curricular and extra-curricular activities, however, are very important because of its focus on wholesome education, life skills education, and competency-based learning. Teachers have also been asked to take on additional evaluation roles and responsibilities which will enhance the education system but also take time and effort separate from classroom teaching. It may be possible to cover all of the required syllabus and activities related to academic matters for the given academic year if not for the extra-curricular activities and adhoc programmes. However with this reduction in overall time for classroom teaching, alternative models of instruction need to be explored. In order to ensure quality education and personal development outcomes for students within this context, it is important to understand if there are other non-traditional ways of achieving the syllabus requirement within the set timeframes. These strategies such as flipped classroom model, however, have to be tested, researched and elucidated so as to ensure their applicability within the Bhutanese setting.

This study was undertaken with the students of Pelbar Higher Secondary School in Paro District, Western Bhutan. The study investigated three key questions:

1. What impact does a flipped class model have on managing the time shortage



(syllabus coverage) for secondary school students?

2. What was the impact of a flipped classroom model on student learning outcomes?

3. What is the attitude of students towards a flipped classroom model?

## Literature Review

Flipped classroom was popularized by Aaron Sams and Jon Bergmann, who at the time were teachers at Woodland Park High School in Colorado, when they began using recorded lectures in 2007 (Garza, 2014). Flipped classroom is a pedagogical model that employs video, lectures, reading assignments, practice problems, and other digital, technology-based resources outside the classroom to introduce the concept, and interactive, group-based, problem-solving activities inside the classroom for more meaningful learning (American Association of Nurse Anesthetists, 2014; Bishop & Verleger, 2013). Students watch videos or online lessons, read online material, and complete assignments and assessments outside of class. Face-to-face class time is used to reinforce learning, to identify gaps in learning and to examine concepts more deeply (Williamson, 2012). Similarly, Flipped Learning Network (2014) defines flipped learning as “A pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter” (p. 1). Even though flipped learning leaders distinguish between flipped learning and flipped classroom, it does not necessarily mean two different concepts for the purpose of this study. According to the pioneers of flipped classroom Bergmann and Sams (2014), there is no such thing as one definition of a flipped classroom. However, they agree that there are some commonalities across the educational ectrums. The commonalities that they are referring to are that, in flipped class, direct instruction (lecture) is delivered at home via videos that teachers either create or curate, and that which has traditionally been done as homework is completed in class. Class hour is usually used for reflection and review of the instruction that students learned through videos.

As the definition suggests, flipped class is aimed at improving student engagement and outcomes. Even though most of the research articles on flipped classes are based on its effectiveness such as student engagement, positive interactions, and betterment of students’ outcomes, there are enough claims and confirmation to assert that flipped classes also frees up classroom instructional hours. Flipped classroom allows time and opportunity for student-centred learning, peer interactions, and personalized instructions (Hamdan et al., 2013). According to Riismandel (2014), use of flipped classes have many benefits that include freeing

up of class time. His research also found that flipped class allowed for class time to be used more efficiently and to stay on schedule. Similarly flipped classroom can reduce the amount of time spent in the physical classroom and can help in removing stress on classroom scheduling (Baepler, 2014). It help students learn at a pace that is most appropriate for each of them (Bergmann & Sams, 2012). With increased availability of class time, Bergmann and Sams (2014) also pointed out that teachers were worried about students' engagement. They called for these free hours created to be used for learning reinforcement and making meaning to what they learn on their own. Bristol (2014) also notes that content overload has become a common problem that teachers are dealing with at all levels of academia. With the use of flipped classroom, he believes that students can pursue the knowledge and comprehension before coming to class and use the class time to focus on application and analysis. In Bhutanese education system too, syllabus has become a big hindrance to the limited time available (Utha et al., 2016). As such, the freed up time can also be efficiently used for syllabus coverage. But this should not impede students learning in any way.

An understanding of student attitude towards different learning traits can be critical in the assessment of student willingness for flipped classroom, which is a prerequisite for successful implementation of flipped classroom strategy (Teng & Chaw, 2013). In a study on students view on the use of flipped classroom, Butt (2014) states that after his experience with flipped classroom for an entire course, students' view towards the flipped classroom approach, on an average, became far more positive. Students were content with flipped classroom activities, with many agreeing that the class time interaction was beneficial to their understanding of course concepts. Students perceived that flipped classroom activities were more student-oriented than traditional class (Kim et al., 2014). Student satisfaction inclines to be higher in flipped classroom and blended learning than in traditional lecture method of teaching (Kelly et al., 20009). In a study on evaluation of flipped classroom, Thompson and Mombourquette (2014) stated that the overall opinion of students on flipped classroom were mixed, yet, majority of them expressed their interest of enrolling in another flipped classroom.

## Methodology

The study was undertaken in one of the higher secondary schools in the Paro District (Pelbar Higher Secondary School), Western Bhutan. A total of 83 class 12 students participated in the study. The experimental group consists of 36 students and control group had 47 students. Both the site and sample were selected using purposive sampling method as all the researchers are teaching at the site school. This would not only minimize the disturbance to instructional hours and the cost incurred for travel. However, division of the classes into experimental and control group were selected through random sampling. Although flipped learning



model can be used across all age spectrum, we observed that it is particularly suitable for secondary school students who are familiar with technology and can take responsibility to learn more independently.

Multiple Choice Question (MCQ) pre-test and post-test on the lesson were administered to both the experimental and control group. Mean score and independent sample t-test were used to assess the difference in dependent variable test score between pre-test and post-test. For the experimental group, pre-test was first administered on the topic chosen. The students were then asked to watch the given video clip and go through the power point presentation prior to classroom learning (treatment). After that, through hands on activity in the classroom, students learn and exhibit their understanding of the concept/topic. Finally, the post-test was administered after the completion of the topic.

For the control group, pre-test and hands on activity was administered and conducted in the classroom until the students learn and exhibit their understanding of the concept/topic. No video clip and power-point presentations are given to them. Post-test was administered after the completion of the topic.

Exact instructional (class) time taken by the experimental and control group for the teaching learning of given topic were recorded by the time recorder. The time recorder was also the same person throughout the course of implementation for both experimental and control group. The experimental group received the treatment-watching video clip, before the actual classroom teaching and learning in their leisure time. For the purpose of this study, an English lesson on story titled "Lamb to the Slaughter" was used as a learning concept. For the students in experimental group, a video clip and a power point presentation was provided as pre work. Since every students did not have computer and smart phone to go through the video and power point presentation at home, arrangements were made for them to watch the clips in the school Information Technology lab anytime during their free hours. The actual teaching in the classroom for both the experimental and control group were done by the same teacher.

Attitude questionnaire designed by the researchers was used for the collection of experimental students' attitude on flipped classroom. Attitude attributes are described by statements that reflected participants' attitude towards flipped classroom strategy that they experienced. It is accorded with 5-point Likert scale from 1-Strongly Disagree to 5-Strongly Agree. Mean score and one-sample t-test were used to compare the mean scores of positive and negative statements with that of the neutral test value so as to confirm their attitudes towards flipped classroom strategy.

## Findings and Discussion

### Introduction

The findings are presented under four themes namely flipped classroom and instructional hours, effect of reduced instructional hours on students learning, students' attitude towards flipped classroom, and students' general comments on flipped classroom strategy including demographic information as detailed below.

### Demographic Information

A total of 83 students from all four sections of class 12 participated in the study. The four sections are randomly divided and assigned as experimental group (A and C) and control group (B and D). The number of students in experimental group and control groups are 36 and 47 respectively. The number of male and female are also 36 and 47 respectively. No other demographic information or academic achievement labels considered for the group division.

### Flipped Classroom and Instructional Hours

An English lesson on the story titled 'Lamb to the Slaughter' was divided into eight parts and taught over the period of eight days. One part was taught in a specified period on each day. Both the experimental and control group were presented the same lesson and checked on their understanding so that the lesson taught in each class were basically completed at their own pace. The experimental group had already done their homework of watching video lesson on the same lesson on their own time without impacting actual instructional hours. Time was recorded by a researcher for every part of the specified teaching hours for all sections that include both experimental and control group as shown in Table 1.

**Table 1**

*Daily Instructional Time Taken by Each Group (in minutes)*

	Day /time	day/ time	day/ time	day/ time	day/ time	day/ time	day/ time	day/ time
	1	2	3	4	5	6	7	8
Control	34.59	41.14	40.81	43.17	32.63	37.62	40.57	40.67
Experimental	30.40	37.58	30.50	38.73	28.59	20.35	37.63	34.24

The difference between the control and experimental group starts from the low of 2.94 minutes to as high as 17.27 minutes within a session of 50 minutes. The time taken to complete the specified topic is lesser in experimental group than

the control group in all eight sessions. Table 2 shows the total time recorded for the coverage of the whole lesson and mean instructional time per session recorded to complete the teaching for the two groups.

**Table 2**

*Average Instructional Hours Recorded for Each Group*

	Total time for 8 periods recorded over 8 days (minutes)	mean instructional time recorded (minutes)
Control	311.23	38.90
Experimental	258.05	32.26
Difference	53.18	6.65

The mean time saved by flipped classroom strategy is 6.65 minutes per period of 50 minutes each. This accounts to around 13.29% which means we get an extra period of 50 minutes for every 7.5 periods of 50 minutes each. This would seem to reflect similar results the authors found when introducing flipped classroom models with other senior high school students in the year 2017. In the flipped classroom implemented by the same authors in the delivery of genetic engineering lesson in class 11 biology, it took 3 periods of 50 minutes for the experimental groups, whereas, the control group took almost 4 periods of 50 minutes each to complete the same topic. This also aligns with the work of Smith (2013), who found that approximately one-third of total class time was recovered over the course of each semester in a university chemistry classroom. Riismandel (2014) and Bergmann and Sams (2012) also found that the use of flipped classroom strategy increased the availability of class time. In all of these studies, the freed up class hours were used for learning reinforcement and interactive classroom learning session. Similarly, the extra time gained through the application of flipped classroom strategy in this study was used for the completion of the mandated syllabus.

### **Effect of Reduced Instructional Hours on Students Learning**

Pre-test and post-test were administered to both experimental and control group. It included 20 MCQs on the lesson learned. The same test were conducted before the delivery of the lesson (pre-test) and after completion of the lesson (post-test). The mean scores, equality of mean scores of pre-test, post-test, and their difference between the experimental and control groups is reflected in Table 3.

**Table 3***T-test for Equality of Means*

	Groups	N	Mean	Std. deviation	Mean diff	t	Sig. (2-tailed)
Pre-test	Experimental	36	9.06	2.203	1.141	2.342	0.022
	Control	47	7.91	2.195			
Post-test	Experimental	36	13.69	1.636	1.354	3.595	0.001
	Control	47	12.34	1.748			
Difference	Experimental	36	4.64	2.180	0.213	0.394	0.694
	Control	47	4.43	2.627			

There is significant difference between the pre-test scores and post-test scores of experimental and control group with  $p < 0.05$ ,  $t = 2.342$  for pre-test and  $p < 0.05$ ,  $t = 3.595$  for posttest. However, there is no significant difference between the pre-test and post-test score of the two groups ( $p > 0.05$ ,  $t = 0.394$ ). Therefore, the effect of classroom teaching did not differ between the experimental and control group, even though instructional time required to complete the same concept was less in experimental group. The researchers did not find any literature that specifically calculated the classroom time advantage afforded by the use of flipped classroom strategy even though there were agreement on the strategy freeing up class hours.

### Students' Attitude Towards the Flipped Classroom

The participants for the attitude questionnaire are only the experimental groups ( $N = 36$ ) since the flipped classroom strategy was only implemented for them only. Table 4 shows mean and the significance difference between the mean positive and negative scores and that of the neutral value (3), in the 5-point Likert scale. The 5-point shows the degree of agreement with the statements with 1 = 'Strongly Disagree' to 5 = 'Strongly Agree'. The neutral value 3 is 'neither agree nor disagree' attitude. Positive statements support the preference for the use of flipped classroom strategy whereas, negative statement do not support the use of the same as a classroom instructional strategy. Positive statements consists of the statements of preference such as; liking, meaningful learning, interactive classroom, engaging classroom, greater participation, and their commitment. Negative statements include time wastage, preference for traditional method, and non-enhancement of students learning,

**Table 4***One Sample t-test*

	Test Value (neutral attitude score) = 3				
	N	mean	Std. Deviation	t	Sig. (2-tailed)
positive statements	36	4.601	0.347	27.6667	.000
negative statements	36	1.486	0.467	-19.47	.000

The mean scores for the positive and negative statements are 4.601 and 1.486 respectively. Their differences with that of the neutral value are highly significant with  $p < 0.001$ ,  $t = 27.67$  for positive statements and  $p < 0.001$ ,  $t = -19.47$  for the negative statements. As per McLaughlin et al. (2013), significantly, more students preferred a flipped classroom format after completing a course through flipped classroom strategy. Butt (2014) also states that after his experience with a flipped classroom for the entire course, students' view towards a flipped classroom approach, on an average, became far more positive. Flipped classroom has positive impacts on students' attitude and also helps in students' performance (Wilson, 2013). With this result on students' attitude, it is an opportunity for educators to embrace the approach in our daily teaching learning experience.

**Students' General Comments on the Flipped Classroom Strategy**

Students' general comment were compiled from the students' responses on three complementary questions in the attitude questionnaire sheet. The questions were: 'How did you find the flipped class?' 'What do you feel about learning through flipped class?' and 'Any other comments?' Almost all students were positive about using a flipped classroom strategy. They agreed that flipped classroom strategy was helpful, informative, interesting, and was a unique experience. Many of them stated that it helped in better comprehension of the concept, more participation, greater opportunities, additional learning, greater interaction, and better engagement during instructional hours. Students felt that flipped classroom is more effective, meaningful, and beneficial than traditional lecture method. They also expressed their wish and willingness to participate in flipped classroom strategy in the future. Some of them also expressed their worry about not having means or technologies at home to practice flipped classroom effectively.

The findings also revealed that flipped classroom is an effective way to reduce the limited instructional hours at the disposal of teachers and students to complete the prescribed syllabus. It is also one form of engaging and making students part of their learning process. Even with these advantages, most Bhutanese

students do not have the technological means to watch video clips and power point presentation at home. But with the increase in the use of smart phones by students of higher classes, flipped classroom implementation will become more reliable. There are a lot of limitations in this study. This study implemented the flipped classroom for a specific language subject with class 12 students. Further research in different subjects with greater range of participants can be carried out. The attitude questionnaire had 4 negative statements out of 16 and this might also have impacted students' attitude scores. Since the participants were students of the researchers, their attitude might have been influenced to please the teachers.

## **Conclusion**

Flipped classroom strategy proved to be effective in managing instructional hours. It helps in freeing up actual classroom instructional hours that can either be used for syllabus coverage or other enhancement activities. Despite the reduced instructional hours, students' learning were not compromised in implementing a flipped classroom. As for the students' attitude, they were positive with the use of flipped classroom strategy in their daily teaching learning session. Students agreed with full conviction that they prefer flipped classroom strategy over traditional lecture method and it helped them in meaningful learning. They felt that the instructional hours were more interactive, engaging, and motivating.



## References

- Driem, G. V. (1994). Language policy in Bhutan. In M. A. Hutt, Bhutan: Aspects of culture and development. Paul Strachen-Kiscadale Ltd.
- Penjore, D. (2013). The state of anthropology in Bhutan. *Asian and African Area Studies*, 12(2), 147-156.
- Namgay, T. (2012). English as an academic language. Language policy implementation issues. GRIN Verlag.
- Duran, L. (1994). Toward a better understanding of code-switching and interlanguage in bilinguality: implications for bilingual instruction. *The Journal of Educational Issues of Language Minority Students*, 14, 69-88.
- Borlongan, A. M. (2009). A survey on language use, attitudes, and identity in relation to Philippine English among young generation filipinos: An initial sample from a private university. *Phillipine ESL Journal*, 3, 74-107.
- Burenhult, A. F.-M. (1999). Code-switching in second language teaching of French. *Working Papers*, 47, 59-72.
- Qing, X. (2010). To switch or not to switch: Examine the code-switching practices of teachers of non-english majors. *Canadian Social Science*, 6(4), 109-113.
- Atkinson, D. (1987). The mother tongue in the classroom: A neglected resource?. *ELT Journal*, 41(4), 241-247.
- Scheweers, C. (1999). Using L1 in the L2 classroom. *English Teaching Forum*, 37(2), 6-9.
- Trochim, W. (2006). Nonprobability sampling. *Social Research Methods*. Retrieved May 20, 2021, from <http://www.socialresearchmethods.net/kb/sampnon.htm>
- Dyrness, R., & Dyrness, A. (2008). Making the grade. *Kappa Delta Pi*, 44(3), 114-18.
- Vatterott, C. (2009). Rethinking homework based practices that supports diverse needs. Alexandria, VA: Association for Supervision and Curriculum Development.
- Sharma, R. (2013). Impact of homework on academic achievement of students with severe emotional disabilities in a non public school setting. California State University, Monterey Bay.

- Peltier, C. P. (2011). A comparative study of teachers' attitudes and practices regarding homework in the elementary, middle, and high school grades. Ann Arbor: ProQuest LLC. Retrieved from <http://www.proquest.com/en-US/products/dissertations/individuals.shtml>
- Carr, N. S. (2013). Increasing the effectiveness of homework for all learners in the inclusive classroom. *School Community Journal*, 23(1), 169-182.
- Kohn, A. (2006). The homework myth: Why our kids get too much of bad thing. Da Capo Life Long.
- Dueck, M. (2014). The problem with penalties. *Educational Leadership*, 71(6), 44-48
- Trautwein, U. (2007). The homework- achievement relation considered: Differentiating homework time, homework frequency, and homework effort. *Learning and Instruction*, 17(3), 372-388.
- Cooper, H. (2007). The battle over homework: Common ground for administrators, teachers and parents. Corwin Press.
- Bryan, T., & Burstein, K. (2004). Improving homework completion and academic performance: lessons from special education. *Theory into Practices*.
- Cooper, H., Robinson, J. C., & Patall, E. (2006, March 07). Duke study: Homework helps students succeed in schools, as long as there isn't too much. Retrieved from Duke Today: <https://today.duke.edu/2006/03/homework.html>
- Dudley, C. M. (2003). How school troubles come home: The impact of homework on families of struggling learners. *Current Issues in Education*, 6(4), 1-11.
- O'Connor, K. (2002). How to grade for learning: Linking grades to standards. Arlington Heights: SkyLight Professional Development.
- Guskey, T. R., & Bailey, J. (2001). Development grading and reporting systems for students learning. Corwin Press.
- Wormeli, R. (2006). Fair isn't always equal: Assessing and grading in the differentiated classroom. Stenhouse.
- Igwenagu, C. (2016). Fundamentals of research methodology and data collection. Lambert Academic Publishing (LAP).

- Dean, C., Hubbell, E., Pitler, H., & Stone, B. (2012). Classroom instructions that works: Research-based strategies for increasing atudent achievement. Marzano, Pickering & Pollock.
- Bergmann, J., & Sams, A. (2014). The flipped classroom. CSE, 17(3), 24-27.
- Ozdamli, F., & Asiksoy, G. (2016). Flipped classroom approach. World Journal on Educational Technology: Current Issues, 8(2), 98-105.
- Gyamtso, D. C., Sherab, K., & Maxwell, T. W. (2017). Teacher learning in changing professional contexts: Bhutanese teacher educators and the Educating for GNH initiative. Congent Education, 1-19.
- Garza, S. A. (2014). The flipped classroom teaching model and its use for information literacy instruction. Communication in Information Literacy, 8(1), 07-22.
- Williamson, R. (2012). Flipped classroom. Retrieved from Education Partnership, Inc.: <http://oregongearup.org/sites/oregongearup.org/files/research-briefs/flippedclassrooms.pdf>
- Hamdan, N., McKnight, P. E., McKnight, K., & Arfstrom, K. M. (2013). A review of flipped Learning. Flipped Learning Network, 1-20.
- Baepler, P., Walker, J. D., & Driessen, M. (2014). It's not about seat time: Blending, flipping, and efficiency in active learning classroom. Computer and Education, 78, 227-236.
- Bergmann, J., & Sams, A. (2012). Flip your classroom-reach every student in every class every day. Colorado: International Society for Technology in Education.
- Utha, K., Giri, K., Gurung, B., Giri, N., Krogh, L., Keller, H. D., & Keller, K. D. (2016). Quality of education in Bhutan-Case studies in the perspective of Gross National Happiness and assessment practices. Aalborg University Press.
- Teng, C. M., & Chaw, L. Y. (2013, December). Feadiness for blended learning: Understanding attitude of university students. International Journal of Cyber Society and Education, 6(2), 79-100. doi:10.7903/ijcse.1086
- Kim, M. K., Kim, S. M., Khera, O., & Getman, J. (2014). The experience of three flipped classrooms in an urban university: An exploration of design principles. Internet and Higher Education, 22, 37-50.

- Kelly, M., Lyng, C., McGrath, M., & G, C. (2009). A multi-method study to determine the effectiveness of, and student attitudes to, online instructional videos for teaching clinical nursing skills. *Nurse Education Today*, 29(3), 292-300.
- Wilson, S. G. (2013). The flipped class: A method to address the challenges of an undergraduate statistics course. *SAGE journals*, 40, 193-199.
- Riisman, P. (2014). The flipped classroom. *Streamingmedia*, 189-192.
- McLaughlin, J. E., Griffin, L. M., Esserman, D. A., A, D. C., Glatt, D. M., Roth, M. T., . . . Mumper, R. J. (2013). Pharmacy student engagement, performance, and perception in a flipped satellite classroom. *American Journal of Pharmaceutical Education*, 77(9), 1-8.
- Smith, J. D. (2013). Student stititudes toward flipping the general Chemistry classroom. *Chemistry Education Research and Practice*, 14, 607-614.
- American Association of Nurse Anesthetists. (2014). Look inside a resource for nurse anesthesia educators. Retrieved from AANA: <https://www.aana.com/search?keyword=flipped%20classroom>
- Bishop, J., & Verleger, M. (2013). Testing the flipped classroom with model-eliciting activities and video lectures in a mid-level undergraduate engineering Course. *IEEE*, 1-3.
- Butt, A. (2014). Students views on the use of a flipped classroom approach: Evidence from Australia. *Business Education and Accreditation*, 6(1), 33-44.
- Strayer, J. F. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning Environ Research*, 15, 171-193.
- Thompson, S. F., & Mombourquette, P. (2014). Evaluation of a flipped cassroom in an undergraduate bussiness course. *Business Education and Accreditation*, 6(1), 63-71.
- Flipped Learning Network. (2014). What is flipped learning. Retrieved from Flip learning: [www.flippedlearning.org/definition](http://www.flippedlearning.org/definition).
- Bristol, T. J. (2014). Educate, exite, engage: Flipping the classroom. *Teaching and Learning in Nursing*, 43-46.

## About the Authors

**Pema Jurmey** is a teacher at Shaba Higher Secondary School, Paro Bhutan. He has B.Ed in Secondary Education and Masters in Development Practices from the College of Natural Resources, RUB, Bhutan. He currently teaches Mathematics and Environmental Science at Shaba Higher Secondary School in Paro Bhutan and has been teaching for last 17 years. He takes interest in initiating learning community for research works in the organisation he works.

**Tshering Lham** is a teacher at Shaba Higher Secondary School. Currently, she is teaching Biology. She has a Bachelor degree in Science with a specialization in botany, and Masters in Science and Technology from Mahidol University, Thailand. She is an avid STEM educationist, and a passionate educator. She has been in the teaching service for the last 14 years.

**Kelzang Lhaden** is a teacher at Shari Higher Secondary School. She has been teaching English since 2002. She has a Masters in Educational Studies from the University of Newcastle in Australia. She was awarded the Gold medal of Excellence in teaching by his Majesty the King. She is now working as a school lead teacher, organizing professional development programmes for the school.

**Tashi Pema** is an English teacher at Shari Higher Secondary School in Paro. She has Bachelors in English and Postgraduate Diploma in Education from Samtse College of Education. She has been teaching for more than 2 decades. She is a dedicated teacher and an awardee of Gold medal of excellence in teaching. She dedicates her time in initiating various literary activities and publications in the school.

**Bak Bir Rai** has been serving as the Principal of Shari Higher Secondary School in Paro Dzongkhag for the last 11 years. Prior to this he served as a Teacher and Vice Principal for 18 years. He graduated with Bachelors of Education from Samtse College of Education and later Masters in Educational Leadership and Management from Paro College of Education, Royal University of Bhutan, Paro. Mr. Bak Bir Rai is the recipient of National Order of Merit (Gold Medal) from His Majesty the King in 2015 for his Excellent Leadership in School Management. He completed School Leadership Development Programme (SLDP-5), organised by the Ministry of Education (MoE) and Royal Institute for Governance and Strategic Studies.

# The Effect of Simulation Games in Improving Grade XII Students' Academic Performance in Economics: An Action Research

Tshewang Dorji

---

## Abstract

This study investigated the effect of simulation games as an intervention strategy in the teaching-learning process to enhance performance of grade XII students in economics. The study adopted a mixed method research approach. A total of 27 (14 girls and 13 boys) grade XII students from one of the higher secondary schools participated in the study. The students were selected through non-probability convenient sampling techniques. The data sources include students class test score, narratives from the classroom observations and survey data. The findings revealed that the students were very positive about the use of simulation games as a classroom pedagogy. Simulation games help students comprehend concepts, ideas, and hypotheses easily besides making teaching-learning interesting, enjoyable, and fun as evident from the increase in mean marks in the class test 2 and high mean average score of 4.5 in the survey rating. However, the study also cautions that the simulation games are time-consuming and teachers need more time and effort to prepare and implement in the class.

*Keywords:* simulation games, class test, action research, Economics

## Introduction

The poor performance of students in Economics in the Bhutan Higher Secondary Education Certificate (BHSEC) examination has been a worrying matter and a serious concern for economics teachers across the nation (Dorji, 2019). This poor performance has resulted in students opting for other optional subjects such as Environmental Science, Media Studies, and Agricultural Studies. Students find it easier to comprehend and score good marks in these subjects although these subjects have poor ability rating for higher education admission in Bhutan. Some schools have stopped offering economics at all because students' low scores affect the average (Rinzin, 2019b) and ranking of the schools.

Boris (2020, p.74) argues that a "teacher may profess to hold fifteen years' experience, but the experience means nothing if he keeps on repeating the same thing without bringing innovation into his teaching." The effectiveness of the teaching-learning process depends mainly upon the methodology that the teacher



adopts (Jibrin & Zayum, 2012; Yadav, 2006). According to the National Council of Educational Research and Training [NCERT] (n.d.) and Jibrin and Zayum (2012) one of the main reasons for the poor performance of students in economics is the poor selection of teaching-learning methodology. A study by Dorji (2020a, p.44) observed that many teachers were not using pedagogy such as “cooperative learning, problem-solving, student research, role play, differentiated learning, experiential learning, concept mapping, flow charts, simulation games, project-based learning, learning through feedback, team teaching, and co-teaching, live consultancy assignments, and pedagogy of service-learning” in the classrooms. There is a long history of teacher resistance to pedagogical changes in Bhutan (Sherab, 2013; iDiscoveri Education & Royal Education Council, 2009). The NCERT (n.d.) found out that in the innovative and digital world many teachers still use traditional or conventional teaching methodology such as lecture among others. Teachers adopt traditional teaching methodology to cover the content-laden curriculum on time. Although the lecture method helps teacher to teach economic concepts however it does not help to develop enough cognitive learning skills nor motivates students. It does not promote students’ participation in the teaching-learning process. It reduces the students’ interest in the subject. As a result, it limits student’s performance up to the knowledge level and does not develop creating and application abilities (Vlachopoulos & Makri, 2017). To make students think like an economist or scientist, an innovative approach to teach economics needs to be undertaken. Innovative teaching methodology creates interest in learning economic concepts and student’s participation in the teaching-learning process. Students need to be engaged in the curriculum rather than teachers limiting the transaction via a blackboard/green board and textbook (NCERT, n.d.).

The simulation game is one of the most researched teaching methodologies in teaching-learning economics. Simulation games provide a crucial opportunity to motivate and engage students to learn theoretical concepts, terms, facts, conventions, trends, and principles. Many economics concepts, terms, facts, conventions, trends, principles, generalizations, assumptions, and hypotheses can be taught using simulation games. According to NCERT (n.d.) topics such as Fixed Cost and Variable Cost (game), Perfect Competition (Role Play), Price Elasticity of Demand (game), Aggregate Demand (game), and Value Added (Roleplay) can be taught through simulation games. The simulation games methodology shifts teacher-centred teaching to a student-centred teaching-learning to allow students to acquire problem-solving and communication skills (Auman, 2011). Literature supports that students have a positive attitude towards simulation games, thus, promoting the use of simulation games in education and teaching-learning (Vlachopoulos & Makri, 2017).

## Significance of the Study

Teaching economics in higher secondary school is often said to be a very demanding and rewarding subject. The researcher believes that innovative teaching methodology might improve the academic performance of students. The study might be useful to other economics teachers with similar teaching-learning situations. The study would also provide room for other teachers to reflect and find an avenue to improve their teaching-learning practices (Choeda et al., 2018). According to the Bhutan Professional Standards for Teachers, all teachers are required to adopt a student-centred teaching-learning methodology with effect from 2021 (MoE, 2020).

## Situation Analysis

Economics is offered as an optional subject in grades IX to XII in Bhutan. The researcher taught economics in grade XII since 2016 and it was observed that students performed poorly in economics in the BHSEC examinations. The researcher found that most students opt for economics in class XI and XII without learning any fundamentals of economics in grades IX and X. Generally, students who opt for economics from grade IX find it easier to understand economic concepts, facts, terms, and theories. This is because the majority of topics learned in grade XII are built on what has already been learned in grades IX and X.

The BHSEC examination 2018 and 2017 recorded the worst performance in economics (Rinzin, 2018; Rinzin, 2019a) with a national mean score of 45.53 in 2018 and 49.53 in 2017. In the researcher's higher secondary school, the mean score for economics in 2018 was 42.0 and 41.24 in 2017. The national mean score of economics in 2019 was 51.17. While the mean score for economics in the researcher school was 49.24. The quality of academic performance is measured by the mean score in examinations (BCSEA, 2020).

The researcher observed that many students study economics just from the prescribed textbooks, class notes and practice a range of past examination papers to prepare for the examinations. Although students attentively attend classes, their academic performance was poor. The researcher was concerned and decided to examine the issue and improve the academic performance of students. Thus, a simulation game methodology was used as an intervention programme to bring about improvement in student learning and academic achievements.

## Competence

The researcher taught economics in grades XI and XII for four years. The researcher was deeply concerned with the poor performance of students in economics over the years. The researcher had attended a three-day workshop

on ‘Action Research’ organised by Dechencholing Higher Secondary School, Thimphu. The researcher referred ‘A Guide to Action Research: Enhancing Professional Practice of Teachers in Bhutan’, a publication of the REC, 2018 which provides practical guidance to conducting action research in education. The researcher also had the support of the school management and colleagues who have attended action research workshops at the school as well as at Paro College of Education in July 2018.

### **Critical Friend**

According to Choeda et al. (2018, p.4) “the purpose of having a critical friend is to ensure that the researcher does not make narrow or biased interpretations of data”. One of the history teachers, a colleague at the same school served as a critical friend for the researcher. He has a sound knowledge of action research as he had studied action research at Paro College of Education during his training period. He had also attended workshops on ‘Action Research’ organised by the school. The researcher and the critical friend also reviewed the role of the critical friend as mentioned in the ‘A Guide to Action Research: Enhancing Professional Practice of Teachers in Bhutan’ by REC. The critical friend thus was clear about the role in the action research.

### **Literature Review**

According to NCERT (n.d.) the concept of the simulation game is based on the concepts ‘simulation’ and ‘games’. For instance, “a simulation game is an educational activity which combines the features of both of a simulation (a working model of reality and active participation) and a game (rules, cooperation, and competition)” (Megarry, 1989; NCERT, n.d., p.85). Similarly, Wilson (1987) outlines simulation as an imitation of reality. It is the imitation of the real thing on a smaller scale. Under simulation, the participants carry out an exercise, which represents a real system, or a procedure, or a process, or parts of it. Simulation involves either mental skills or physical skills or both mental and physical skills. Simulations in education are often simplified or accelerated representations, which allow students to explore the situation. Megarry (1989) also highlighted the feature of simulation such as (i) simulation is an artificial situation based on reality or some of the components of reality, (ii) simulation provides a real learning environment for students and (iii) simulation involve students actively in the teaching-learning process.

Wilson (1987) defines a game as a competition, or exercise, played by adversaries within the rules, to win the game. Megarry (1989) supported this definition that a game is played by one or more players, cooperating or competing towards a definite objective with an agreed set of rules. According to NCERT

(n.d.), there are seven features of games: (i) Game is a purposeful activity and contain a set of objectives, (ii) game is carried out by the participants to achieve the predetermined objectives, (iii) game has certain rules to be followed by the participants during the activity, (iv) game is time-bound and has a time limit. (v) The game is played with active participation and needs cooperation among the participants. (vi) Feel of competition is always present among the participants. (vii) There is a scoring system in the game to declare the results. Simulation game as an activity that combines the players, rules, and competition with those of an imitation of reality (Wilson, 1987). Simulation game is a group-oriented approach to teaching. The role of the learning is active and the role of the teacher is that of a guide or a facilitator (NCERT, n.d.).

Simulation games involve role-playing with self-directed student participants. Under role-play, a participant needs to assume a realistic social role based on a common situation for interaction in the group. According to Megarry (1989) role-play refers to a group of techniques in which the participants are asked to accept a different identity, try to think their way into someone else's situation and perhaps into their mind as well. Killen (2009) argues that simulation is a broader term compared to role-play. Most simulations are rule-based activity whereas role-play gives more freedom to students to think and act in real life. However, both simulation and role-play can be viewed as an attempt to represent reality or a real situation without risks. According to NCERT (n.d., p.86), "simulation game often allocates different roles to the participants by issuing them with role cards bearing the name, age, and occupation of the person they are to represent". There are four features to role-play: (i) role-play require a profile describing the role behaviour to be performed during the game, (ii) a case study or scenario describing the situation in terms of which the roles are to be played or performed, (iii) a rule, specifying the conditions under which the game is to be played, (iv) to indicate how the winning and losing to be determined at the end of the game.

According to Vlachopoulos and Makri (2017) there are several advantages of simulation games in the teaching-learning process: (i) simulation games have increased the students' motivation to learn when the students' motivation is low due to socio-cultural factors and irrelevant curriculum that fail to connect the real-life experiences of the students. Simulation games make lessons active, interesting, and fascinating. The students are motivated by assigning roles, by dividing them into groups, and by stating the rules of the activity. Their level of interest increases because the student has a natural urge to play. Students become more eager in finding themselves in the activity of simulation games. (ii) Simulation games maximized the involvement of the students and their participation in the teaching-learning process. This method is helpful and relevant for the average students in remembering concepts and improvement of their academic achievement.

(iii) Simulation games require active participation and involvement of students. As a result, the motivation level of students increases and help to overcome misconception (Vlachopoulos & Makri, 2017). The students learn concepts, terms, facts, conventions, trends, principles, generalizations, assumptions, hypotheses, problems, and processes effectively and meaningfully.

The NCERT (n.d, p.87) states that “studies have shown that pupils who were taught economics through simulation games at higher secondary level scored more than pupils who were taught through traditional methods of teaching”. (iv) Simulation games help students to learn concepts with motivation and engagement. It enhances the retention level of the students. The students who were taught through simulation games had high levels of retention in comparison to those pupils who were taught through the traditional methods of teaching (NCERT, n.d). (v) Simulation games promote co-operation, team spirit, leadership, and respect for colleagues (Ahmad et al., 2013; Wang et al., 2016). Through simulation games, students become close to each other and strengthen their social relationships. Activities and group work under simulation games help the students to learn and share their knowledge and skills. (vi) The literature review also shows students who were taught through simulation games are more confident in expressing their views and ideas. NCERT (n.d., p.87) argues that the “clarity of concepts, increased interest towards the subject and being exposed to simulations make them more confident in dealing with real-life situations” and students become self-aware after activity (Vlachopoulos & Makri, 2017). (vii) Simulation games promote cooperative activity and group interaction. Social desirable habits such as tolerance, brotherhood, self-dependence, thinking for a common cause are fostered and enhanced. (viii) Simulation games also develop various life skills such as personality, decision-making, problem-solving, communication, and negotiations (Sarabia-Cobo et al., 2016). These life skills are necessary for the holistic development of the students. (ix) Simulation games promote the phase ‘learning as a by-product’. Students participate in the activity with excitement and fun, and enjoy more opportunities for learning (Ibrahim et al., 2011). But the purpose and objective of the activity under simulation games are to learn concepts, facts, and principles meaningfully.

There are various steps for designing a simulation game based exercise. According to NCERT (n.d) there are eight steps for designing a simulation game based exercise as detailed below:

(i) Formulation of instructional objectives - Formulation of instructional objectives is important steps for designing a simulation game based exercise. The objectives of the concepts to be taught must be written in behavioural form for student’s effective attainment.

(ii) Identification of simulation game - After the formulation of instructional objectives, an appropriate simulation game exercise should be identified. The component of concepts helps the teacher to identify the most suitable exercise to carry out in the class.

(iii) Preparation of simulation game - Teacher and student should prepare and complete their work related to the number of participants in each group, rules of exercise, roles, material required and arrangement of the furniture.

(iv) Assigning role among participants -The teacher assigns the role to the participants. The activity should go smoothly and be concluded properly. There are two types of roles among participants: (a) key role and (b) supporting role. The key roles have main and greater performance than the supporting roles in the simulation games.

(v) Observer - Students who do not participate in the activity should be assigned a different role such as writing scores, timekeeping, distribution and collection of material. The observer student should keep a complete record of work such as how they worked, what discussions were held, how roles and duties were assigned. The observer should mark constructive criticism of the work and note some important points for future references. Observers should learn equally with those students who were involved in the activity.

(vi) Organisation of simulation game - The whole plan of work is put into action. After the introduction of rules, the simulation game should be played.

(vii) Intervention - The teacher should provide constructive feedback in the progress of the activity as and when required. However, teacher intervention should be minimum to have a natural flow of simulation games.

(viii) Debriefing - This is the end stage where there should be general classroom discussions in which the students generalise their outcomes. The teacher should match the outcomes of the simulation game and the objectives of the lesson. The purpose of the activity should be expressed as not to entertain but to learn concepts, facts, and principles meaningfully.

## Research Question

Do simulation games help students learn economic concepts, terms, and related economics information and enhance academic performance?



## Methods

A pragmatic paradigm guided the study. The study adopted a mixed method approach. The baseline data and post interventions data were collected through class test and class observations. Survey questionnaire was administered to find out students' feelings and attitude towards the three-week simulation games.

## Population and Sample

A total of 27 grade XII students from one of the Higher Secondary Schools participated in the study. The student participants were selected through non-probability convenient sampling techniques. Of the 27 students, 22 students (13 girls and 9 boys) had not taken economics in grades IX and X. Economics subject is introduced to students in grades IX and X as a simple depiction of economic aspects closer to their real life. As students enter higher secondary school, economic theories, concepts, terms, facts, conventions, trends, principles, generalizations, assumptions, hypotheses, problems, and processes are introduced to students in abstract language. The student participants came from mixed socioeconomic status and gender within the age range of 18-20 years old.

## Data Collection Tools

### Class test

The class test was carried out to collect both base line and post intervention data. The objective of conducting the pre-test (class test 1) was to find out the knowledge level of students through the analysis of test scores before the implementation of the simulation games. Pre-test was conducted on March 10, 2019, with a writing time of 50 minutes. The pre-test covered topics such as circular flow of income and national income. The questions consist of six short answer questions with a total of 20 marks. The total mark of 20 was converted to 100 for easy tabulation.

The post intervention test (class test 2) was conducted on June 1, 2019 to find out the students' level of performance in economics after the implementation of simulation games for three weeks. The questions for post intervention test were of similar standard to that of the pre-test questions.

The pre-test (class test 1) and the post-test (class test 2) were compared to examine academic performance before and after the implementation of simulation games. The pass percentage and mean mark of class test 1 and class test 2 were compiled and verified.

## **Class Observations**

The second source of data was through classroom observations. Six rounds of observations were carried out during the entire period of the study. The three observations were general on how students took part in the teaching-learning process. The purpose of the observations was to see the behaviour of the students before and after the implementation of the simulation games. Day to day anecdotal records were maintained for each student.

## **Survey**

In order to find out students' feelings and attitude towards the three-week simulation games, a survey was administered to the entire class. The survey questionnaire consists of 5-Point Likert Scale - (5=Strongly Agree, 4=Agree, 3=Neutral, 2= Strongly Disagree, 1= Disagree). The survey data were analysed via mean, and standard deviation to determine the feelings and attitude towards the three-week simulation games.

## **Intervention**

The poor performance in class test 1 (base line data) and the conduct of the students in the classroom (observations) revealed the need for an immediate intervention. Informed by the literature review, researcher adopted simulation games as an intervention strategy after identifying relevant topic. For three weeks, economics for grade XII students were taught using simulation games for a duration of 50 minutes every day except Saturdays and Sundays. Sample of the lesson plan is appended (Appendix A) herewith.

## **Data Analysis**

SPSS version 24 was used to analyze class tests 1 & 2, and Survey data. Descriptive statistics were used to explain the quantitative data via percent, mean, and standard deviation. The narratives of the classroom observations were used to supplement data from class test. The data collected through the class tests, observations, and survey were triangulated to confirm the result and inform the discussion.

## **Ethical Clearance**

The researcher informed the aim and objective of the study and sought the opinion of grade XII student participants. The students were briefed verbally about the planned study and its purpose to ensure proper usage. They were ensured anonymity and confidentiality and briefed on how the data was going to be used and protected. Parents' concerns were not asked as students were above 18 years old. The study was carried out as a part of the teaching-learning process. The researcher also sought permission from the school management to carry out the

study. The critical friend and his role during the study were briefed to the class.

## Findings and Discussion

The marks scored by the students during class test 1 were disheartening as evident from Table 1. The pass percentage was 54.2 and the mean mark was 42.6. The female students (mean marks=48.3) performed better in the test than their male counterparts (mean marks=36.9).

**Table 1**

*Pass percentage and mean marks in class test 1 (pre-test)*

Student Participants	Pass Percentage	Mean Marks
Female	66.7	48.3
Male	41.7	36.9
Total	54.2	42.6

The narratives from the researcher's classroom observation records too revealed the issues and the challenges faced by the students in not performing well in the economics test (class test 1). For instance, majority of the students in the class were studying economics for the first time, they faced difficulties in understanding economic concepts, facts, principles, and theories. Further, the researcher's interactions with students revealed that the lessons were mostly teacher driven which is dominated by lecture method with a bit of demonstration, group work and PowerPoint presentations.

The observation data also showed that most of the students (40%) do not actively participate in the class activities. Few students had to be reminded constantly by the teacher to participate in the learning activities. Few students would discuss in private groups and engaged in private talks and not pay heed to the teacher's instructions. During the initial phase of study around 4% of students missed class on regular basis. These group of students resort to rote memorization without understanding the concepts, terms, facts, conventions, trends, principles, and generalizations.

However, 28.6% of students were found motivated and actively participated in the class asking several questions and sought clarification. These group of people did well in the class test too.

The post intervention data revealed a marked improvement in students'

performance in economics as evident from the high mean marks in class test 2. For instance, the mean marks in the class test 2 increased to 59.44 compared to 42.6 in the class test 1 as reflected in Table 2. Similarly, pass percentage of students in the class test 2 increased to 96.29% compared to 54.2% in the pre-test. Further, female students continued to fare well in the test. The overall performance and mean marks of students in the economics test increased after the simulation games. The results support that when students were taught using simulation games, students can score high marks in the class test.

**Table 2**

*Comparison of Pass Percentage and Mean Marks of Economics in Class test 1 and Class test 2*

Student Participants	Class Test 1		Class Test 2	
	Pass Percentage	Mean Marks	Pass Percentage	Mean marks
Female	66.7	48.3	100	63.66
Male	41.7	36.9	91	54.16
Total	54.2	42.6	96.29	59.44

Similarly, the observation data too indicated that simulation games were relevant in teaching-learning economics subject. The students actively participated in learning activities. The researcher also observed that class activities were lively, enjoyable, and responsive and students readily took part in learning activities without having to coerced or remind. A very wide variety of experiences were brought into the classroom through simulation games. The researcher's role became more of a guide, mentor and facilitator in the teaching-learning process.

The survey data also revealed that the students prefer simulation games strategy in the teaching-learning process as evident from a high mean score of 4.5 (Strongly Agree) as reflected in Table 3. The simulation games help comprehend concepts, hypotheses, and theories besides making teaching-learning interesting, enjoyable, and fun.

The triangulation of the data from class tests, observations, and the survey revealed the overall effectiveness of the simulation games as a strategy to learn economics. Class test 2 showed a significant improvement in the test scores of the students. The researcher observed that students actively participated in the lessons and shared positive things about the simulation games. The survey findings also revealed that students have a positive attitude towards the use of simulation games

and recommended its use in the teaching-learning process in future. The findings confirmed the claims made by promoters of simulation games as an effective classroom tool NCERT (n.d.) and Vlachopoulos and Makri (2017).

**Table 3**

*Learning Satisfaction Analysis*

Sl. No	Learning Satisfaction Level	N	Mean	Std. Deviation
1	Teacher engaged me actively and meaningfully	27	4.4	0.6
2	Simulation games methodology was helpful	27	4.7	0.4
3	I was encouraged to participate in the discussion during the group activity	27	4.7	0.5
4	Simulation games make learning interesting, enjoyable, and fun	27	4.8	0.4
5	I learn better with simulation games methodology	27	4.6	0.6
6	Simulation games made it easier to understand concepts, hypothesis, and theories	27	4.4	0.7
7	Simulation games promote cooperation, team spirit, collaboration, and respect for peers	27	4.6	0.5
8	Simulation games help us in developing important skills such as decision making, problem-solving, communication, and negotiation	27	4.7	0.5
9	Simulation games enhance my motivation to learn in the classroom	27	4.3	0.6
10	I get good marks in economics when simulation games methodology is used in the classroom	27	4.0	0.6
11	My academic performance improved after using simulation games	27	4.3	0.7
12	I recommend simulation games to teach class twelve students	27	4.7	0.6
<b>Total average mean (Strongly Agree)</b>			<b>4.5</b>	<b>0.6</b>

### Reflection of the Study

The researcher felt good after the successful completion of the Action Research. The researcher gained better understanding of the teaching-learning process using simulation games although he learnt about simulation and role-play as a teaching strategy at the erstwhile National Institute of Education, Samtse during his PGCE programme.

The researcher also observed that the students reciprocated well when taught using simulation strategy. It empowers students' comprehension of lessons or topics as opposed to surface learning that requires only memorization and rote learning. The simulation games provide more insightful information than a

textbook in delivering the lesson. Further, the use of simulation games improved retention and makes learning more entertaining.

The critical friend played an important role in helping researcher reflect and explore areas of his practice of the intervention. During the study process, the critical friend provided constructive suggestions, comments, provocative questions and feedbacks. The critical friend also helped researcher in recording observations, verifying survey questionnaire, review the standard of question papers for class test 1 and 2.

Although simulation strategy has the potential to engage students in deeper learning and make learning enjoyable and fun. However, there are certain shortcomings which the teachers need to be mindful of while implementing simulation strategy in the class. As Bhutanese teachers are assigned to teaching a minimum of 18 hours (22 periods) per week excluding other administrative and supervisory responsibilities, the researcher and his critical friend did not get enough discussion time for reflective enquiry. In simulation games, teacher workload increases. Teachers have to plan well before the implementation of the complete game. The simulation requires proper planning, execution, follow-up, and reviewing. It is also difficult for the teacher to identify the topic that can be taught through simulation games. The researcher also felt students were burdened with increased workload and responsibility within the limited time to complete the tasks. Overuse of simulation games in the teaching-learning process can be overwhelming and burdensome to students and teachers alike. Moreover, the Bhutanese curriculum is centralized and exam-oriented-emphasising assessment of learning and does not support student-centred learning.

## Conclusion

The findings revealed that the students have a positive opinion of the use of simulation games in the teaching-learning process. The researcher observed that simulation games promote liveliness, interest, and learning for fun. By implementing simulation games, students' participation in the classroom increased and started to score high marks in class test besides improving class attendance.

The researcher would like to recommend other teachers to incorporate at least four simulation games in the teaching-learning process (two before midterm and two after midterm examinations). Before the implementation of simulation games, the teacher should ensure that students have adequate experience with reality being represented. It is also important for the teacher to discuss the purpose of the activity with the students. There were few limitations observed during the implementation of simulation games as it requires more preparation time and energy for teachers, and all micro and macroeconomics concepts cannot be taught



through simulation games.

The researcher recommends future researchers to replicate the same study with an extended intervention period and make a comparison and conclusion. The researcher also recommends Colleges of Education to carry out a similar study on the simulation games in the teaching-learning process in teacher education.

## References

- Ahmad, S. M. S., Fauzi, N. F. M., Hashim, A. A., & Zainon, W. M. N. W. (2013). A study on the effectiveness of computer games in teaching and learning. *International Journal of Advanced Studies in Computers, Science and Engineering*, 2(1), 1.
- Auman, C. (2011). Using simulation games to increase student and instructor engagement. *College Teaching*, 59(4), 154–161.
- BCSEA. (2018). Pupil performance report 2018: For BCSE, BHSEC and LCSC-XII 2017 examinations. Thimphu, Bhutan: BCSEA.
- BCSEA. (2020). Pupil performance report 2020: Volume 13. Thimphu, Bhutan: BCSEA.
- Boris, O. O. (2020). Effects of problem solving teaching strategy on secondary school students' academic performance in Chemistry in Ondo State, Nigeria. *International Journal of Research and Analytical Reviews*, 7(2), 74-80.
- Choeda, Drukpa, P., Yuden, Drukpa, P., Chuki, S. (2018). A guide to action research: Enhancing professional practice of teachers in Bhutan. Paro, Bhutan: Royal Education Council.
- Cohen, L., Manion, L., Morrison, K., & Wyse, D. (2010). A guide to teaching practice (5th ed.). Routledge.
- Cresswell, J.W. (2014). Research design. Qualitative, quantitative and mixed method approaches (4th ed.). Sage Publications.
- Dorji, T. (2019). Using mnemonic method to improve student's ability to remember economics concepts: An action research. *Bhutan Journal of Research and Development*, 8(1), 47-58.
- Dorji, T. (2020a). Classroom observation in the Bhutanese classroom: Its reality and limitation. *European Journal of Volunteering and Community-based Projects*, 1(2), 40-49. doi:10.5281/zenodo.4080422
- Dorji, T. (2020b). Using handouts in the Bhutanese classrooms: Its effectiveness and limitations in teaching learning Economics. *Education Innovation and Practice*, 4(1), 52-65.
- Dorji, T. (2021). Effect of using problem-based learning on the academic achievement of higher secondary school students. Accepted by the *International Journal of Asia Education*, 2(2), 235-243.

- Ibrahim, R., Wahab, S., Yusoff, R. C. M., Khalil, K., Desaru, I., & Jaafar, A. (2011). Student perceptions of educational games in higher education: An empirical study. *Issues in Information Systems*, 12(1), 120–133.
- iDiscoveri Education & REC. (2009). *The quality of school education in Bhutan: Reality and opportunities*. Thimphu, Bhutan: Royal Education Council.
- Jibrin, A.G., & Zayum, S.D. (2012). Effect of concept mapping teaching strategy on the academic achievement of senior secondary school students in genetics. *Journal of Science, Technology and Education*, 1(1), 49-53.
- Killen, R. (2009). *Effective teaching strategies: Lessons from research and practice* (5th ed.). Victoria, Australia: National Library of Australia Cataloguing-in-Publication Data.
- Megarry, J. (1989). *Simulation and gaming: The international encyclopedia of educational technology*. Pergamon Press.
- MoE. (2020). *Bhutan professional standards for teachers*. Thimphu, Bhutan: MoE.
- NCERT. (n.d.). *Teaching Economics in India; A teacher's handbook*. Delhi, India: NCERT.
- Rinzin, Y. C. (2018, January 30). Students perform poorly in Business Mathematics and Economics. Kuensel-Bhutan's National Paper, p.1.
- Rinzin, Y. C. (2019a, January 30). Students perform poorly in Commerce and Economics subjects. Kuensel-Bhutan's National Paper, p.2.
- Rinzin, Y. C. (2019b, February 25). Making Economics an optional subject affect performance. Kuensel-Bhutan's National Paper, p.1.
- Sarabia-Cobo, C. M., Alconero-Camarero, A. R., Lavin-Alconero, L., & Ibanez-Rementeria, I. (2016). Assessment of a learning intervention in palliative care based on clinical simulations for nursing students. *Nurse Education Today*, 45, 219–224.
- Sherab, K. (2013). *Gross national happiness education in Bhutanese schools: Understanding the experiences and efficacy beliefs of principals and teachers*. Unpublished PhD dissertation. University of New England, Armidale, Australia.

- Vlachopoulos, D., & Makri, A. (2017). The effect of games and simulations in higher education: A systematic literature review. *International Journal of Educational Technology in Higher Education*, 14 (22), 1-33. doi:10.1186/s41239-017-0062-1
- Wang, C., Huang, C. C., Lin, S. J., & Chen, J. W. (2016). Using multimedia tools and high fidelity simulations to improve medical students' resuscitation performance: An observational study. *BMJ Open*, 6(9), 12-19.
- Wilson, B. (1987). *Methods of training: Group work*. Parthenon Publishing.
- Yadav, A. (2006). *Teaching of Economics*. Anmol.

### About the Author

**Tshewang Dorji** is an Economics teacher at Dechencholing Higher Secondary School, under Thimphu Thromde (Municipality). He has published research articles in the field of gender and development, gender and education, entrepreneurship education, school infrastructure, education policy, pedagogical practices and coordinates research activities in the school. He has a Master in Economics and Education from Teachers College, Columbia University, New York. Currently, he is teaching economics in grades XI and XII.

### Appendix A

The following sample lesson plan outlined in the NCERT (n.d. p.89-91) was implemented in the classroom:

Topic: Monopolistic Competition Market

Class: XII Arts

Time: 55 Minutes

Components of monopolistic competition market

- Many firms
- Closely related but differentiated product
- Free entry and exit of firms

- Selling costs

### Instructional objectives

After going through this activity student should be able to:

- state the meaning of monopolistic competition market.
- list the features of monopolistic competition market.
- explain the features of monopolistic competition market.
- describe the terms “Product Differentiation” and “Selling Costs” [L]<sub>[SEP]</sub>
- write the rationale of a firm in differentiating its product.

### Rules

- Divide the whole class into five equal groups.
- There would be 5 students in each group.
- There would be four firms which will be selling their product “Toothpaste”.
- One group shall be consumers.

### Procedure

- Three students of the first four groups will act as a seller of different firms which are selling their product toothpaste. Remaining two students of each group will perform promotional activities like advertisement on newspaper, T.V. and Radio, Free Sampling, etc. to sell their products. Their description is given below:

### Table

#### *Role of Students*

Group	Role of Firm	Number of students	Student engaged in promotional activities	Total
1	Firm A Colgate	03	02	05
2	Firm B Pepsodent	03	02	05
3	Firm C Close up	03	02	05
4	Firm D Dabur	03	02	05
Total		12	08	20

It is clear from the above table that there are five students in each group engaged in performing roles of firms and engaged in promotional activities.

The fifth group will act as consumers who wish to purchase a product “toothpaste” and for this, they visit and interact with the members of each firm and observe all the promotional activities. The group of consumers will get information related to price, quantity, quality, brand name, colours, type of service etc. about the products.

### Debriefing

After the activity has been conducted, the groups will share their experiences and explain the purpose of the activity. At this stage, the teacher needs to match the outcomes of the activity with the objectives of the lesson and describe that there are a number of firms selling a similar product and thus, each firm supply a certain percentage of the total supply of the product. Competition prevails in the market because there are many firms. Products of different firms are close substitutes of one another. They can be differentiated from each other based on a brand name, colours, shape, quality, and expenditure incurred in promoting sales of a firm etc. Finally, the meaning of monopolistic competition is derived with the help of students as it refers to a market situation in which there are different firms selling closely related but differentiated products.

### Homework

Q1. Give four examples of any five consumer goods industries where product differentiation is prevalent.

Q2. Can a seller in monopolistic competition market influence price? Give one reason.

Q3. Explain any four features of monopolistic competition market.

# Learners' Preference: A Reason to Use Code-Switching in Teaching and Learning Short Stories in Grade 10 English

Damchu Dema<sup>1</sup> and Ugyen Dorji<sup>2</sup>

---

## Abstract

Code-switching is a phenomenon where there is an alternation between two or more languages or dialects within a sentence in a conversation. It can be used as one of the strategies of teaching short stories in the Bhutanese classrooms. However, in Bhutan, English being the medium of instruction, teachers and students are obliged to communicate only in English in the class. This impedes students reasoning, critical thinking skills and the overall learning process both within the classroom and outside the learning environment. Impacts and factors leading to code-switching in teaching literary texts has been widely explored in other countries. However, very little research has been carried out in Bhutan. Hence, this study explored the factors leading to code-switching in L2 classrooms to teach short stories to grade 10 students of one of the higher secondary schools in Trongsa dzongkhag. It also attempted at examining the perception and attitudes of English teachers and learners towards code-switching in the teaching and learning of short stories. The study was conducted using mixed methods: integrating structured survey questionnaires and semi-structured interview and the data were analyzed using descriptive analysis. Thus, the researcher found the significant factors such as, difficulty in comprehending the new concepts, new vocabularies and pronunciation and to encourage students' participation in the class which leads to the use of L1. Further, it also found that both teachers and students have positive attitudes towards the use of code-switching as a technique to teach short stories to grade 10 students in English as a Second Language classroom but not to use as frequently as they wished to.

*Keywords:* code-switching, literary text, short stories, bilingual teachers, English

## Introduction

Bhutan is a multi-lingual society with diverse ethnic groups such as Ngalops, Sharchops, Khengpas, Lhotshampas, including the Tibetans. Various dialects are spoken by these groups throughout the kingdom and there are nineteen different languages in the country (Driem, 1994). Dzongkha is a national language



and also an official language of Bhutan and it is regarded as the language of national culture and identity. However, English is learned as a second language and is considered as a *Lingua Franca*. Majority of educated Bhutanese are fluent in English and therefore considered bilingual in Dzongkha and English.

Modern education in Bhutan dates back to 1914 where subjects such as English, Arithmetic, Hindi and Dzongkha were taught in the learning classes. With the establishment of first school in 1914 at Haa, Bumthang and Thimphu in the following years, King Ugyen Wangchuck (1907-1926) introduced a western education system (Penjore, 2013). English is then the medium of instruction for all other disciplines in schools across the country except Dzongkha subject. Although English is a medium of instruction in the schools, students are allowed to speak the two literacy languages, that is English and Dzongkha languages (Namgay, 2012). Therefore, code-switching has become a common phenomenon in the Lower remote schools of Bhutan. Code-switching is one of the strategies used in the bilingual and multilingual community to communicate effectively and meaningfully as it is the part of the sociolinguistic study in the bilingualism, and is especially common in second or foreign language classes. Code-switching is a process of an alternation between two or more languages or dialects within a sentence or in a conversation. According to Franceschini (1998), code-switching is not a historical language where it is passed on from one generation to another generation but a kind of interlanguage which is produced anew in each sociocultural situation. Earlier code-switching phenomena was considered as a random process, an interference, or performance error by incompetent bilinguals (Duran, 1994). The two very important reasons why people switch codes in a community is when the speakers can hardly communicate with the target language and when they have diverse communication objectives.

According to Bista (2010) and Leyew (1998), there are several socio-linguistic factors that impact the behavior of code-switching. These factors are such as lack of equivalent words in English, unfamiliarity with the used English words, bridging gaps in conversations, facilitating the first language speech, misunderstanding avoidance, intimacy delivery, privacy maintenance, adding emphasis, and English language proficiency.

Teachers and students both use code-switching in the classroom as it has a number of positive influences on teaching and learning process and should be allowed when there is difficulty in continuing a conversation in a new language (Borlongan, 2009). A teacher should allow children to use a word or so from any other languages if he is unable to remember a word in the middle of a sentence. This will help the students to continue and complete his sentence. Caganaga (2015) stated that while doing a pair activity, language switching can help students

in clarifying misunderstanding using their target language and also engage them in practicing and explaining concepts to each other. A teacher can also switch codes to explain and convince the concept to the students while introducing a new chapter, to explain meaning of words and sentences and to explain the themes. Thus, code-switching can be used as one of the teaching strategies. However, teachers usually switch codes subconsciously, as a result teacher may not always be aware of the functions and outcomes of the code-switching process (Burenhult, 1999). Whether code-switching is a conscious or subconscious process, inevitable or not, it serves some basic functions that is beneficial in creating a conducive classroom environment and building a strong classroom rapport (Qing, 2010).

In Bhutanese classrooms, most of the time teachers and students are found switching from English to Dzongkha, but teachers do not embrace the concept of code-switching and therefore such linguistic resources are left unexplored in English classrooms. Students of Secondary classes encounter difficulties in critical thinking, reasoning and problem solving since such behavior is restricted in the classrooms. Often the teachers tend to prohibit switching languages with the assumption that first language will impede in second language learning process. However, the findings of Centeno-Cortés and Jiménez-Jiménez (2004) proposed that prohibition of L1 in the classroom, might hamper learning because L1 has been found to aid as a vital cognitive and metacognitive tool for the learners. Thus, switching languages must be encouraged instead of prohibiting it to promote learners' learning.

## **Rationale**

Short story is one of the genres under English literature taught in Bhutanese classroom. Students enjoy short stories, yet lack excellence in their performance in this section of literature paper. The factors that contribute to such poor performance could be due to learner's inability to pose comments on the meaning of the text and understand its intrinsic literary value. The other factors also could be their inability to show into life lessons as taught from the text and the ineffective strategy used to teach the lesson. Though various teaching strategies are employed in teaching English literature texts, the teacher must select the best teaching strategy to make conducive learning environment. Among various strategies, code-switching is found to be one of the most effective tools to teach short stories. However, many principals and educators claim that English be the sole medium of instruction apart from Dzongkha subject taught in the class. Researchers have indicated that learners' native language promote language two acquisition (Cummins, 1981); fulfills pedagogical functions and has socio-psychological benefit (Atkinson, 1987); facilitates teaching and influences learners' behavior (Kharma & Hajjaj, 1989); and serves as a communicative strategy in English classroom (Scheweers,

1999). Thus, discouraging the use of native language in the context of English as second language instruction impedes the comprehension of meaningful insights of literary works resulting in poor academic performance.

Though, there appears to have been researched on code-switching in the Bhutanese classroom, it is limited to a few and no research has been conducted on code-switching as a strategy to teach short stories to secondary students, where literature text is considered equally important as grammar in English discipline. Thus, this study explored the importance of code-switching as teaching learning strategy and drew attention on its benefits for teacher and students. The researcher further explored on the research conducted by Adendorff (1993), Gila (1995) and Marawu (1997) which explains that code-switching can be applied as a strategy in facilitating understanding of literary works and promoting scholastic achievement. Code-switching also contributes to the issue of “English- only” policy of medium of instruction. The study examined the possibility of employing English-Dzongkha code-switching as an effective strategy to teach short stories to secondary students. Furthermore, this research studied the factors affecting code-switching, perception and attitudes of the students on code-switching. The findings of this research would be beneficial in determining the significance of code-switching in understanding the short stories in the literature text.

### **Aims and Objectives of the study**

The following were the objectives of the study:

- 1.To examine the students’ perception and attitudes on code-switching.
- 2.To analyze the significant factors leading to code-switching in learning short stories in English as a Second Language (ESL) classroom.
- 3.To study the impact of code-switching on short story text comprehension.

### **Literature Review**

According to Lever-Duffy and McDonald (2005), learning is a complex activity that can be seen differently depending on individual’s needs. Every individual has different learning abilities and styles, and possess knowledge in diverse ways. Learners’ perception differs on how and why they do that way. That is why some students learn more effectively when taught with their preferred methods of teaching. So, it is important that the teacher choose the most appropriate teaching method that fits the learners’ choice and enjoy learning the subject(s) (Riding & Smith, 1997). According to Cummins (1981), teaching the subject content often in learners’ native language promotes the second language (English) acquisition and result in better scholastic performance. Kharma and

Hajjaj (1989) also stated that teachers' efficiency in using native languages in English classroom facilitates teaching and influences learner's behavior in active participation. Therefore, studies by Cummins (1981), Kharma and Hajjaj (1989) and Riding and Smith (1997) indicated code-switching as one of the most effective teaching and learning strategies that can be applied for active classroom learning. Over recent years much attention has been given to learner-learner interaction in the classroom to facilitate learning. There has been a need for a shift from the traditional transmission approach where the teacher is seen as a transmitter of information and the learner as the passive receptor to one where the teacher is a facilitator and the learner an active participant in the learning process (Wells, 1982). Wells' 'Reciprocal Interaction Model of Learning' stresses language as a resource and thus emphasizes the interactional context in which children learn the concept through interaction by using different languages. Thus, Wells' model of learning has relevance to this study which involves ESL learners and for whom code-switching can be perceived as a resource. Code-switching plays a significant pedagogical role in the classroom. Code-switching is useful for explaining and elaborating on concepts, increasing classroom participation, establishing good classroom relationships, ensuring the smooth running of the lesson, and making connections with the local culture of learners (Clegg & Afitska, 2011). Code-switching can be effective teaching and learning strategy that features the importance of bilingual pedagogy and various language practices that teachers could adopt to facilitate pupils' understanding and participation in the classroom. So, code-switching may occur during the teaching and learning process in the classroom to ensure that students understand instructions and content. Cook (2001) explains that teachers may use the first language in order to explain activities so that the activities would be beneficial to the learners. The use of the learners' first language would allow negotiation and better understanding of the required task. Several studies have been conducted to investigate the purpose and function of code-switching around the world. For instance, Tien and Liu (2006) claim that code-switching in Taiwan's EFL classroom is inevitable. Learners of the language by and large do not participate actively in English communication within their multilingual setting. Learning the target language poses a challenge because the language is not in practical use after academic hours. Hence, the teaching and learning process cannot take place until one resorts to switching between languages. A numerous study shows that teachers and pupils exercise code-switching during lessons to achieve learning and teaching goals in the classroom (e.g., Adjei 2010; Ezuh 2008). Similarly, Arthur (1996) examines the interactions between teachers and pupils in grade six classes in two primary schools in north-eastern Botswana. The policy accentuates the use of their national language, Setswana from pre-primary to grade 3 and use of English medium from grade 4.

Numerous linguists in Malaysia have focused their studies in finding the

functions of code-switching. However, few efforts have been devoted in finding the functions of code-switching among practicing teachers in the English classroom and how the practice affects the curriculum. The contribution of code-switching in the learning of literary text is still largely unresearched. Findings from the study by Then and Ting (2009) stated that both the languages are still being alternately used by English and Science teachers in Malaysia although English language has been implemented as the language of instruction for both the subjects in schools. The researchers found that teachers employ two languages in their teaching to facilitate students' comprehension of the content area. The study concluded that the low proficiency learners had a positive perception towards teachers' code-switching and these learners supported future code-switching in English classrooms.

Over the years, attitudes towards code-switching have changed. Yevudey (2012), acknowledged that code-switching in Ghana has become an expected code choice as its normality and acceptability has increased among bilinguals and multilinguals. Code-switching is encountered in areas such as on radio and television, and in churches and classrooms. Forson (1979) indicates that code-switching was not a code choice in Ghana until after the early 1950s when English was introduced as the medium of instruction in the elementary schools. Forson records that during meetings of bilingual Akan and English speakers they slip into code-switching as an occasion for spontaneous giggling where the speaker usually find himself as a participant in the ridiculing. Ezuh (2008) stated that the effectiveness of the use of code-switching as a medium of instruction in the classroom facilitates the students' academic performance. Ezuh assumes that the students from the two schools performed better when they were taught via code-switching where as their performances declined when taught using English as the only medium of instruction. In a response to a questionnaire survey, both teachers and pupils have positive attitudes towards code-switching in the classroom and encouraged its adoption as a medium of instruction. This conclusion reflects Arthur and Martin's (2006) argument that the use of code-switching in the classroom should be viewed as a "teachable pedagogic resource". The implication is that teachers should be introduced to the strategic use of code-switching in the classroom. Therefore, it should be incorporated into the teacher-training curriculum.

Code-switching is given considerable recognition for its effectiveness as a teaching tool. Teachers, nonetheless, are advised to adopt the technique with caution in each individual context so that improvement can be monitored. Yusuf (2009) noted that code-switching was less frequently elicited by the need to attain emphasis or efficiency and to gain attention from the students, which was fulfilled by the pragmatic functions of proper name, hesitation, quotation, and transfer of subconscious markers. The findings also indicated that the language instructor most often switched codes for the purpose of accuracy, especially to explain general

concepts used in the field of industrial ergonomics, and for facility of expression. Code-switching can be used by teachers by integrating it into the teaching points. This can serve as a motivational tool by involving them in discussions so that they can relate the knowledge base in the backdrop of their own culture. Teachers can also begin a lesson in one language, then switch to another language, forcing the learners to listen carefully and comprehend the subject matter (Sultana & Gulzar, 2010).

Therefore, from the above literature on code-switching as a purposeful instructional strategy in the classroom, it can be concluded that although some research recommends that code-switching should be discouraged in the classroom, most studies suggest that it can play an important role in the teaching and learning processes as pupils' participation and understanding may increase when they are free to use the language(s) that are most familiar to them. To sum up, issues pertaining to attitudes and the actual use of code-switching by teachers and pupils have been some of the main concerns of code-switching research.

The types of language people prefer is greatly influenced by the environment, culture or society they live in. Language of the families would change according to the place of their living and pickup speaking or learning a language of the majority (Barron-Hauwaert, 2010). The findings from Saunder's (2006) study states that more than half of the world's population use more than one language while engaging in the activities basic to human needs. Thus, bilingualism has long been considered the norm and there has always been a great deal of bilingualism. Similarly, Bhutan is a multicultural and multilingual society with different ethnic groups of Ngalop, Sharchop, Lhotshampa, and other indigenous groups including the Tibetans (Driem, 1994). Majority of Bhutanese can speak at least two languages and probably understand one or two others, while some may speak five to six languages. Gyatsho (2003) mentioned that Bhutan has complex linguistic situation as there are as many as nineteen different vernaculars spoken across the country. As a multilingual society, several dialects are spoken with Dzongkha as an official national language. There are good numbers of people who can communicate effectively in more than one or two languages. Ever since the introduction of a western-style English medium education system in Bhutan, English is taught as a subject and used as medium of instruction of school curriculum. So, code-switching between English and Dzongkha is a usual scenario and has even led to the genesis of 'Dzonglish'. As it is apparent from the above lines; it mostly occurs when one is at the loss of words and it questions one's fluency. This is a serious weakness. Dorian (1998) also, however, supports the lack of technical terms or concepts incur the necessity to borrow, which in turn may act as a cause for the code- switch. On the contrary, Singh (2005) argues that the phenomenon is considered nothing more than speakers making full use of the



resources offered by a bilingual situation, and is in no way stigmatized.

Thus, this study was undertaken to contribute to the existing discussions on the relevance of the use of code-switching as a technique for teaching short stories to grade 10 students of one of the higher secondary schools in Trongsa dzongkhag. The paper attempted to study the factors leading to code-switching, perception and attitudes of students towards code-switching in teaching short stories in the classroom. The researcher tried to unravel the pedagogic relevance of code-switching in the classroom and how its use facilitates pupils' text comprehension and enhance classroom participation.

## Methodology

The research adopted mixed method approach. Survey method was employed to garner quantitative research data objectively and systematically (Almeida, 2017). The qualitative data was collected through interview which was semi structured in nature.

The targeted participants for this research consisted of grade 10 students. The population of 60 heterogenous ability students voluntarily participated to examine the factors leading to code-switching and perception of students on code-switching through survey questionnaires. The survey questionnaires include five-point Likert scales to minimise the statistical problems and to determine their level of opinions. Subsequently, a semi-structured interview was administered to 6 volunteers of the group to examine their attitudes and beliefs in the practice of code-switching in the classroom.

The selection of the participants was based on purposive sampling as the researcher sampled with a purpose and had a specific predefined group based on the purpose of the research (Trochim, 2006). The sampling was applied to grade 10 students of one of the higher secondary schools under Trongsa dzongkhag. The selected participants completed the structured survey questionnaires and semi-structured interview respectively to study the factors leading to code-switching and the participants' perception and attitudes towards code-switching in L2 classroom to teach and learn short story text.

The format of the survey questionnaire consisted of a self-rating scale to find out the degree of respondents' use of code-switching (Dzongkha and English) among bilingual students and teachers. Questionnaires were designed to determine the learners' perception about use of code-switching in learning short stories in English literary text. So, the survey questionnaire included the use of a Likert Scale with five points or options to identify the level of opinion of the participants (Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly



Disagree=1). Before implementing the study, research protocols were fulfilled and participants were briefed on the purpose of the study. Participants were also informed regarding the confidentiality of the data and ensured that it will be used for the sole purpose of this study only.

Descriptive analysis was used to analyze the data collected from the survey questionnaire and presented in mean and standard deviation. The interview data have been quantitized and represented in a graphical form that made it easier to draw the conclusion.

**Table 1**

*Analysis of Survey Questionnaires to Determine the Learners' Perception about Use of Code-switching in Learning Short Stories in English Literary Text.*

Statements	Mean	SD	Remarks
The use of Dɔŋkha language by the teacher helps me to enjoy the short story lesson.	3.87	0.947	Agree
The use of Dɔŋkha language by the teacher helps me to understand the lesson better.	4.08	0.962	Strongly Agree
The use of Dɔŋkha language by the teacher makes me feel more confident and motivated in learning short stories.	3.82	0.965	Agree
The use of Dɔŋkha language by the teacher enables me to focus on the lesson without worrying about unfamiliar words and sentences.	3.87	0.873	Agree
The use of Dɔŋkha language by the teacher encourages me to actively participate in classroom activities	3.90	1.020	Agree
I would prefer the teacher to use English only during lessons and not to use Dɔŋkha language.	2.63	1.301	Neutral
I would prefer the teacher to minimize the use of Dɔŋkha language during short story lessons.	3.18	1.142	Agree
I would prefer the teacher to use both English and Dɔŋkha language during short story lessons.	3.92	1.124	Agree
I don't like it when the teacher uses Dɔŋkha language during short story lessons.	2.42	1.139	Neutral
I find it difficult to learn when the teacher does not explain new words/topics/concepts in Dɔŋkha language.	3.87	1.081	Agree
I find it difficult to concentrate when the teacher uses English only in short story lessons.	3.63	1.178	Agree
I switch codes when I am unable to express myself in English	3.85	0.880	Agree
I switch codes to help myself maintain the flow of conversation	3.77	0.871	Agree
I switch codes when I communicate with my peers who share the same language	3.95	0.891	Agree
I switch codes when explaining difficult words and sentences to my peers	4.13	0.700	Strongly Agree
	3.66	1.005	Agree

## Findings

The overall analysis of the survey data “to determine the learners’ perception about use of code-switching in learning short stories in English literary text” revealed that students “Agree” that code-switching is an effective strategy in teaching stories to grade 10 students as evident from a high average score of (Mean = 3.7, SD = 1.0) as reflected in Table 1. Majority of the students switch codes for different reasons such as it serves as a communicative resource for students and that it is the preferred choice of language used amongst students who share the same language.

The specific findings indicate that students “Agree” to the statement “The use of Dzongkha language by the teacher helps me to enjoy the short story lesson”. While switching from English to Dzongkha in short story lesson, teacher explains meaning of words and sentences in learners’ preferred language that help them enjoy and understand the lesson. The result demonstrates that the students “Strongly Agree” that the use of code-switching by teachers frequently improved their understanding and comprehension of short story lessons.

It is observed that students “Agree” that code-switching by teachers improve their confidence and motivate them in learning short stories. They claim that they become more confident and motivated in learning the target language when teachers include the use of their first language in the short story lesson. They feel that they are able to comprehend concepts better in their first language. Furthermore, majority of the respondents “Agreed” that the teachers’ use of code-switching enables them to focus on the lesson without worrying about unfamiliar words and sentences. It also states that the majority of the respondents “Agreed” that teachers switching codes from English to Dzongkha encourages them to actively and confidently participate in classroom activities. The finding also shows that students are skeptical (“Neutral”) when teacher uses only English language during lessons. Instead, students prefer (Agree) learning short story lessons by switching languages at least for difficult words and phrases. As reflected in Table 1, the students have mixed response (Neutral) when their lesson is taught in both English and Dzongkha languages because they feel that the essence of English language is lost when other language is applied during short story lessons in ESL classroom. The finding also indicates that students “Agree” that they find difficulty in concentrating in short story lesson when the teacher does not explain new words/topics/concepts in Dzongkha language. Therefore, students “Agree” on using code-switching whenever they are unable to express themselves in English because this technique helps them maintain the flow of their conversation. The finding indicates that most of the students “Agree” using code-switching to

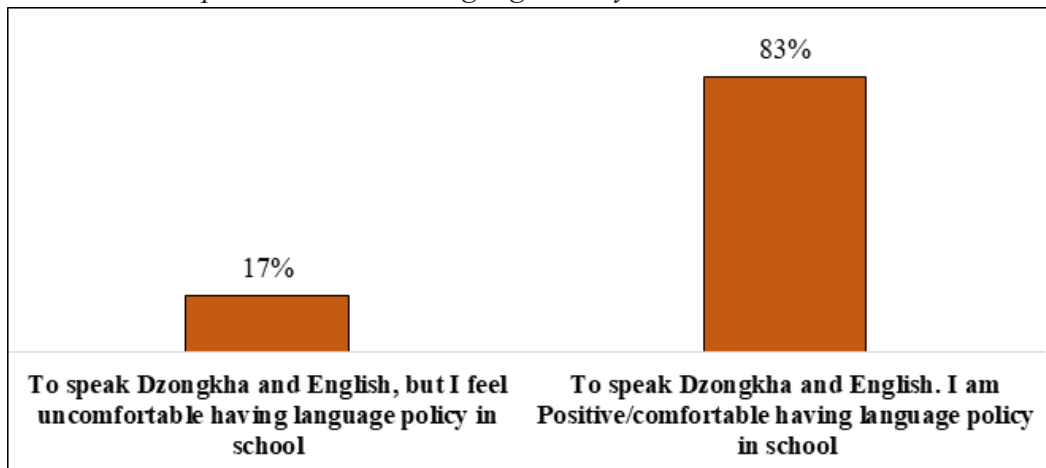
communicate with their peers who share the same language because this technique helps them explain and make their peers understand difficult words and sentences easily.

The study also revealed that code-switching can play an important pedagogic role in the classroom. It is useful for explaining and elaborating on concepts, increasing classroom participation, establishing good classroom relationships, ensuring the smooth running of the lesson, and to contextualize. To determine code-switching as an effective strategy in teaching short stories to grade 10 students, the student interview have been quantatized by highlighting on the main concerns related to the practice of code-switching in learning short stories in the ESL classroom as detailed below.

Majority of the students (83%) have positive opinions about the language policy to speak either English or Dzongkha language in school to have strong language culture in the community. However, few students (17%) have expressed their preference for minimal use of English or Dzongkha language in the school as they are not comfortable speaking in these two languages, instead they preferred speaking in their mother tongue as reflected in Figure 1.

**Figure 1**

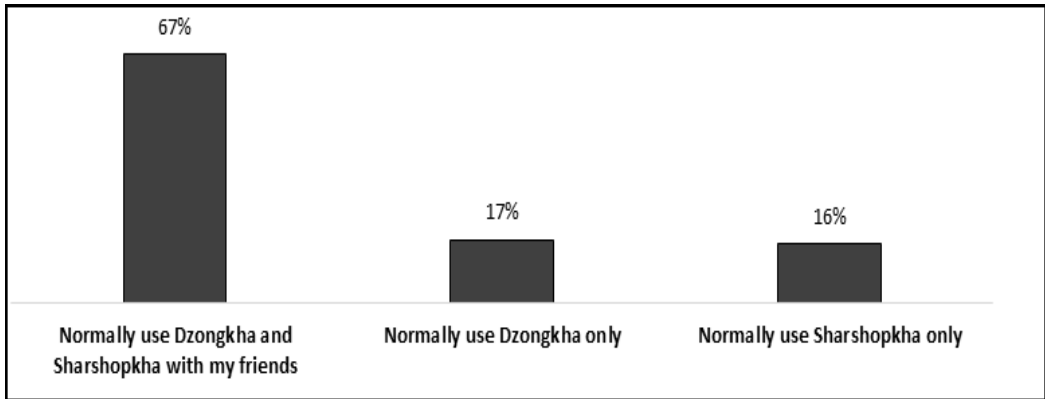
*Students' Perception on School Language Policy*



Code-switching is a useful technique for students when they have difficulties communicating in English. A majority of the respondents (67%) reported that they switch to Dzongkha when they communicate with their friends as revealed in Figure 2.

Figure 2

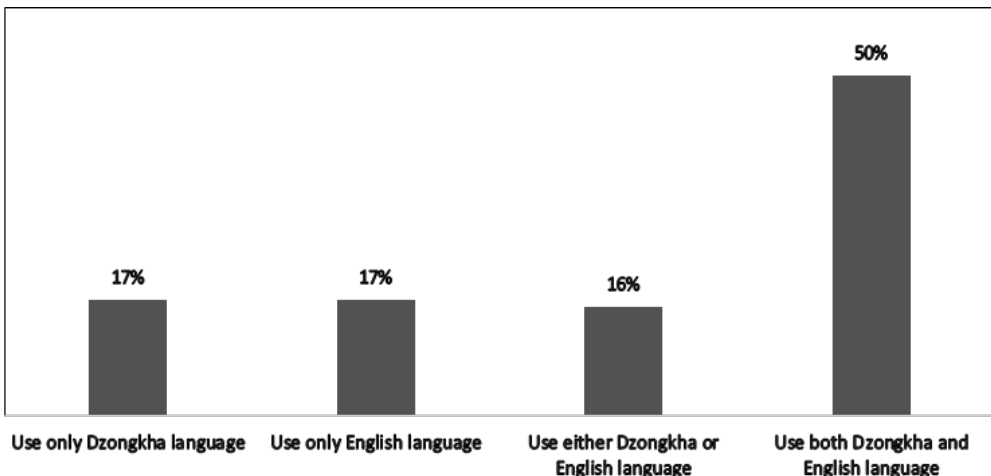
*Common Language Use as a Means of Communication with Friends in the School*



Further, Figure 3, reveals that majority of students (50%) prefer using both English and Dzongkha languages while interacting with their English teachers in the school although their teachers instruct them using English language as reflected in Figure 5 as it helps them improve the standard of their English language. Figure 4 and 6 indicate that students have a strong preference for using code-switching in classroom learning as it provides assistance in understanding lessons better. It is found that almost 70% of the respondents reported that they use code-switching as a tool to help them understand and explain difficult words and sentences in ESL classroom for learning short stories.

Figure 3

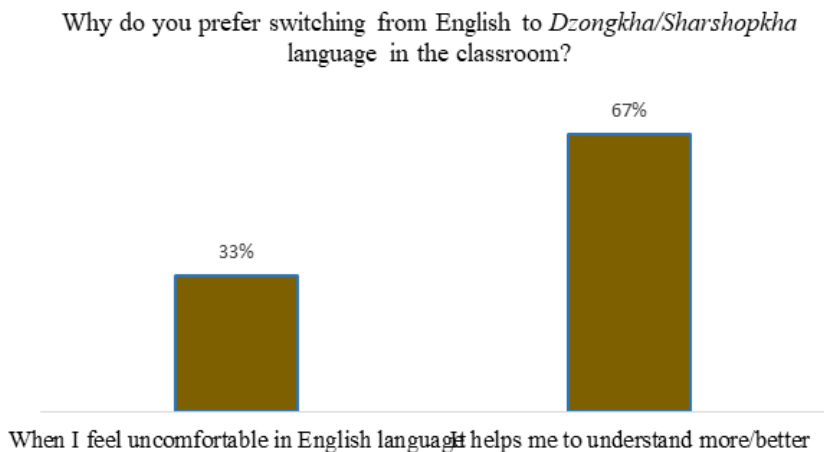
*Language Commonly Used to Interact with their English Teacher in the School*



So, majority of them agree that they deliberately switch codes whenever they have difficulties in communicating in English.

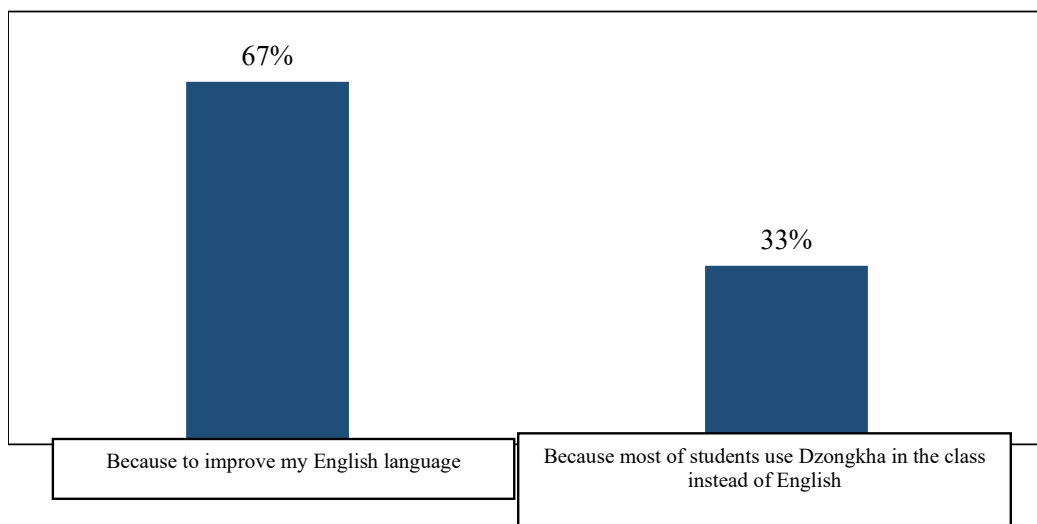
**Figure 4**

*Students' Preferences for Switching from English to Dzongkha Language in the Classroom*



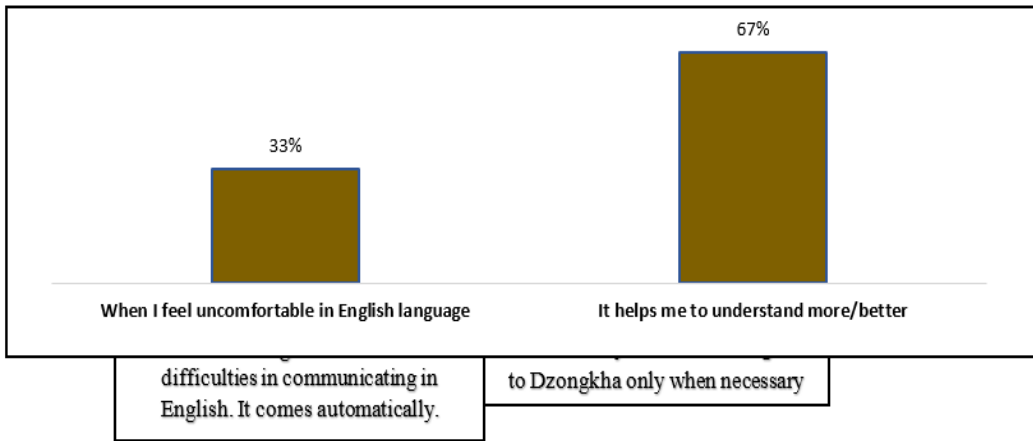
**Figure 5**

*Reasons for Mandatory use English in the Classroom by Teacher*

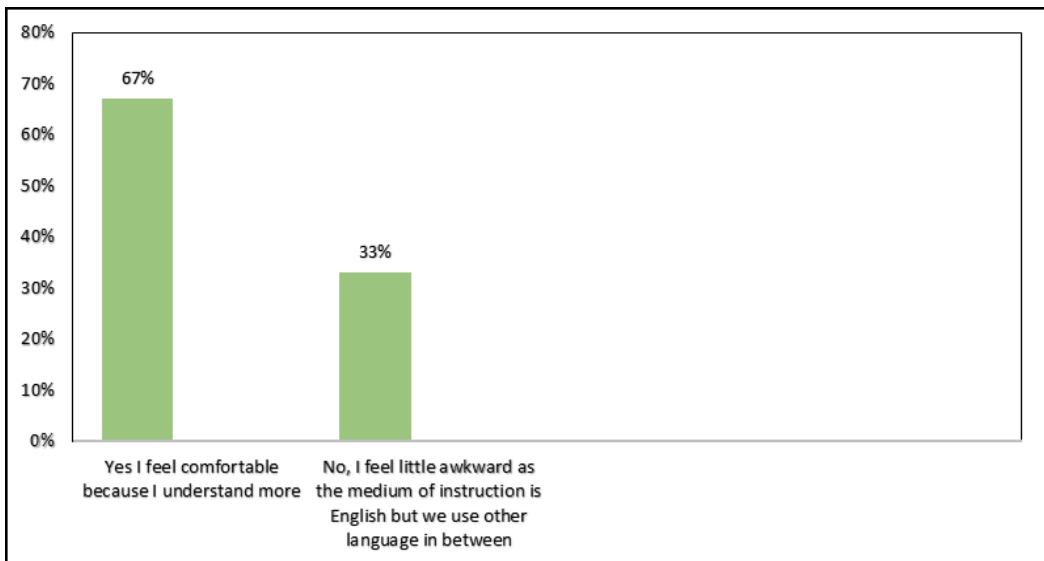


**Figure 6**

*Conditions for Switching Language from English to Dzongkha*

**Figure 7**

*Students' Opinions on Switching Languages during English Short Story Lessons*

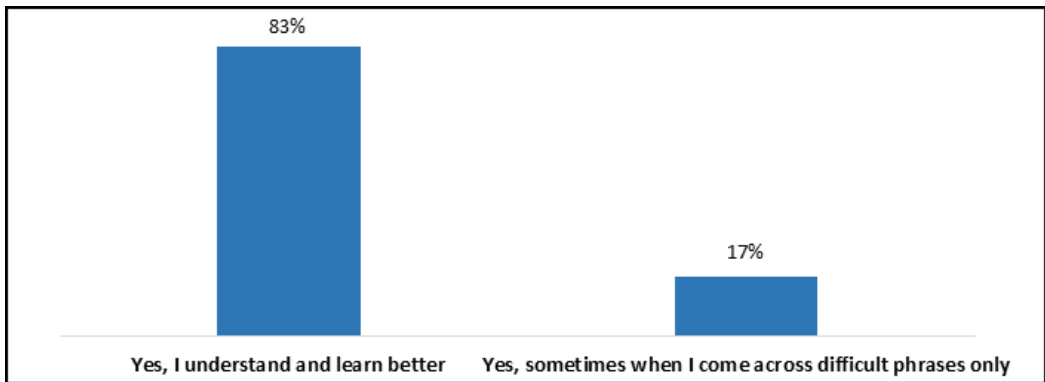


The results in Figure 7 and Figure 8 provide evidences that students feel comfortable to switch from one language to another for communicative purposes, to ensure that the conversation progresses smoothly and for better understanding when they come across difficult phrases. However, some

students expressed that they feel awkward to switch language as the medium of instruction is English. Nevertheless, majority of the respondents indicated that code-switching helps them to understand and learn concepts and difficult word meanings from short story text better. Students use code-switching in the classroom basically to accomplish different tasks and to serve specific goals. Furthermore, code-switching is used to better communicate with other students.

**Figure 8**

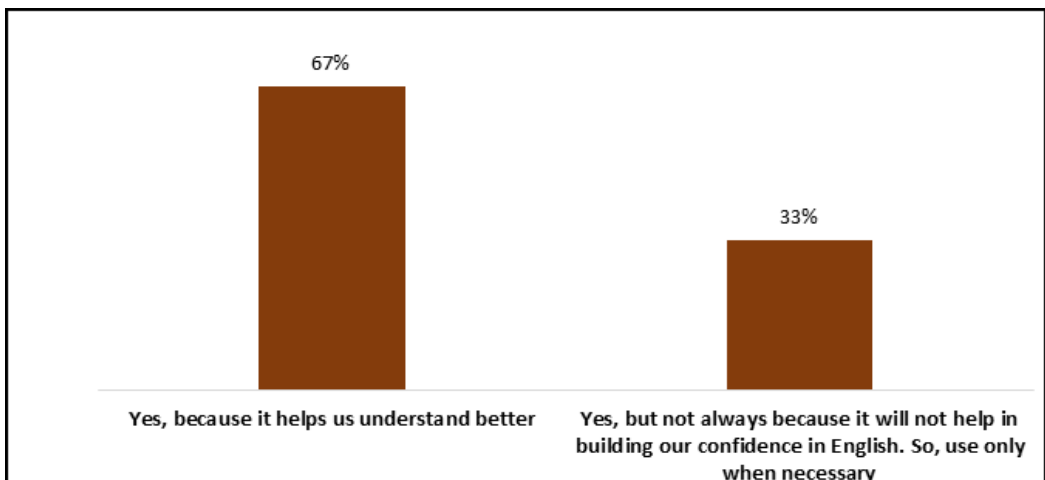
*Students' Perception on their Learning level when English short story Lessons are Taught through Code-switching*



So, Figure 9 demonstrates that participants strongly recommend (67%) code-switching from English to Dzongkhag language during short story lessons because it helps them understand the concept better.

**Figure 9**

*Students' Recommendation on Code-switching during English Lessons*





The overall analysis from the questionnaires revealed that code-switching as a valuable teaching and learning strategy to teach short stories in grade 10. The main reason why students switch codes in the ESL classroom in learning short stories, is due to limited English vocabularies and the lack of confidence to communicate in English. The nature of code-switching is dependent on the social environment. So, the amount of code-switching varies from schools in urban areas and those in rural areas. In urban schools, students are considered more proficient English speakers. It is noticed that students use less code-switching while in rural schools the use of code-switching is more. They consider code-switching to be one of the best solutions to assist them in overcoming the learning difficulties due to their lack of comprehension of the text in English.

Code-switching helps less competent students to understand any concepts taught. So, to facilitate comprehension and understanding of the text, teachers use code-switching as a technique to increase students' motivation and confidence in learning English. However, the use of code-switching as a technique in ESL classroom must be kept as the last resort, because excessive use of code-switching is believed to result in overdependence on the students' first language (Dzongkha). Therefore, teachers should remind students to abide by the language policy of using English as a medium of instructions to improve their English language standard. Nevertheless, it can be concluded that students are satisfied and had positive opinions towards the use of code-switching as a technique to teach short stories to grade 10 students in ESL classroom but not to use as frequently as they wished to. Code-switching must be practiced only at times of difficulty in convincing the concept and when they come across new terms.

## Discussion

In this section, the main findings of the study are discussed in relation to the three objectives outline earlier namely - significant factors leading to code-switching in learning short stories in English as a Second Language classroom; examine the students' perception and attitudes on code-switching; and the impact of code-switching on short story text comprehension which are in turn discussed below.

### **Significant factors leading to code-switching in learning short stories in English as a Second Language classroom**

The findings indicated that the most influential factor which resulted in using of code-switching in students is their limited proficiency or incompetency in speaking English (L2) compared to their first language (Dzongkha). This indicates that higher the speaking proficiency in L2 would have positive impact in L2 learning, which is consistent to the findings by Wang (2003) and Weijen, Bergh,

Rijlaarsdam and Sanders's (2009) that the L2 proficiency is a defining factor in L2 text quality. The inclusion of students' L1 in the classroom provides affective support to decrease students' learning anxiety. Therefore, students switch codes as it helps in the acquisition of the second language (English) which is evident from the learning theory stated in the literature review. Cummins (1981) stated that teaching the subject content often in learners' native language promotes the second language acquisition and results in better scholastic performance. Similarly, students responded that they are able to perform better and promote their English language. Thus, the result is consistent to Cummins' statement.

Further, as revealed from the survey findings that students are encouraged to actively participate in classroom activities when the teachers use Dzongkha language. This finding aligns with what Arthur (1996) revealed in his study that teachers switch codes to encourage participation by students. Students prefer switching languages from L1 to L2 as it is easier to communicate and feel more comfortable when they use two languages within the same discourse. Therefore, they use switch codes to avoid misunderstanding, express emotions, fill in stopgaps, and actively participate in classroom discussion. Kharma and Hajjaj (1989) also supported that teachers' efficiency in using learners' native language facilitates learners' behavior in active classroom participation.

Despite being required to follow the school's language policy; students continue to switch codes because it is difficult to find proper equivalents when contextualizing the text. This practice confirms Bista (2010) and Leyew (1998) findings that sociolinguistic factors such as a lack of corresponding English words and unfamiliarity with commonly used English words influence code-switching behavior.

### **Examine the students' perception and attitudes on code-switching**

On the perceptions and attitudes of students on switching codes from L2 to L1. It is evident from the survey findings that students have positive attitudes towards code-switching in the classroom and are in favor of using it as an alternative approach to teaching and learning in the classroom. This conclusion reflects Arthur and Martin's (2006) argument that the use of code-switching in the classroom should be viewed as a "teachable pedagogic resource". As code-switching seems to be an unavoidable code choice in the classroom, Amekor (2009) suggests that teachers should be introduced to the concept of code-switching to enable them to know the types and use it appropriately to enhance both content and language acquisition. Further, code-switching is given considerable recognition for its effectiveness in facilitating the language learning process. Almost half of the student participants perceived code-switching to be particularly beneficial when explaining unfamiliar words and sentences to the students who have limited

knowledge in L2. The data shows that when students lack proficiency in the target language, they feel compelled to switch codes, which is consistent with the findings of Ariffin and Husin's study (2011). Teachers, nonetheless, are advised to adopt the technique with caution in each individual context so that improvement could be monitored.

It is apparent from the survey findings that many students are in favor of code-switching. 80% of the students said that it was more fun for teachers to employ code-switching in ESL classes during short story lessons. Pupils said that switching codes by the teachers boosts their knowledge and understanding of the short story text during English classes. It is also noted that most students are encouraged to participate actively in classroom activities such as question and answer session, group discussions and presentations when they are allowed to switch codes by their teachers. This statement is consistent to the claim made by Cook (2001) that teachers could use L1 in order to explain the activities so that the activities are beneficial to the learners' active participation in the activity. Moreover, most of the students felt that switching codes during the lesson enhances confidence and therefore they were able to enjoy learning in ESL classroom. This demonstrates that code-switching could be used as an effective strategy which enhances students' learning process. Code-switching may be the preferred option of students when new materials are delivered, but it may not be the preference for other aspects of the lesson such as to exclude others, reflect social status and to seek attention. Nonetheless, it is found that students regard code-switching as a valuable classroom resource for knowledge transfer and expressive purposes. This conclusion aligns with Wells' (1982) "Reciprocal Interaction Model of Learning" which emphasizes language as a resource for the interaction purpose. Children learn the concept through interaction by using different languages. Thus, it considers language as a resource in which code-switching is perceived as a resource in the classroom.

The findings also revealed few negative sentiments among the participants about using code-switching in teaching-learning short stories. Code-switching is undesirable because it leads to unacceptable language use among students, which might lead to deterioration of English standards. It is evident that some students prefer teachers to conduct the lesson entirely in English without referring to the first language. This may be because students perceive the amount of target language exposure as an important factor in determining their success in acquiring the target language. This finding is very much similar to the findings of Selmat's (2014) study on the perception of code-switching in Malaysian ESL classroom. According to Brew-Daniels (2011) code-switching in the classroom does not necessarily cause a blockage or deficiency in learning a language, on the contrary, it fosters pupil's

performances. Nevertheless, he also cautioned that it should be used sparingly as its pervasive use might hamper students' language competency. Therefore, it may be concluded that the classroom reality does not encourage complete exclusion of code-switching but could be used as the most convenient and effective tool in practicality.

### **The impact of code-switching on short story text comprehension**

This research question sought to explore how the practice of code-switching enhances text comprehension. The findings from the study demonstrates that the use of L1 enhances learner's vocabularies, provides meaningful and significant information, ensures understanding of plot, characters and other elements of short stories and promotes learners' creativity and critical thinking. Therefore, to facilitate the interaction and collaboration amongst students for effective learning, switching codes whenever necessary have a number of positive impacts. It is also noted that code-switching might help students in lexical searches, aids in L2 word generation and overall synthesis of text. According to the study on teachers' code-switching in classroom instructions for low English proficient learners, explored the significance of code-switching for text comprehension in the study by (Ahmad & Jusoff, 2009). Their findings revealed that almost 70% of the respondents reported that teachers switch codes in the classroom to facilitate students' understanding of the text. So, it is evident from the current study and the earlier findings that code-switching is an effective teaching and learning strategy in facilitating students' text comprehension.

### **Limitations**

Although the findings support existing literature and reveal several pedagogical implications of code-switching as a technique in teaching short stories to higher secondary school students in grade 10, it is acknowledged that there are certain limitations to this study. Since, the study was conducted with small sample size of the population in just one higher secondary school, the findings might not be applicable to the whole population. Some of the survey questionnaire items might not be that relevant to the situation where the research has been conducted. Moreover, acquisition of any language(s) depends on the environment, demographics, the age and background of learners and psychodynamic modality of the class itself. In such cases, data interpretations could be classified differently. For generalization, there is a need to conduct the study with larger population size, students' learning process and their background in more details which is not done in this study.

## Conclusion

Code-switching is a natural phenomenon among bilingual speakers. Speakers switch codes for a variety of reasons, the most common of which is their lack of proficiency in the second language and the need to grasp new concepts quickly. Other factors include encouraging students' participation, strengthening interpersonal relationship, to check comprehension, and organizing classroom tasks. Bhutan is a multicultural and multilingual country of many ethnic communities, with many Bhutanese speaking at least two languages and understanding at least one or two others. Most of the people in a multilingual culture can easily communicate in more than one or two languages. English is taught as a subject in Bhutanese schools and is used as the medium of instruction. However, code-switching from English to Dzongkha or any other languages is a common phenomenon in the Bhutanese classroom.

The findings established that the most influential factor which resulted in using of code-switching in students is their limited proficiency or incompetency in speaking English (L2) compared to their first language (Dzongkha). This finding has led to the conclusion that code-switching serves as an essential pedagogical function. Thus, the study found code-switching to be useful for communicating and elaborating ideas by reducing students' anxiety in learning literature. It also found code-switching to be useful in conveying the clear understanding of the concepts and to encourage students' active participation in the classroom. The result also shows that students strongly agree that teachers' code-switching improved their understanding and comprehension of the text. Students also reported that code-switching helps gain confidence and motivates them to participate in the class activities. Furthermore, owing to the complexity of the plot and unfamiliar materials or topics, and also the students' diverse learning background and low competency level, code-switching is considered as an effective technique in teaching short stories. Thus, this suggests that code-switching can be perceived as an effective pedagogical tool to improve students' comprehension of the text and learn better.

Depending on the context, a teacher may employ such repertoire. However, it might have an implication such as code exchange may bring unharmonious relationship among different speakers in the classroom. Therefore, teachers' understanding of the students' native language is important in order to handle the lessons carefully without hurting anyone's sentiments when switching codes in the classroom. Similarly, code-switching might promote unacceptable language use among students, that could lead to a decline in English standards. On examining the negative impacts of code-switching, it is found that such practices might deprive students from becoming independent learners. Nevertheless, if the purpose of using code-switching is to help students understand better and make

them learn as quickly as possible, code-switching might be an effective teaching and learning strategy. A teacher may allow students to switch codes in classroom learning to deliver the intended message and also to help in learning the target language.

In a nutshell, code-switching may be considered as one of the most effective teaching and learning strategies to teach short stories to grade 10 students. It was also found that teachers and students have positive attitudes and experiences of code-switching to help cater to the needs of students in the classroom. However, teachers also have concerns with regard to negative aspects of code-switching in the target language. Such inconsistency in their perception of code-switching could impact the way in which it is used in the classroom. Therefore, concern teachers may ensure that the practice of switching codes to L1 does not interfere with the acquisition of the target language, instead promote students' learning abilities and language acquisition of the target language.

## References

- Adjei, A. F. (2010). Motivation for code-switching in the classroom: The case of rural primary school. *Journal of African Cultures and Languages*, 1(1), 21-28.
- Ahmad, B., & Jusoff, K. (2009). Teachers' code-switching in classroom instructions for low English proficient learners. *English Language Teaching*, 2. doi:10.5539/elt.v2n2p49
- Almeida, F. (2017). Strength and limitations of qualitative and quantitative research methods. *European Journal of Education Studies*, 3(9). doi: 10.5281/zenodo.887089
- Amekor, K. C. (2009). Code-switching as a medium of instruction in selected schools in the volta region. Unpublished thesis for the Master of Philosophy degree, University of Ghana, Ghana.
- Ariffin, K., & Husin, M.S. (2011). Code-switching and code-mixing of English and Bahasa Malaysia in content-based classrooms: Frequency and attitudes. *The Linguistics Journal*, 5(1), 220-240.
- Atkinson, D. (1987). The mother tongue in the classroom: a neglected resource? . *ELT Journal*, 41(4), 241-247. doi:10.1093/ELT/41.4.241
- Barron-Hauwaert, S. (2010). Bilingual siblings: Language use in families. *Multilingual Matters*.
- Bista, K. (2010). Factors of code-switching among bilingual English students in the university classroom: A survey. *English for Specific Purposes World*, 9(29), 1-19.
- Borlongan, A. M. (2009). A survey on language use, attitudes, and identity in relation to philippine english among young generation filipinos: An initial sample from a private university. *Phillipine English as a Second Language (ESL) Journal*, 3, 74-107.
- Brew-Daniels, J. (2011). Twi-English code-switching in the classroom: A case study of some selected colleges of education in the Ashanti Region. Unpublished thesis for the Master of Philosophy degree, University of Ghana, Legon.
- Burenhult, A. F.-M. (1999). Code-switching in second language teaching of French. *Working Papers*, 47, 59-72.
- Caganaga, A. Y. (2015). The perception of EFL teachers on the impact of the



- usage of code-switching in EFL classroom management. *Open Access Library Journal*, 2(11),11. doi: 10.4236/oalib.1101961
- Clegg, J., & Afitska, O. (2011). Teaching and learning in two languages in African classrooms. *Comparative Education*, 47(1), 61-77.
- Cook, V. (2001). Using the first language in the classroom. *The Canadian Modern Language Review*, 57(3), 402-424. doi:10.3138/cmlr.57.3.402
- Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In *schooling and language minority students: A theoretical framework*. (p.3-49). Los Angeles: California State University. Evaluation, dissemination and assessment centre.
- Dorian, N. (1998). *Language death: The life cycle of a Scottish gaelic dialect*. University of Pennsylvania Press.
- Driem, G. V. (1994). Language policy in Bhutan. In M. A. Hutt, *Bhutan: Aspects of Culture and Development*. Paul Strachen-Kiscadale Ltd.
- Duran, L. (1994). Toward a better understanding of code-switching and interlanguage in bilinguality: implications for bilingual instruction. *The Journal of Educational Issues of Language Minority Students*, 14, 69-88.
- Ezuh, S. K. (2008). Investigating the effect of using code-switching in Instruction on the performance of students of senior high schools in the Volta and central regions. Unpublished thesis for the Master of Arts degree, University of Ghana, Legon.
- Forson, B. (1979). Code-switching in Akan-English bilingualism. Unpublished thesis for the Doctor of Philosophy degree, University of California, Los Angeles.
- Franceschini, R. (1998). Code-switching and the notion of code in linguistics: Proposal for a dual focus model. In P. Auer (Ed.), *Code-switching in conversation: Language, interaction and identity*. Routledge.
- Gila, B. N. (1995). An investigation into the role of code-switching in classroom interaction in Transkei junior secondary schools. Durban: M.A. Dept. of Linguistics, University Natal.
- Gumperz, J. J. (1982). *Discourse strategies*. Cambridge University Press

- Kharm, N. N., & Hajjaj, A. (1989). Use of mother tongue in ESL classroom. *International Review of Applied Linguistics in Language Teaching (IRAL)*, 27(3), 224-235.
- Lever-Duffy, J., & McDonald, J. B. (2005). *Teaching and learning with technology* (2nd ed). Pearson.
- Leyew, Z. (1998). Code-switching: Amharic-English. *Journal of African Cultural Studies*, 11(12), 197-216.
- Marawu, S. (1997). A case study of English/ Xhosa code-switching as a communicative and learning resource in an English medium classroom. M.Ed. English Second Language, Rhodes University.
- Namgay, T. (2012). English as an academic language. *Language policy implementation issues*. GRIN Veriag.
- Penjore, D. (2013). The state of anthropology in Bhutan. *Asian and African Area Studies*, 12(2), 147-156. Retrieved from [https://www.asafas.kyotou.ac.jp/dl/publications/no\\_1202/AA1202-01\\_Penjore.pdf](https://www.asafas.kyotou.ac.jp/dl/publications/no_1202/AA1202-01_Penjore.pdf)
- Qing, X. (2010). To switch or not to switch: Examine the code-switching practices of teachers of non-english majors. *Canadian Social Science*, 6(4), 109-113. doi: 10.3968/j.css.1923669720100604.011
- Riding, R. J., & Smith, E. S. (1997). Cognitive style and learning strategies: Some implications for training design. *International Journal of Training and Development*, 1(3). doi:10.1111/1468-2419.00020
- Scheweers, C. (1999). Using L1 in the L2 classroom. *English Teaching Forum*, 37(2), 6-9.
- Singh, M. (2005). Enabling transnational learning communities: Policies, pedagogies and politics of educational power. *Internationalizing Higher Education*, 9–36. Retrieved from [https://link.springer.com/chapter/10.1007%2F1-4020-3784-8\\_2](https://link.springer.com/chapter/10.1007%2F1-4020-3784-8_2)
- Sultana, N., & Gulzar, A. (2010). Code-switching as a teaching strategy. *NUML Research Magazine*, 8(1). Retrieved from <http://www.numl.info/Data/Sites/1/publications/issn1814-2877-vol8-jan2010.pdf>
- Trochim, W. (2006). Nonprobability sampling. Retrieved on May 20, 2021, from <http://www.socialresearchmethods.net/kb/sampnon.htm>
- Yevudey, E. (2012). Code-switching in the classroom: A case of Ewe-English code-switching in Ghana. M.A. Dissertation. Aston University,

Birmingham.

Yusuf, Y. Q. (2009). A pragmatics analysis of teacher's code-switching in a bilingual classroom. *The Linguistics Journal*, 4(2), 6-39.

Retrieved from <https://www.linguistics-journal.com/2014/01/07/a-pragmatic-analysis-of-a-teacher-s-code/>

### About the Authors

**Damchu Dema** is an English Literature teacher at Samcholing Higher Secondary School, Trongsa. She has a Master's Degree in English Literature from Yonphula Centenary College, Kanglung, Trashigang. During 16 years of her career, she served in various levels of schools (viz. Wamrong LSS, Khaling LSS, Taktse HSS and Gelephu HSS) and different categories of learners. It has given her wide range of experiences in understanding learners' choice of learning styles. So, she has keen interest in research work related to effective teaching-learning pedagogies. She also has some articles published to her credit.

**Ugyen Dorji** is a mathematics teacher at Sherubling Central School, Trongsa. He has a Master's Degree in Science and Technology Education from Institute for Innovative Learning, Mahidol University, Thailand. He is competent to teach mathematics, physics, ICT and TVET subjects. During 18 years of his profession, he has taken part in several national level curriculum framework development and reviews, and has numerous contributions in textbooks writing (Mathematics and TVET) and facilitated several national level professional development programmes. Besides, he also has several researches published in national and international online journals as well as print journals. He is keen in conducting researches related to 21st century classroom pedagogies.

# The Effects of Using Simulated Role Play in Teaching History to Secondary Students in Bhutan.

Lhatu

---

## Abstract

This experimental study investigated the learning achievement of grade IX Bhutanese students using simulated role play technique in teaching and learning history. From a total of 180 grade IX students, 60 students were selected using cluster random sampling technique. Data were collected using multiple methods including questionnaire, students' reflective journal and achievement test (pre-test and post-test). The key findings revealed that there were significant differences in the mean scores of the students after the integration of simulated role play technique in teaching history. Other finding of the study revealed that the students had positive opinion towards simulated role play technique as it brought positive difference in their learning achievement. Therefore, it is recommended for all teachers to incorporate simulated role play technique in the classroom to see immediate and gradual improvement in students' learning achievement.

*Keywords:* learning achievement, experimental study, simulated role play, History

## Introduction

History is the study of the past to bring an understanding to the present. Historians of different time defined history differently but all definitions had a common significance that is the change over time covering all aspects of human society. It is a description of past actions and events that happened among mankind which affected the social and political condition of the human race. It is the witness that appears to the passing of time, illuminates reality and brings us the enthusiasm to study bygone days. The study of history provides a foundation of insightful knowledge, grounded in the humanities and in the social sciences, that is useful for professional lives. Bourgoin et al. (2001) assert that without a strong foundation of social studies education, the ability of the citizen to contribute to their culture and society declines and there is a danger of losing one's social identity. Our identity is our pride and self-esteem; we lose our identity when we are into material development. Ura et al. (2012) described that identity encompass cultures, traditions and belief in spiritual values such as compassion, peace, and sense of connectedness. Therefore, to keep our society balanced with material development and spiritual continuity, it is essential for its people to know and respect the history of the country. History education is one major form to keep

identity preserved and valued.

Barton and Levstik (2004) emphasized the role of history in helping citizens engage in collaboration towards a common good. Moreover, the subject provides an opportunity for students to understand and appreciate the inevitability of change and the need to develop historical empathy. It is of paramount importance in the society, and thus history as a subject was then implemented to be taught in Bhutanese schools under three themes namely Bhutan History, Civics and World/Indian History. Bhutan history and civics are intended to increase the students' knowledge on country's history and political situation. The integration of world/ Indian history in the Bhutanese curriculum is to educate students on some of the major world events and its significance. Although it is essential to know and study one's own history, students in Bhutanese schools find it difficult and boring and thus cannot score high marks in the examination. Over the years, history as a subject in the school curriculum has constantly suffered negative perceptions regardless of the emphasis placed on the importance of the subject by the Ministry of Education. History classes were taught using age old textbook based lecture method. The text books were not revised for years. A study carried out by Centre for Educational Research and Development (2009) to investigate pedagogical approach in classroom teaching and its effectiveness found that about 89% of teachers are still using lecture method while teaching in the classroom with minimal use of inquiry.

History is one subject that is not held in high esteem among Bhutanese students. The performance of grade X students' in history during the Bhutan Certificate of Secondary Education Examination held in December 2016 was not encouraging. The overall mean marks of History, Civics and Geography (HCG) was lowest compared to other subjects as reflected in Table 1. The paradox is humanities subjects especially history is considered as one of the easiest subjects to study in general by the students.

**Table 1**

*The Performance of Grade X Students in History in Bhutan Certificate of Secondary Education, 2016 Compared to other Subjects*

<b>Subject</b>	<b>Average Score (%)</b>
Dzongkha	66.99
Economics	64.70
Math	64.33
History Civics & Geography	62.76
Science (Chemistry, Physics, & Biology)	70.85
Computer Applications	76.56
Environmental Science	66.08

The press release from Department of School Education, Ministry of Education (MoE), Bhutan (2017) also revealed that, the performance of Bhutanese students in history was not up to satisfaction. Students could not perform well in history, though history is considered as one of the easy subjects to study in general. The students' performance in Bhutan Higher Secondary Education Certificate (BHSEC) 2017 revealed that only 4.74% of students could score marks in the range of 81 - 100 which is lowest compared to other subjects (e.g., 8.89% of students scored in the range of 81 – 100 in economics, 5.61% in mathematics, 38.48% in computer application and 11.37% in environmental science).

Students lack of understanding of historical concepts may be attributed to the teacher centred teaching where teachers act as the source of knowledge and students as the recipients. Most of the time students are made to memorise entire texts; syllabus coverage is given more consideration than students' learning. As a result, students are not competent and confident in their examination. Therefore, this study was carried out to find the effectiveness of simulated role play technique in the teaching of history. Several researchers have recommended that simulated role play is an active learning technique that motivates learning and enhances students' interest towards studying history through its unique mechanisms and the experiences that every individual will acquire after attending the history lesson (e.g., Andersson & Andersson, 2010; Auman, 2011).

## Literature Review

Simulated role play is a teaching technique that has been used widely for experiential learning and provides an imaginary context in which issues and behaviors may be discovered by students who take on a precise role or character. To present an insightful simulated role play, students explore, prepare and are determined to engage themselves to create effective scenario. Silvia (2012) argues that students are not satisfied with the act they played because the act did not seem realistic; however, the experience certainly seemed worthwhile and inspiring. Simulated role play builds in students the skills of interpersonal and relational challenge by engaging themselves in communication, negotiation and decision making. Through these processes students realize not only how it feels to be part of their act but also the importance of their ongoing relations with friends.

Hou (2012) states that simulated role play improve learners' communication skills and develop problem-solving abilities. When participating in role-play, learners explore a difficult situation that requires resolution through discussion, debate, and negotiation among roles with differing views. It gives opportunities for learners to apply their prior knowledge in contexts and receive the consequences of actions in safe environments. Research shows that simulated role-playing benefits learning in several ways (Dracup, 2008). Firstly, it produces deep-level learning outcomes that is retained for a long time. It is a strategy to promote experiential learning. Learning by doing is a process where meaningful learning takes place. Secondly, it engages both learners and facilitators. That is, learners are inclined to enjoy the experiential learning experiences (hands on experience). Thirdly, role-play can support students develop problem-solving skills by assuming different roles situated in complex problem scenarios relevant to the professional domain (Hou, 2012). McCarthy and Anderson (2000) defend that the effectiveness of a simulated role-plays would be lost, unless the students read and rehearse their role carefully under the instructor's guidance. The students practice the role of their own, under the guidance of their teacher and work cooperatively for a common goal. To make the scenario interesting and engaging the students need to put collective effort, so that they feel the difference in active and passive learning.

Andersson and Andersson (2010) highlight that simulated role play not only helped in general improvement in learning achievement but also in active involvement required in creating the situation which promotes enhanced enthusiasm, motivation, and a positive attitude to the teaching subject. Simulated role play combines the skills of cognitive and affective domains of learning (feel and think). It also promotes oral communication and written skills as the students have to take up the role of real character, they should be spontaneous and realistic. Simulated role play technique provides a platform for the students to develop basic



life skills such as communication, analyzing and critical thinking and decision making skills.

According to McLaughlin, Kirkpatrick, Hirsch, and Maier (2012), simulated role play involves decision-making and conflict resolution. It involves participants deliberately adopting a role for a specific purpose. It is a simplification of reality that maintains the essential functions of the simulated environment. Simulated role play is considered important in a classroom because it recreates dramatic quality of situation of the historical setting. It teaches empathy to students for social conscience, encourage and inspire active involvement in classroom activity. To have a meaningful and memorable learning experience through simulated role play, motivating students with praise and reward are the basic ways to develop high self-esteem resulting in building confidence of the students.

### **Research objectives**

- 1.To examine the learning achievement of grade 9 students using simulated role play to teach history.
- 2.To find out the opinion of the students towards simulated role play in teaching history.

### **Research questions**

- 1.What is the effect of simulated role play on students' learning achievement?
- 2.What is the opinion of students towards simulated role play in learning history?

### **Methodology**

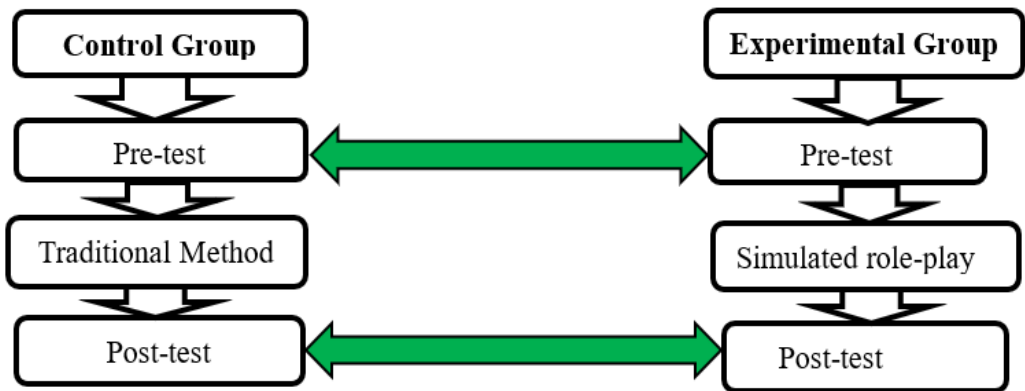
This study adopted a mixed methods research design; a combination of qualitative and quantitative approaches. The researcher adopted parallel mixed methods approach because this approach can give a better perspective of the problem and produce more complete evidence in terms of both depth and breadth. This approach can also strengthen findings through the triangulation of qualitative and quantitative data. Barnes (2012) supports the popularity of mixed methods research in social science that mixed methods research is a unique form of social enquiry with its own set of philosophical, methodological and practical guidelines.

The study employed an experimental research design with two groups of students - one as an experimental group and other as a control group. The targeted population of the study was 6 sections of grade 9 students (80 boys and 100 girls) in one of the central schools in Southern Bhutan. The cluster random sampling technique was used to select 2 sections consisting of 30 students each with mixed gender and mixed ability. The age group of the students ranged from 14-18 years

old. The experimental group was taught with simulated role play technique and the control group was taught using traditional lecture method as reflected in Figure 1.

**Figure 1**

*Illustration of the Research Procedure*



The researcher developed 40 multiple choice questions from two chapters of Bhutan civics grade 9 textbook which were validated by three experts. 25 best items were selected for the achievement test based on experts' recommendation. Pre-test and post-test was administered to compare the differences in learning achievement of the participants before and after the lesson intervention. In order to collect the opinion of the student on simulated role play, a 20-item questionnaire was designed and students were asked to indicate the extent of their agreement with each statement on a five-point Likert scale. Research participants in experimental group were asked to write 4 journals reflecting on the strengths and limitations of simulated role play in teaching history. A professor from Rangsit University, Thailand and a lecturer from Samtse College of education, Bhutan validated the instruments of the study. To check the reliability of the learning outcome test questions, a pilot test was conducted and KR-20 coefficient was calculated using Kuder-Richardson formula (KR-20). The KR-20 coefficient was 0.809 which was greater than 0.70, this indicated that the learning outcome test was reliable. Similarly Cronbach's alpha ( $\alpha$ ) for questionnaire was computed using SPSS software. The Cronbach's alpha was 0.792 which was greater than 0.70, this indicated that questionnaire was reliable.

## Findings

The findings are presented under two themes namely i) effect of simulated role play on students' learning achievement and ii) student's opinion towards learning history through simulated role play.

### Effect of Simulated Role Play on Students' Learning Achievement

The first objective of the study was to examine the learning achievement of grade 9 students in history using simulated role play. For this objective, a comparative statistical analysis was done using mean and standard deviation and significance level P-value as presented in Table 2. The comparison was done 'within the group' by comparing the pre-test and post-test of the group.

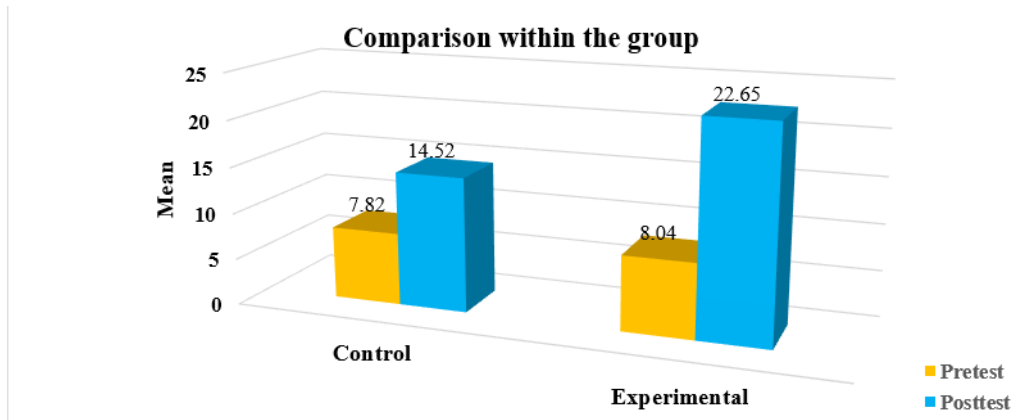
**Table 2**

*Pre-test and Post-test Comparison*

Group	Test	Mean	Mean Difference	Standard Deviation	Sig. (2 tailed)
Control	Pre-test	7.82	7	2.72	0.00
	Post-test	14.52		3.82	
Experimental	Pre-test	8.04	14.61	3.49	0.00
	Post-test	22.65		1.89	

Significance level:  $P < 0.05$ -significant

From Table 2 it is apparent that the mean of the pre-test and the post-test scores of control group were 7.82 and 14.52 respectively. The mean of the pre-test and post-test scores of experimental group were 8.04 and 22.65 respectively. The mean difference of pre-test and post-test of the control group was 7.00 and the mean difference of pretest and posttest of experimental group was 14.61 resulting to the significance value (p) 0.00 which indicates that there was statistically significant increase in the students' scores in the post-test when compared to their pre-test in both the groups. The details of comparison within the group is presented in Figure 2.

**Figure 2***Comparison of Pre-test and Post-test within the Group***Students' Opinion towards Learning History through Simulated Role Play**

Students' reflective journal was another instrument used by the researcher to collect data for the second objective of the research which was aimed at examining the opinion of students towards the use of simulated role play in teaching and learning history. The data from the student's reflective journal was analyzed using grounded theory proposed by Strauss and Corbin (1998). The data collected from student's reflective journal were organized systemically and categorized into the following six sub-themes. The identified sub-themes were: (1) learning by doing for better understanding, (2) fun and interesting, (3) build team spirit, (4) engaging, (5) motivated learning and (6) gained confidence as discussed in turn below.

**Learning by Doing for Better Understanding**

The main purpose of this study was to check the effectiveness of the simulated role play technique in teaching and learning history by providing hands on experience. Since most of the history lessons are associated with traditional approaches, learning by doing was not taking place. The analysis of the student's reflective journal revealed that they understood the content better and additionally also got an opportunity to explore more on the topics when history concepts were taught through simulation. For instance, Student 1 (S1) expressed that simulated role play helped him comprehend history better through hands on and by actually engaging him in the lesson and not simply listening to the teacher's lecture.

*I am happy to learn history with simulated role play as it gives us an opportunity to learn by doing (S1)*

Similarly, other students are also expressed that this strategy helped them

understand history concepts better as detailed below:

*History learning through simulated role play makes us understand better on historical perspectives. We get chance to see the reality (S2)*

*I learned more than I expected because I did it instead of listening about it (S15)*

*By doing role play and simulation we become very active as a result we learn more. It is better than sitting and listening to what teacher teaches (S23)*

### **Fun and Interesting**

The simulated role play technique required students to be in others shoes since it required them to act the role which was assigned to them. The students simulated the national election process including public campaign, candidate debates and the election process. The reflection from the student's journal revealed that the simulated role play was fun, interesting and enjoyable.

For instance, Student 10 expressed that:

*I feel fun and interesting to simulate role play because we have to act differently but we learn while acting (S10)*

Further, Student 4 expressed that simulated role play not only enhances their learning but also kept them awake and active in the class:

*I enjoy learning history through simulated role play because we learn more when we act if not we often sleep learning from the text (S4)*

Likewise other students too expressed that simulation strategy required them to interact and discuss with friends which helped them acquire new ideas and knowledge as expressed by Student 8.

*It is exciting to learn history through simulated role play because we get new knowledge and ideas from friends (S8)*

Further, this strategy requires them to move out of the classroom into the auditorium for want of bigger space or related sites depending on the topic. Majority of the students reflected that going outside and studying in the open air or new venue is fun and refreshing rather than sitting in the same classroom which could become quite monotonous. For instance, Student 3 expressed:

*Going out of the classroom and learning in the environment related to the topics is fun and knowledgeable. It is very interesting to work in a group and simulate the role play (S3)*

## Built Team Spirit

Collaboration and cooperation are the fundamental components of the simulated role play technique. Without the enthusiastic support from team mates the target or the objectives cannot be achieved. To achieve the set objectives, everybody should come to a common understanding and work towards a common goal. The feeling of unity among team members will foster team spirit.

It was evident from students' reflective journal that every member of the group was valued and respected. Every member cooperated and worked for the common goal as expressed by Student 14 and Student 6 below.

*Role play and simulation is all to do with cooperation. If we do not work in a group we fail to reach our objectives. So every member in a group cooperates to come up with successful simulated role play (S14)*

*We worked in the group and individual responses are respected and valued. Discussions are made in group that encourages us to communicate and know each other (S6)*

## Engaging

Simulated role play is a part of active learning. Engaging students with the materials and allowing them to collaborate with each other are essential elements of active learning. Engaging students in the learning process increases their attention and focus, motivates them to practice higher-level critical thinking skills and promotes meaningful learning experiences.

Students' journal revealed that since this strategy requires them to fully engage in the activity, they did not feel bored or put to sleep unlike other classes. Considering the fact that simulated role play technique is not a one man's show, students reflected that they learnt better and wished for such techniques to be integrated while teaching every topic in history as marked by Student 22 and Student 29:

*I often sleep in the history class but I didn't this time because I am fully engaged in discussion with group member for the role play. If all the topics are taught in this way we will learn more and perform better in examination (S22)*

*To perform simulated role play everybody is actively involved so it is not one man's show. Every individual gets equal opportunities as a result we learn better than listening to lecture (S29)*

## Motivated Learning

Motivation was one of the recurring themes that emerged from students'

reflective journal. Recognizing student's work through praise and incentives generated interest and motivation among the students as expressed below.

*We are motivated to participate in the simulated role play because our works are recognized and valued. I see all my friends put equal effort in their work as they want to get the reward from the teacher (S7)*

*Awarding of prizes to the best performing group motivate us to perform better in the next lesson. We motivate our self and work collaboratively so that our group can get the reward prepared by the teacher (S18)*

*By simulating a role play it motivate us to participate in the class because we learn more things if we participate than remaining silent (S12)*

### **Gained Confidence**

Integration of simulated role play technique in the teaching and learning history enhanced student's confidence level. Unlike the traditional approach where few students dominate the class discussion and side track quiet students, the integration of simulated role play technique in teaching history required every student to participate and give their best effort to achieve the collective goal. As a result they gain confidence and participate in the class discussion without having to coerce as evident from the journal reflection of the following students.

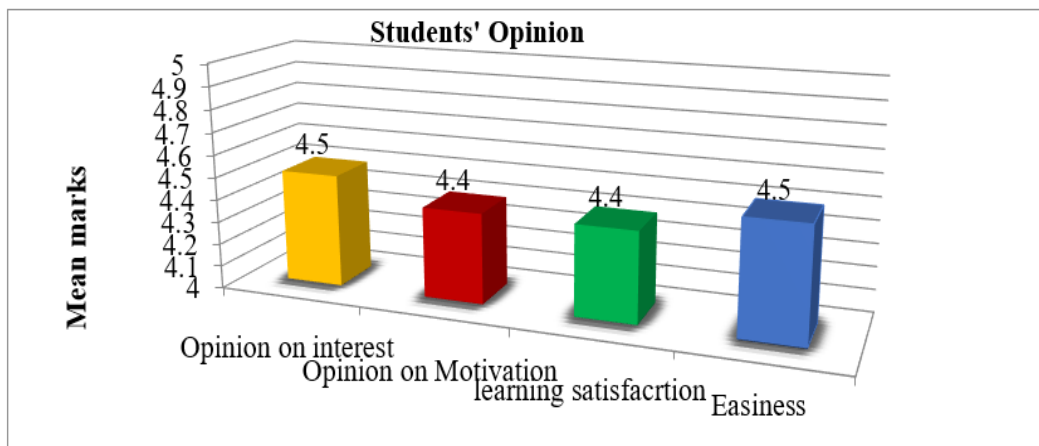
*By simulating a role play we gain confidence to speak in the crowd. Through role play and simulation we do not forget what we learn (S9)*

*Participating in the role play and simulation makes me feel confident. Now I can speak confidently though I make mistakes (S30)*

*I think role play and simulation is giving me an opportunity to become confident person in future because I get chance to act and speak in the class (S28)*

The analysis of survey data on the opinion of the students towards simulated role play technique in teaching history revealed that the students were very positive about this strategy as evident from the very high mean score as reflected in Figure 3. For instance, the student's average rating on the statement: Interest in studying history with simulated role play technique is 4.5 (Agree), followed by very high average score of 4.4 for simulated role play technique motivate learning; 4.4 for satisfaction after integration of simulated role play technique; and 4.5 for easiness in learning history with the use of simulated role play technique.



**Figure 3***The Opinion of Students towards Simulated Role Play*

As evident from the analysis of student's reflective journal and survey data, simulated role play technique brought a significant change in their attitude towards history lesson. Students reflected that such techniques can do away with the drawbacks of the traditional approaches and help them develop interest towards the subjects. The students expressed that they were able to apply the learnt lesson in different situation as the knowledge and experience they could retain acquired information for a longer duration. Further, they also mentioned that simulated role play technique helped them demonstrate a process, analyze an argument, or apply a concept to a real-world situation. From the statement, it was clear that simulated role play technique not only brought change in learning style but also encouraged students to participate actively in every lesson. Thus, it can be concluded that integration of simulated role play technique is suitable for teaching and learning history.

## Discussion

This study presents two major findings. The first finding was that integration of simulated role play technique in teaching history enhanced the learning achievement of grade 9 students. There was a positive difference in the learning achievement of the students as reflected in Table 1. The second finding was that students had positive opinion towards simulated role play technique in studying history. The data from questionnaire and students' reflective journal proved that students enjoyed studying history with the use of simulated role play technique. The techniques helped them increase their interest to study history, and students

were also satisfied with their achievement in their result.

The first finding of the study revealed that integration of simulated role play technique in teaching history enhanced the learning achievement of the students. For instance, the mean scores of the experimental students in pre-test were just 8.04 but after the simulated role play technique was applied, the mean score in the post-test increased to 22.65. The positive difference in the learning achievement of the students was in line with the study carried out by Islam and Islam (2013) who found that students enthusiastically accepted simulated role play technique as it challenges their creativity and ability to think critically, which enables them to speak more logically and confidently in the classroom. Similar finding was reported by Bhattacharjee (2014) that the simulated role play technique foster students to demonstrate improved learning outcome and broader perspective on the attitude towards their learning. It also offers students an active learning environment that balances theory and practical and also encourages students to develop critical thinking and logical reasoning skills.

The study by Brummel, Gunsalus, Anderson and Loui (2010) investigated the effectiveness of simulated role play as an active learning pedagogy over traditional approaches in achieving significant learning outcomes and found out that lessons learned with the integration of simulated role play was worthwhile as it is engaging. The study also revealed that student's attentions were captured towards the assigned work resulting in realistic learning experience. Thus, the finding of this study to examine the learning achievement of students through simulated role play is supported.

The second objective of the study was to explore the opinion of students towards simulated role play. The findings from the questionnaire and students' reflective journal revealed that simulated role play technique increased students' content knowledge. The finding from this study was in parallel with the findings of Wiskin, Roberts, and Roalfe (2011) that studied the impact of discussing a sexual history in simulated role-play teaching on pre-clinical student attitudes towards people who submit for STI (Sexually Transmitted Infection) testing. The study brought the change in a number of students who had medical examination for STI. At first the students were reluctant for the medical examination; it was British white students who came for the check-up followed by others. So the students view simulated role play as the technique that had the ability to convince people about the cause and effect.

Similarly, Schnurr, De Santo, Green and Taylor's (2015) study to investigate Student Perceptions of Knowledge Acquisition within a Role-Play

Simulation of the Convention on Biological Diversity found that after participating in the simulated role play, students mean ratings of their knowledge on topics were significantly higher than initial ratings. The study revealed that the students significantly improved their knowledge on all of the main topics addressed in the simulation. This suggests that, on average, students felt that simulated role play improved their understanding of the course and made a positive difference in their learning and knowledge acquisition.

## Conclusion

Numerous studies were carried out to examine student's opinion on effectiveness of simulated role play. For instance, both Chasek (2005) and Frederking's (2005) study showed that final exam scores improved as a result of integrating simulated role-play technique. Similarly, a control and experimental group study by Baranowski (2006) and Kraina and Lantis (2006) too revealed the effectiveness of simulated role play that created a significant difference in the scores of the students involved in control and experimental group. Moreover, students were able to develop and practice interpersonal and relational skills as part of the simulated role play.

Similar results were also obtained in this study. The achievement test of the students after the integration of simulated role play improved their score from 8.04 to 22.65 which was a significant increase indicating that this technique has the ability to create positive difference in the students' learning achievement. Correspondingly, the data from opinion questionnaire also proved that simulated role play technique brought change in the opinion and thought of the students with the overall mean of 4.45 out of 5 on the Likert scale. Lastly, the data from the students' reflective journal revealed that simulated role play technique brought a significant change in the attitudes of the students to study History.

Therefore, it can be concluded that simulated role play is an active learning technique that not only creates difference in the learning achievement of the student but also develops positive experience and gain confidence.

Based on the results of this study, teachers are advised to incorporate simulated role play technique in the classroom to improve students' learning achievement and it can be applied in teaching most subjects across the school curriculum.

## References

- Andersson, N., & Andersson, P.H. (2010). Teaching professional engineering skills: Industry participation in realistic role play simulation. Proceedings of the 6th International CDIO Conference, École Polytechnique, Montréal, June 15-18, 2010. Retrieved from [http://orbit.dtu.dk/fedora/objects/orbit:59323/datastreams/file\\_5114366/content](http://orbit.dtu.dk/fedora/objects/orbit:59323/datastreams/file_5114366/content).
- Baranowski, M. (2006). Single session simulations: The effectiveness of short congressional simulations in introductory American government classes. *Journal of Political Science Education*, 2 (1), 33–49.
- Barnes, B.R. (2012). Using mixed methods in South African psychological research. *South African Journal of Psychology*, 42(4), 463-475.
- Barton, K. C., & Levstik, L. S. (2004). *Teaching history for the common good*. Routledge.
- Bhattacharjee, S. (2014). Effectiveness of role playing as a pedagogical approach in construction education. 50th ASC Annual International Conference Proceedings. Norman, University of Oklahoma.
- Bhutan Council of School Examination and Assessment. (2015). Pupils performance report 2015. Volume 9. Retrieved from <http://www.bcsea.bt/downloads/ppr.PPR-2014.pdf>.
- Bourgoin, R., Churchill, M., Carolan, T.D., Fanjoy, J., Hayden, H., & Leblance, P. (2001). The importance of social studies in the public school curriculum. Paper presented in class at university of Brunswick, Course No. ED 4620.
- Brummel, B. J., Gunsalus, C. K., Anderson, K. L., & Loui, M. C. (2010). Development of role-play scenarios for teaching responsible conduct of research. *Science and Engineering Ethics*, 16(3), 573-589.
- Cameron, R. (2011). Mixed methods research: The five Ps framework. *The Electronic Journal of Business Research Methods*, 9(2), 96-108.
- Carr, E.H. (1961). *What is History-his acclaimed reflections on the theory of History and the role of the historian*. Penguin Books.
- Caruth, G.D. (2013). Demystifying mixed methods research design: A review of the literature. *Mevlana International Journal of Education*, 3(2), 112-122, [doi.org/10.13054/mije.13.35.3.2](https://doi.org/10.13054/mije.13.35.3.2).
- Centre for Educational Research & Development, Bhutan. (2009). RABSEL, the

Educational Journal. (VOL.XII). Retrieved from: <http://www.pce.edu.bt/sites/default/files/Rabsel%20Volume%20-%20XII.pdf>.

Chasek, P. S. (2005). Power politics, diplomacy and role playing: Simulating the UN security council's response to terrorism. *International Studies Perspectives*, 6 (1), 1–19.

Dracup, M. (2008). Role play in blended learning: A case study exploring the impact of story and other elements. *Australasian Journal of Educational Technology*, 24(3), 294–310.

Frederking, B. 2005. Simulations and student learning. *Journal of Political Science Education*, 1 (3), 385–393.

Hou, H.T. (2012). Analyzing the learning process of an online role-playing discussion activity. *Educational Technology and Society*, 15(1), 211–222.

Islam, P., & Islam, T. (2013). Effectiveness of role play in enhancing the speaking skills of the learners in a large classroom: An investigation of tertiary level students. *Stamford Journal of English*, 7, 218–233.

Kerr, D., Troth, A., & Pickering, A. (2003). The use of role-playing to help students understand information systems: Case studies. *Journal of Information Systems Education*, 14(2), 167.

Krain, M., & J. S. Lantis. (2006). Building knowledge - Evaluating the effectiveness of the global problems summit simulation. *International Studies Perspectives*, 7 (4), 395–407.

McCarthy, J.P., & Anderson, L. (2000). Active learning techniques versus traditional teaching styles: Two experiments from History and Political Science. *Innovative Higher Education*, 24, (4), 279–294. doi:10.1023/B:IHIE.0000047415.48495.05.

McLaughain, R.G., Kirkpatrick, D., Hirsch, P., & Maier, H.R. (2012). Using online roleplay/simulations for creating learning experiences. *International Journal of Innovation in Science and Mathematics Education*, 7(1), 1–5.

Ministry of Education (2017). Press release, BCSE(X) examination 2016. Retrieved from: <http://www.education.gov.bt/documents/10180/1126903/Press+Release.pdf/e21f427b-47ef-4faf-8542-c7e44a6a0034?version=1.0>.

Schaap, A. (2005). Learning political theory by role playing. *Politics*, 25(1), 46–

52.

- Schnurr, M. A., De Santo, E. M., Green, A. D., & Taylor, A. (2015). Investigating student perceptions of knowledge acquisition within a role-play simulation of the convention on biological diversity. *Journal of Geography*, 114(3), 94-107.
- Silvia, C. (2012). The impact of simulations on higher-level learning. *Journal of Public Affairs*, 3, 24-34.
- Strauss, A., & Cobin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Sage Publishers.
- Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). An extensive analysis of GNH index. Thimphu, Bhutan: The Centre for Bhutan Studies.
- Wiskin, C., Roberts, L., & Roalfe, A. (2011). The impact of discussing a sexual history in role-play simulation teaching on pre-clinical student attitudes towards people who submit for STI testing. *Medical Teacher*, 33(6), 324-332.

### About the Author

**Lhatu** is a teacher at Kamji Central School. He has B. Ed (history) from Paro College of Education, Bhutan and Master of Education from Rangsit University, Thailand. To his credit he has ten years of teaching experience at middle secondary and central schools. His action research titled *An Investigation of Middle Secondary School Students' Assertiveness* was published by BON VIEW Publishing PTE. LTD. based at Singapore.

# Students' Perception and Experiences on Emergency E-learning Project amidst Covid-19 Pandemic: A New Paradigm of Bhutanese Education 2020

Thinley<sup>1</sup> and Dil Maya Ghalley<sup>2</sup>

---

## Abstract

Covid-19 pandemic has triggered the whole world shaking economy, educational institutions, trade and commerce. While, education is pivotal in every aspect, there is the need of a paradigm shift from classroom teaching to E-learning. Hence, like any other countries in the world Bhutan gave a brave start to E-learning amidst the covid-19 Pandemic which was a historic move for a nation like Bhutan. This study investigated Bhutanese students' perception and experiences on emergency E-learning project amidst covid-19. The study was conducted in one of the Central Schools under Chhukha district, Bhutan. A cluster random sampling was used to select 122 students from 9th grade who had attended emergency E-learning project amidst covid-19. The researchers used mixed method approach. The quantitative data was analyzed using mean and standard deviation while the qualitative data was analyzed using a thematic approach. The key findings revealed that majority of the participants were not in favour of emergency E-learning project. An average mean on participants' perception on E-learning was only 2.80. The study also revealed that students faced challenges in E-learning such as difficulties in understanding the content, inaccessibility to network connectivity, shortage of gadgets, expensive data packages and other unhealthy practices such as cheating and plagiarism.

*Keywords:* E-learning, Covid-19, perception, experiences, education

## Introduction

Education of Bhutanese youth has always been the top most priority in Bhutan. His Majesty the 4th King of Bhutan rightly said that the future of nation lies in the hands of its youth. Similarly, the Ministry of Education (MoE) emphasizes that every Bhutanese youth irrespective of race, cast and gender should get a basic education as their fundamental rights. The Annual Education Statistics, MoE, Bhutan (2018) also reported that the Royal Government of Bhutan will provide free education from pre-primary till 10th grade to all the children in Bhutan.



The novel corona that struck the world in 2020 has forced all agencies and organizations to close and forced people to work from home. Similarly, the covid-19 pandemic forced educational facilities to close and replaced face-to-face interaction with online teaching (Murphy, 2020). In Bhutan too, the covid-19 has changed the whole concept of classroom teaching. With the closure of schools and institutions across the nation on 18th March 2020, teaching and learning shifted to online from face to face. This may be called as global call to adapt to emergency learning and contextualize the new normal in education system through online classes.

The Ministry of Education has initiated E-learning platform to deliver online lessons and to keep students engaged during pandemic. However, the initiatives implemented by the MoE to educate the students have both pros and cons. This platform is very limited to underprivileged students especially those who are hailing from remote villages as many rural parts of the country are not connected with the internet facilities, users are not well-equipped with new technological facilities or are not aware of it. Rana et al. (2014) have reported that the challenges in E-learning can be overcome if the learning materials that users require are properly taken into consideration. So, it is very crucial to address the difficulties faced by the learners in E-learning courses beforehand in order to have its optimistic impacts on learning. For instance, to equip the teachers and students with 21st century information technology, the Ministry of Education, Bhutan has already drafted its Education ICT Master Plan in 2014. Its objectives are to have effective teaching and learning environment, efficient educational administrative systems and to motivate lifelong learners for the 21st century into a digital world through online courses (MoE, 2014).

Despite the importance of E-learning and other online virtual courses in Bhutanese education system, there is no substantial research conducted with regard to E-learning programmes especially at the school level. The researchers therefore investigated the practical experiences and perception of students on emergency E-learning project initiated by the Royal Government of Bhutan, Ministry of Education during the Covid-19 Pandemic.

The following questions were used to guide the study:

1. What are the students' perception on the implementation of emergency E-learning project by the Ministry of Education, Bhutan in the wake of covid-19 pandemic?

2.What are the students' experiences with the emergency E-learning project implemented by the Ministry of Education, Bhutan?

## **Literature Review**

### **E-learning**

E-learning platform is a system whereby the learners take part in online courses by using different types of electronic devices. For students at the university level, it is considered as a major educational tool for teaching and learning. As per Brooke (2008) E-learning is defined as guided learning facilitated by the use of digital tools.

In the era of modernization, the swift advancement of information technology has transformed human life style drastically especially in the field of education. Teaching and learning has become very easy with advanced technologies such as computer, laptops, phones, etc. Based on the statement proven by Popovici and Mironov (2014) the availability of smart technologies has eased the learning of university students through E-learning platform who are directly experiencing the real environment.

Similarly, Mohammad and Ebrahim (2012) have also supported the concerns raised by the scholars and specialist on the importance of information society in the current era. The information technology has become very important in education system worldwide as the E-learning system has provided easy and fastest information which is not possible by other means. Such learning system has encouraged both learners as well as the teachers as it has made the learning system much easier as compared to on-campus learning which requires lots of resources. Thinley et al. (2017) reflected that, with rapid development of information technology, teaching and learning has changed over the years. It has enhanced a better platform for every educator to make best use of its benefits and use it as a strategy to boost the learning achievement of students.

### **Pros and cons of E-learning**

E-learning has the greatest advantages especially in the field of education. It is the fastest means of communication during the process of online teaching and learning. A wide range of discussions that require time, venue and resources can be delivered within a very short span of time eliminating time constraint, resource

and venue. Nejad (2012) also mentioned that E-learning has greater advantages compared to traditional teaching and learning because it is cost effective and saves time.

Researchers across the globe has conducted many studies using E-learning and gathered positive findings. For instance, Mehendi and Kalpana's (2018) study on student's perception about E-learning found that E-learning has advantages resulting to boosting of understanding and better performance. Likewise, Pozgaj and Knezevic's (2007) E-learning survey on students' opinions reported that students choose learning from home via E-learning platform from face to face as it saves time and students can easily download teaching and learning materials from one place without having to purchase or borrow from other mates. The study also reflected other advantages of E-learning such as freedom of learning and self-exploration to enhance one's knowledge.

The advantages of E-learning are further elaborated by Journell (2010) who carried out a study on perceptions of E-learning in secondary education - a viable alternative to classroom instruction or a way to bypass engaged learning? The findings showed that the mass number of students were in favor of E-learning owing to its advantages such as faster delivery of lesson, user friendliness and the nature of the courses being very flexible when compared to the conventional way of teaching. To this, it is felt that the E-learning course not only help the students to acquire knowledge, it also has profound effects on everybody's lives. If things are in place and learners are well oriented, parents and educators need not have to worry about children's education especially in times of emergency like covid-19 pandemic.

However, there are also negative impacts of E-learning. For instance, Tagoe's (2012) investigation on students' perceptions on incorporating e-learning into teaching and learning revealed that students opt to choose a mixed mode and supplemented courses in the near future rather than being too dependent on web including online courses. If E-learning has to be a success, there should be a major revamp on improvised strategies for easy access to personal desktop and improve network connectivity. Similarly, there were also cases of students not aware of what E-learning is all about and not prepared or equipped for E-learning (Ncube, 2015) besides time management and higher internet charges.

The other challenges faced by the students with E-learning include management issues such as managing teaching and learning materials and lack

of teacher support when required (Selvam et al., 2008). There is a demand for a better approach to address these problems to have an exceptional E-learning environment. Consequently, if E-learning has to take place without any hindrance, the relevant stake holders should play paramount role in imparting the required skills to the learners and ensure that they have access to E-learning resources both in terms of gadgets and accessibility.

## **Research Methodology**

This study employed mixed method approach which was concurrent in nature. The quantitative data was garnered through survey questionnaires which has five-point Likert scale that mainly focused on students' experience on emergency E-learning project during covid-19 pandemic. Semi-structured interview was employed to collect qualitative data. The experiences shared by the students in the semi-structured interviews were analyzed based on themes. The quantitative data were analyzed using descriptive statistics such as means and standard deviations.

## **Population and Sample**

The total sample for this study comprised of 122 students from 4 sections of 9th grade students in one of the Central Schools under Chhukha District, Bhutan. The researcher used a cluster random sampling to select 4 sections out of 7 sections of 9th grade students as a sample for this study. The students were in the average age of 14-18 years old with mixed gender and varied experiences in technology and gadgets. Two students one male and one female were randomly selected from each section for the interview.

## **Limitations of the study**

The study was limited to 4 sections of 9th grade students of one of the Central Schools under Chhukha District, Bhutan. The findings of the study cannot be generalized to all the 9th grade Bhutanese students in the country. Secondly, the study focused only on online learning project during covid-19 pandemic, therefore, the results may not be generalized to other normal situation.

## **Research Ethics**

In the conduct of this study, all ethical requirements are properly adhered too. The researchers obtained prior approval from the Vice Principal (Academic

Head) of the school, Chhukha Bhutan to conduct the research. The data was treated with confidentiality and was used only for the purpose of the study. Pseudonyms were used to represent participants instead of their real names.

## Findings

The survey data is presented in descriptive and tabular form. A verbatim from interview transcripts were used to represent the participant's views adequately. The quantitative data was used to answer the first research question, What are the Bhutanese Students' Perception on the Implementation of Emergency E-learning Project by the Ministry of Education, Bhutan in the wake of Covid-19 Pandemic?

The analysis of quantitative data revealed that the student's perception on the implementation of emergency E-learning project by the Ministry of Education, Bhutan in the wake of covid-19 pandemic as not very encouraging. For instance, the overall average mean rating in all the 15 items by the participants with regard to their perception on emergency E-learning project was remarkably low with an average mean of only 2.70. This clearly shows that majority of the students were not in favor of E-learning as most of the statements were rated very low at the perception level of Disagree or Slightly agree. This indicates that they were not ready with such educational reforms initiated by the Ministry of Education, Bhutan.

Therefore, the quantitative findings showed that majority of them disagreed or were not ready to cope up with E-learning. Hence, it can be concluded that the implementation of emergency E-learning project during covid-19 by the education ministry was not effective as evident from Table 1 that most students did not have proper gadgets to access E-learning as they could not procure one due to the poor financial position of their parents. Those with gadgets had connectivity issues such as poor network in far flung places due to geographical landscape and not able to sustain data package. Further, E-learning also promotes unhealthy practices such as cheating and plagiarism in the assignments and examinations. For many of them this is their debut with the E-learning.

However, most of the students are also quite positive about some aspects of E-learning. For instance, a majority of the students expressed that E-learning is helpful to students during the pandemic with an average mean score of 4.6 (Perception level - Strongly Agree, Statement number 3, Table 1). Similarly, going by the statements number 1 and 8, it was clear that most of the participants opined

that the implementation of E-learning during covid-19 pandemic was a good move by the Ministry of Education, Bhutan with an average mean score of 4.1 (Perception level – Agree to some extent, Statement 1) and E-learning provided the students an opportunity to explore learning materials of their own with an average mean score of 3.9 (Perception level - Agree to some extent, Statement 8).

Table 1

*Students' Perceptions on E-learning*

SL No	Statements	N	Mean	Std. Dev	Perception level
1	The implementation of e-Learning amidst Covid-19 Pandemic was a good move by the Ministry of Education, Bhutan.	122	4.2	1.2	Agree to some extent
2	All the students have an access to e-Learning education Project amidst Covid-19.	122	2.4	1.1	Disagree
3	E-Learning is helpful to students during the pandemics.	122	4.6	1.0	Strongly Agree
4	Every student gets equal opportunity in the e-Learning settings.	122	2.0	1.1	Disagree
5	The teachers are proactive in catering online courses and provide the feedbacks of the task without delay.	122	3.0	1.3	Slightly Agree
6	E-Learning benefited all the students to engage fruitfully and grow academically.	122	2.7	1.2	Slightly Agree
7	E-Learning boosts student-parent-teacher-peer interaction towards academic enhancement.	122	3.2	1.5	Slightly Agree
8	E-Learning Provided the students an opportunity to explore learning materials of their own.	122	3.9	1.2	Agree to some extent
9	I prefer e-Learning than formal classroom teaching.	122	2.0	1.6	Disagree
10	E-Learning prevents cheating and plagiarism.	122	1.2	1.6	Disagree
11	The network connectivity is very strong and there is no any technical problem associated with e-Learning.	122	1.8	1.2	Disagree
12	Financially disadvantaged students can also afford e-Learning easily.	122	1.8	1.2	Disagree
13	E-Learning system is easy and user friendly.	122	2.8	1.3	Slightly agree
14	E-Learning minimizes workload to students compared to classroom teaching.	122	2.5	1.5	Disagree
15	E-Learning system has improved my academic performance.	122	1.9	1.3	Disagree
<b>Total</b>		<b>122</b>	<b>2.7</b>		<b>Slightly agree</b>

The qualitative data were used to address research question number 2 - What are the Bhutanese students' experiences with the Emergency E-learning Project implemented by the Ministry of Education, Bhutan?

The interview data were analyzed and categorized under five themes namely

difficulties in understanding the content, inaccessibility to network connectivity, shortage of gadgets, expensive data packages, and encourages cheating and plagiarism as discussed in turn below. The participants and themes were referred to using the codes such as DUCSE9 is used to represent Student 9's experience with difficulties in understanding the content and INCSE4 to represent Student 4's experience with inaccessibility to network connectivity. Similarly, SoGSE72 is used to represent Student 72's experience with the shortage of gadgets, ECPSE90 for Student 4's experience with increase cases of cheating and plagiarism in the academic work, and EDPSE1 for Student 1's experience with expensive data package.

### **Abbreviations:**

DUCSE: Difficulties in Understanding content, Students Experience

INCSE: Inaccessibility to network connectivity, Students Experience

SoGSE: Shortage of gadgets, Students Experience

EDPSE: Expensive data packages, Students Experience

ECPSE: Encourages cheating and plagiarism, Students Experience

### **Difficulties in Understanding the Content**

Most of the students in the interview expressed that it was difficult to understand the concept delivered on line and attend to assignments assigned by the teachers. Since students were used to face-to-face learning where most of the contents were taught by the teachers through interactive sessions. For instance, Student 9 expressed that;

*We are unable to understand through online lesson as the teaching doesn't take place practically (DUCSE9)*

Similar views were expressed by Student 21 and Student 44 that;

*In the online class, only activities are given by teacher which makes us difficult to respond (DUCSE21)*

*I found it difficult to understand the concept given in the online class because we are used to learning through direct teaching (F2F) by the teacher (DUCSE44)*



## Inaccessibility to Network Connectivity

Bhutan is still a developing country and there is no uniform network connectivity in all places. Consequently, most students come from remote places where connectivity is a major challenge. Similarly, frequent power fluctuations have added problems to E-learning. This is evident from the excerpts of student's experiences of E-learning as stated below.

For example, Student 1 expressed that;

*I could not participate in the online class regularly because my village is located in the remote areas where the network is not strong (INCSE4)*

Similarly views were echoed by Student 2 when he expressed;

*Since the network is weak, responding to online classes got delayed (INCSE17)*

## Shortage of Gadgets

The participants also claimed that E-learning demands students to procure quality gadgets such as smart phone and laptop to support online learning uninterrupted. Many students who came from financially disadvantaged family could not afford the smart phones and laptops that deprived them from attending online lesson. Those students who used parent's phone had the problem of having to share with siblings as both need to attend to online lessons which deprived them from attending online classes or either delayed the submission of the assigned task as evident from the assertions made by Student 72 and Student 10 below.

*We have more siblings but have only one smart phone which is rotated among siblings. We often missed online classes and delay the submission of assignments owing to lack of independent smart phone (SoGSE72)*

*My parents only have black and white phone that doesn't support to online lesson (SoGSE10)*

## Expensive Data Packages

Another problem that the students faced was the expensive data charges. Majority of the participants reported that even if they have smart phones or laptop, procuring data package was expensive as most of the students came from humble

background. This resulted in irregularities such as failing to respond to teacher's queries, submitting the assigned task to the concerned teacher on time, accessing information online to name a few. For instance, Student 1 expressed that; The internet data charges are very expensive hampering the timely submission of online course (EDPSE1)

Similarly views is shared by Student 8 that;

*Students are struggling with high internet cost as most of us come from financially disadvantaged family (EDPSE8)*

### Encourages Cheating and Plagiarism

Majority of the participants in the interview opined that online mode promotes cheating and plagiarism among students. Most of the students copy assignments from friends or from the online sources as monitoring is not possible like in the case of face to face teaching. So everybody end up getting good grades during online class even if they have not acquired required learning. For instance, Student 101 confess that:

*I usually copy my answers from my friends who are good in studies (ECPSE101) Similarly, Student 90 cites that lack of understanding of the content as a cause for him to copy from friends; Since I don't understand the content, I will have to rely on my friends for help (ECPSE90)*

### Conclusion

This study explored student's perceptions and experiences from online teaching and learning mode initiated by the Ministry of Education in lieu of face to face teaching during the outbreak of covid-19 pandemic.

The key findings revealed that the participants are not in favor of E-learning platform initiated by the Ministry of Education although it was helpful to keep students engaged during disasters. Further, the students attending online are also confronted with numerous challenges such as difficulties in comprehending the content, inaccessibility to network connectivity, shortage of gadgets, expensive data packages and it promotes unfair means through cheating and plagiarism. The findings of the study by Daniel (2019); Ncube (2015) and Rengasamy et al. (2008) supported the claims made by this study.

To conclude, E-learning, if organized wisely will definitely live in the generations to come as it comprises of digitalization and advancement in information and communication tools to facilitate teaching and learning. Nevertheless E-learning must be accorded a priority in the wake of such catastrophe that human experience by putting resources in place and equipping children with the required skills to be fully able to participate in web based mode of learning.

Based on the findings the following recommendations are made to the Ministry of Education, Bhutan and other relevant institutions.

1. The school need to adequately orient on E- learning skills to teachers as well as students to enable to conduct online courses effectively in case we have to offer courses online in future.
2. Ministry of Education, Bhutan must collaborate with Dzongkhags and allocate budget for the schools to help disadvantaged students with IT gadgets and data package to support online lessons.

## References

- Brooke, S. (2008). E-learning pedagogy programme.  
<http://www.jisc.ac.uk/whatwedo/programmes/elearningpedagogy.aspx>.
- Brown, S. (2010). Likert scale examples for surveys. Iowa state university extension. Retrieved from <http://www.extension.iastate.edu/Documents/ANR/LikertScaleExamples forSurveys.pdf>
- Daniels, M., Sarte, E., & Cruz, D, J (2019). Students' perception on e-learning: A basis for the development of e-learning framework in higher education institutions. The International Conference on Information Technology and Digital Application. doi:10.1088/1757- 899X/482/1/012008
- Elango, R., Gudep, V. K., & Selvam, M. (2008). Quality of E-learning: An analysis based on e-Learners' perception of e-Learning. The Electronic Journal of e-Learning, 6 (1), 31-44.
- Journell, W. (2010). Perceptions of e-learning in secondary education: A viable alternative to classroom instruction or a way to bypass engaged learning? Educational Media International, 47 (1), 69–81. doi: 10.1080/09523981003654985
- Mahandi, M. V., & Kalpana, R. (2018). A study of students' perception about e-learning. Indian Journal of Clinical Anatomy and Physiology, 5(4),501-507. doi: 10.18231/2394-2126.2018.0116
- Michael, P. A. (2020). Covid-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. Contemporary Security Policy, 41(3), 492-505. doi: 10.1080/13523260.2020.1761749
- Ncube, S.L (2015). Students perception of E-learning in the department of science at the University of South Africa. Unpublished master's thesis, University of South Africa.
- Nejad, B.M., & Nejad, B.E. (2012). Impact of E-learning on learning and realizing information Society. Research Journal of Applied Sciences, Engineering and Technology, 4(23), 5016-5020.
- Popovici, A., & Mironov, C. (2014). Students' perception on using e-Learning technologies.

- Social and Behavioral Sciences, 180, 1514-1519. doi:10.1016/j.sbspro.2015.02.300.
- R, Hemant., Rajiv., & Lal. M. (2014). E-learning: Issues and challenges. *International Journal of Computer Applications*, 97 (5), 0975-8887.
- Ministry of Education. (2014). Education ICT master plan 2014-2018. Royal Government of Bhutan, Thimphu Bhutan.
- Strauss, A., & Cobin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Sage.
- Tagoe, M. (2012). Students' perceptions on incorporating e-learning into teaching and learning at the University of Ghana. *International Journal of Education and Development using Information and Communication Technology*, 8(1), 91-103.
- Ministry of Education. (2018). The annual education statistics. Retrieved from <http://www.education.gov.bt/wpcontent/downloads/publications/aes>

## About the Authors

**Mr. Thinley** is a Special Educational Needs Coordinator (SEN-Co) at Kamji Central School under Chhukha Dzongkhag. He received his Bachelor degree in Education from Paro College of Education, Royal University of Bhutan in 2011. He is a recipient of the Trongsa Poenlop Scholarship from His Majesty the King of Bhutan in 2015 and completed Master Degree in Curriculum and Instruction from Rangsit University, Thailand in 2016. Mr. Thinley has been teaching in various grades for the last nine years. He is a keen researcher and till date he has carried out six educational action researches. Currently, he is teaching language for tenth grade students of Kamji Central School besides shouldering other responsibilities in the school.

**Mrs. Dil Maya Ghalley** is a teacher at Kamji Central School under Chhukha Dzongkhag. She received her Bachelor of Education (Secondary) from Paro College of Education, Royal University of Bhutan in 2010. She has taught English, History and Media Studies for eleventh and twelfth grade students at Sherubling Central School under Trongsa Dzongkhag from 2011-2016. She has carried out various educational researches and currently, she is teaching English and History subjects at Kamji Central School. She served as the school staff secretary for two consecutive years (2019 & 2020) and as the officiating principal during Covid-19, 2020.

# Journal Guidelines for Manuscript

## **Educational Innovation and Practice – A Peer-reviewed Academic Journal of SCE**

Educational Innovation and Practice – The Academic Journal of Samtse College of Education (EIP) aims to publish scholarly articles that encompass all forms of scholarly activity with close attention being paid to quality criteria and the explicit connection between the theories employed and the data to be explained and use in support.

The journal encourages empirical and non-empirical research that explores pedagogy, action research, innovative teaching practices, commentaries, book reviews, policy briefs, curriculum development, distance learning, education technology and communication, enacted in a variety of fields that are formally and informally constituted. We seek to publish scholarly articles to provide unique perspectives to ongoing problems associated with the above themes that are salient to scholarly activities in these fields.

EIP is published annually, each volume consisting of approximately 150-200 pages. Each issue will contain 4-6 research articles, reflective papers, policy briefs, and book reviews of 3500-4000 words each in length and manuscript guidelines. The journal serves as a vehicle in the establishment of new forms of scholarly community, which bring and support a level of diversity in its interactions that are representative of the community of scholars.

The editors and reviewers assume full responsibility for all decisions to publish, revise and reject manuscripts. The journal is peer reviewed. The reviewers' first review all manuscripts and a decision is made to accept, revise or reject based on a collective agreement of the editors. After this decision has been made the authors are informed of the decisions. In case the paper gets rejected the author is encouraged to resubmit for the next volume. In case of revise the authors need to resubmit their paper on the deadlines provided.

## Manuscript guidelines for Educational Innovation and Practice

The manuscript guidelines are designed to assist authors to ensure that their manuscript consistently follows these guidelines and also to acquaint editors and reviewers to the style structure of the Journal.

1. All manuscript should be submitted in a Word “doc” file or in a Word-compatible file with Times New Roman 12 point font.
2. Authors should comply with the guidelines in the Publication Manual of the American Psychological Association (APA, 7th Edition) as a primary reference.
3. The Peer Review Process - To facilitate blind review, authors should not reveal their identity or any information identifying the author on any page of the manuscript except the title page and biographical note which will not be sent to the reviewers.
4. Manuscripts submitted to the EIP should not be currently under review by another Journal or have been made available in print or internet.
5. The manuscript should be sent as an e-mail attachment to Research Officer at [sangaylhamo.sce@rub.edu.bt](mailto:sangaylhamo.sce@rub.edu.bt) with a copy to the Dean of Research at [srinchen.sce@rub.edu.bt](mailto:srinchen.sce@rub.edu.bt). The Research Officer will acknowledge receipt of manuscript and send a copy of it to the reviewers for the review process. Authors will be contacted after the review process.
6. The Editorial Board reserves the right to reject a manuscript without substantive reasons if it does not fulfill the manuscript guidelines.

### The manuscript must include:

1. The title page with the manuscript title, author’s name, abstract, keywords and author footer on a page separate from the body of the article.

#### 1.1 Title structure

The manuscript title should be to the left (left justified), bold and only the first letter of the title should be uppercase (e.g., Challenges and transformations for teacher education)



### 1.2 Author (s) name

The manuscript title should be followed by Author (s) name with 'No' titles and institute affiliated.

### 1.3 Abstract

The abstract should be between 150-200 words. Please do not use references in the abstract of your article.

### 1.4 Keywords

The abstract should be followed by five keywords with dot between keywords.

### 1.5 Author footer

The information about the author (s) for the footer must include author's name (using initial for the first and middle name and spelling out the second name), institutional affiliation and email address.

S. Lhamo

College of Education, Royal University of Bhutan, Samtse, Bhutan

e-mail:sangaylhamo.sce@rub.edu.bt

## 2. Author Biographies

Include a brief biographical note about the author(s) in no more than 120 words on a separate page.

## 3. Organisation

The general organisation of the paper should be as follows: the scope of the study should be stated first, and then the details of methods, tools, followed by findings, discussion and conclusion.

## 4. Symbols

The symbols should be clearly identified and special care should be taken to distinguish between letter O and zero, the letter I and the Roman Number one, kappa and K, mu and u. Subscripts and superscripts should be used to avoid confusion especially while dealing with chemical equations (e.g., Carbon dioxide should be represented as CO<sub>2</sub> and not as CO2).

## 5. Units

All scientific or technical data included in the text should be stated in the metric systems. The use of English or other regional systems of units should be avoided.

## 6. Citations within the text

American Psychological Association (APA) uses the author-date method of citation. The last name of the author and the date of publication are inserted in the text in the appropriate place.

When summarizing or paraphrasing a source, provide the author (surname) and year. When quoting a particular passage, include the specific page paragraph number, as well.

When quoting in your paper, if a direct quote is less than 40 words, place the quotes within quotation marks (“...”). If a direct quote is more than 40 words, make the quotation a free standing block of text and DO NOT use quotation marks.

### 6.1 One work by one author

Mehra (1974) argued that Bhutanese are one people who are self-disciplined, loyal, and dedicated to the authority.

OR

A study conducted in Bhutan found that Bhutanese are highly self-disciplined, loyal, and dedicated to the authority (Mehra, 1974).

### 6.2 One work by two authors

When a work has 2 authors cite both names every time you reference the work in the text.

Example:

Day and Leitch (2001) presented numerous narrative accounts of teachers’ negative experiences.

OR

School reforms have also been shown to evoke teachers’ unpleasant emotions (Zembylas & Barker, 2007).

### 6.3 One Work by three or more authors

When a work has three or more authors, cite only the surname of the first author followed by “et al.” and the year. (However, in the reference list all the surnames and the initials of the all the authors should be included up to 20 authors). However, when there are 21 or more authors, include the names of the first 19 authors in your reference list, followed by “...” and then the name of the final author.

Choden et al. (2003) argue that .....

In turn girls develop low self-esteem (Choden et al., 2001, p. 32)

#### 6.5 Two or more works in the same parenthetical citation

Citations of two or more works in the same parentheses should be listed in the order they appear in the reference list (i.e., alphabetically, then chronologically).

Example:

Several studies (Jones & Powell, 1993; Peterson, 1995, 1998; Smith, 1990) suggest that...

#### 6.6 Two or more papers on the same idea by the same author (s) in the same year

When a same idea is expressed in two or more books by the same author, a distinguishing letter (a,b,c...) should be added to the year as shown below:

Example:

Nidup and Dorji (2005a; 2005b) are of the opinion that chickens in Bhutan are genetically diverse.

The mitochondrial DNA sequences suggest that Bhutanese chickens are genetically diverse (Nidup & Dorji, 2005a; Nidup & Dorji, 2005b).

### 7.Groups as Authors

Collective work of a group (e.g., government agencies, corporations, study groups, and associations) where the names of groups serve as authors are usually spelled out each time they appear in a text citation. The name may be shortened by using its abbreviation in the subsequent citations in case of long and cumbersome name. For instance:

First citation: According to Curriculum and Professional Support Section [CAPSS] (1999) continuous assessment helps teachers to understand the needs of children find their weaknesses and provide remedial help.

Subsequent citations: CAPSS (1999) also envisage continuous assessment to gradually replace the current system of one shot examination.

## 8. Works by No Identified Author

When the work has no author, cite the first few words from the title and then year of publications. Use double quotation marks around the title of an article, chapter, or Web page and italicize or underline the title of a periodical, book, brochure, or report.

Example:

The book *College Bound Seniors* (1997).....

On free care “Study Finds” (1982).....

Treat reference to legal materials such as court cases, statutes, and legislation like works with no author.

## 9. Works Discussed in a Secondary Source

Give the secondary source in the reference list; in the text, name the original work, and give a citation for the secondary source. For example, if Zam’s work is cited by Rinchen through Dolkar (2000) without reading the original work, list Dolkar (2000) in the reference. In the text use the following citation:

Zam quotes an old Bhutanese saying, “You cannot be what you are and what you are rusts while busy being what you are not” (as cited in Dolkar, 2000).

## 10. Levels of Heading

Headings and subheadings indicate the organisation of a manuscript and set up the importance of each topic. They signal what each section is about and allow for easy navigation of the document. The heading style recommended by APA consists of five possible levels (Table 1). Each section starts with the highest level of heading (Level 1), even if one section has fewer levels of subheading than another section. All topics of equal importance should have the same level of heading throughout a manuscript. Each heading level is formatted differently as detailed in Table 1.

**Table 1***Format for Five Levels of Headings*

<b>Level</b>	<b>APA Heading Format</b>
1	<b>Centred, Bold, Title case</b> Begin text on a new line
2	<b>Left-aligned, Bold, Title case</b> Begin text on a new line
3	<b><i>Left-aligned, Bold, Italic, Title case</i></b> Begin text on a new line
4	<b>Indented, Bold, Title case, Period.</b> Begin text on the same line
5	<b><i>Indented, Bold, Italic, Title case, Period.</i></b> Begin text on the same line

## 11. Figures

Any graphics or photographs which are not a table is considered as figures. All figures must be suitable for reproduction without being retouched or redrawn. Check that all lettering will be distinct after being reduced to fit available space on the journal page. All figures should be referred to as 'Figure 1' or 'Figure 2' with a short title. The Figure number should be written in bold font and title should be written in italic and placed on top of the Figure (see APA 7th edition). The authors are also required to submit figures separately saved as Windows-compatible graphic files (e.g., BIP, GIF, JPG).

## 12. Tables

All tables should have table number (e.g., Table 1, Table 2) written in bold font and placed above the table. Every table should have a short title that adequately represent the content of the table. The title should be written in italic and placed below the table number.

The font face and font size used for Tables and Figures should be consistent with that of the main texts.

### 13. Reference Page

In general, references should contain the author name, publication date, title, and publication information.

#### 13.1 Book

Aris, M, (1994). *The raven crown: The origins of Buddhist monarchy in Bhutan*. Serinda.

Good, T. L., & Brophy, J. E. (2000). *Looking in classroom* (8th Ed.). Longman.

#### 13.2 Chapter of a Book

Bergquist, J. M. (1992). German Americans. In J. D. Buenker & L. A. Ratner (Eds.), *Multiculturalism in the United States: A comparative guide to acculturation and ethnicity* (pp. 53-76). Greenwood.

#### 13.3 Articles in periodicals (journals, newspapers, newsletter, and magazines)

Jamtsho, S., & Rinchen, S. (2008). Accessibility, acceptance and effects of information communication technologies in the schools and colleges of Bhutan. *Rig-Gter – Academic Journal of Samtse College of Education*, 3, 52-69.

Sharma, M. (2005). Information and communication technology for poverty reduction. *Indian Journal of Open Learning*, 14 (1), 81-89.

Wangchuk, S. (2002, November 2). Youth issues must involve young people. *Kuensel – Bhutan's National Newspaper*, p.4.

Thinley, D. (2002, November). The common stylistic features of Bhutanese proverbs. *Kalapinka – The NIE Newsletter*, 4, 5-8.

#### 13.4 Electronic (online) References

##### 13.4.1 Journal articles - Online

Most online journal article comes with DOI (digital object identifier). Include DOI in the reference list instead of URL. If there is no DOI available for an online

journal article, then you need to include the URL instead as indicated below.

#### Online Journal articles with DOI

Bellocchi, A., Ritchie, S. M., Tobin, K., Sandhu, M., & Sandhu, S. (2013). Exploring emotional climate in pre-service science teacher education. *Cultural Studies of Science Education*, 8, 529-552. doi: 10.1007/s11422-013-9526-3

#### Online Journal article with no DOI

Ahmann, E., Tuttle, L. J., Saviet, M., & Wright, S. D. (2018). A descriptive review of ADHD coaching research: Implications for college students. *Journal of Postsecondary Education and Disability*, 31(1), 17-39. <https://www.ahead.org/professional-resources/publications/jped/archived-jped/jped-volume-31>

#### 13.4.2 News article - Online

Darby, A. (2004, August 10). Furious Butler quits as governor. *Sydney Morning Herald*. <http://www.smh.com.au/articles/2004/08/09/1092022411039.html?oneclick=true>

#### 13.5 Government document

Royal Government of Bhutan. (1999). *Bhutan 2020: A vision for peace, prosperity and happiness*. Thimphu, Bhutan: Planning Commission Secretariat.

#### 13.6 Personal communication (interviews, e-mail, and other forms of personal communications)

No personal communication is included in the reference list. In the main text cite the communicator's name, the phrase "personal communication" and the month, date, and year of communication.

(P. Jigdre, personal communication, December 31, 2014).



### 13.7 Unpublished thesis

Rinchen, S. (2014). Emotional climate of a pre-service science education class at the Royal University of Bhutan [Unpublished doctoral dissertation]. Queensland University of Technology.

#### **Editorial Correspondence**

Any inquiries related to EIP, including manuscripts for submission, should be addressed to: Research Officer at [sangaylhamo.sce@rub.edu.bt](mailto:sangaylhamo.sce@rub.edu.bt) and Dean of Research at [srinchen.sce@rub.edu.bt](mailto:srinchen.sce@rub.edu.bt)

## IN THIS ISSUE

---

### PAPERS

Flipped Classroom: Prospect in Freeing up Classroom Instructional Hours and Students' Attitude towards Flipped Classroom Strategy

Pema Jurmey, Tshering Lham, Kelzang Lhaden, Tashi Pema and Bak Bir Rai

The Effect of Simulation Games in Improving Grade XII Students' Academic Performance in Economics: An Action Research

Tshewang Dorji

Learners' Preference: A Reason to Use Code-Switching in Teaching and Learning Short Stories in Grade 10 English

Damchu Dema and Ugyen Dorji

The Effects of Using Simulated Role Play in Teaching History to Secondary Students in Bhutan

Lhatu

Students' Perception and Experiences on Emergency E-learning Project amidst Covid-19 Pandemic: A New Paradigm of Bhutanese Education 2020

Thinley and Dil Maya Ghalley

Educational Innovation and Practice Journal  
Guidelines for Manuscript

*Date of Publication: 29 May 2022*