

# THE INTEGRATION OF FIELD TRIP WITH MULTIMEDIA TECHNOLOGY FOR LEARNING ACHIEVEMENT IN SOCIAL STUDIES OF GRADE 4 BHUTANESE STUDENTS

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#### Thesis entitled

# THE INTEGRATION OF FIELD TRIP WITH MULTIMEDIA TECHNOLOGY FOR LEARNING ACHIEVEMENT IN SOCIAL STUDIES OF GRADE 4 BHUTANESE STUDENTS

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#### Abstract

The quasi-experimental method of quantitative and qualitative study was conducted to collect data and compare the learning achievement and learning satisfaction of grade 4 Bhutanese students before and after using integration of field trip with multimedia technology (videos and PPT) in Social Studies. The study was conducted in one of the schools in southern Bhutan over a period of a month. The instruments used were achievement test (pretest and posttest) for quantitative and semistructured interview for the qualitative study. The quantitative data were analyzed using paired sample t-test and the qualitative data through thematic analysis with p<0.05 level of significance. The data analysis of learning achievement result through paired t-test showed significant improvement in posttest ( $\bar{x}16.27$ ) than the pretest ( $\bar{x}10.47$ ). The mean difference of (5.80) and the significance (p) value was .01 which indicated that the integration of field trip with multimedia technology improved the learning achievement of the students. Similarly, the data collected through semi-structured interview revealed positive learning satisfaction and also motivated them to learn better and developed positive relationship. Therefore, this study recommends integrating field trip with multimedia technology as one of the approaches to make lessons entertaining, engaging and efficient.

(Total 143 pages)

Keywords: Field Trip, Multimedia Technology, Learning Achievement, Learning Satisfaction, Grade 4 Students

Student's Signature......Thesis Advisor's Signature.....

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## **ABBREVIATIONS**

Abbreviations	Meaning		
BCSEA	Bhutan Council for School Examination and Assessment		
CAPSD	Curriculum and Professional Support Division		
CAPSS	Curriculum and Professional Support Section		
CFA	Continuous Formative Assessment		
CTDD	Curriculum and Textbook Development Division		
DCRD	Department of Curriculum and Research Development		
DoC	Department of Culture		
EMSSD	Education Monitoring Support Service Division		
NAPE	New Approach to Primary Education		
NCERT	National Council of Educational Research and Training		
ICT	Information and Communication Technology		
IOC	Item Objective Congruence		
МоЕ	Ministry of Education		
PPT	PowerPoint Presentation		
REC	Royal Education Council		
STEM 💆	Science, Technology, Engineering and Mathematics		
TVET	Technical and Vocational Education and Training		
STEM TVET	निध्रुं भर्ते व Rangsit		

#### CHAPTER 1

#### INTRODUCTION

This chapter contains the study's background and justification, research aims, research questions, research hypothesis, scope and limitations. It also includes operational definitions and the importance of the study.

#### 1.1 BACKGROUND AND RATIONALE OF THE STUDY

Social Studies influence students for cross-cultural interactions, which are crucial in today's globally connected environment. The main objective of Social Studies curriculum is to prepare students to act responsibly as citizens of a multicultural, democratic society in an interdependent global community.

The origin and the concept of Social Studies was first defined in United States as a curriculum basically to study about the human being and its society in 1916 (Jorgensen, 2014). Humans are the part of an animals which existed on this planet long ago and through Social Studies, students can learn more about the civilization and human development in the society. Before 1960 in Turkey, Geography and History were merged and taught in schools as Social Studies (Eryılmaz, Bozkurt, & Boyraz, 2021). Social Studies is one of the academic subjects which connect with human and the society they live in and it is taught in schools from primary level till the students they graduate. It is not only a part of the curriculum but students learn more about social science and the human kinds. Learning Social Studies not only make individuals refine but build a trustworthy citizen of the country. The learning of Social Studies creates more responsible human with values and skills engraved in the mind of every student. Through the lessons, students learn more about diverse culture, religion and human behaviours of different people in the world (Dhandania, 2016).

According to the Department of Curriculum and Professional Division of Bhutan (2022), Social Studies is one of the major subjects of school's curriculum at primary level. Social Studies subject is taught for upper primary grade IV to VI with the content related to the world that people live in. It focusses more of relationships, interaction and interdependence between human beings and the nature around them. The very reason of infusing this subject in the curriculum was to make learners more competent to face the world by learning through hands on experiences and to acquire critical thinking, problem solving and decision-making skills with values installed in the young minds to become responsible citizens. Agung (2018) stated that the main motive of learning Social Studies is not to shine in educational field but to become noble and productive citizens. It can change one's mindset for better living and develop the abilities to cope up with the situations in the society. Dorji (2021) asserted that Social Studies curriculum in Bhutan is taught from grade IV to VI at primary level. History and Geography subjects were taught from grade VII and Economics from grade IX. While separating those subjects from Social Studies, the concepts and philosophies of the content were left intact.

All teachers throughout the nation are required to use approaches that can help students develop higher order thinking skills, according to Bhutan Professional Standards for Teachers, Ministry of Education (2020). From the findings of Sherab and Dorji (2013), teachers need to be competent and resourceful when it comes to the use of latest pedagogical and teaching style from age old traditional to make learners learn better and in a meaningful way. To be competent in the digitalized era, students should be prepared with 21st century skills to learn. Teachers must also possess 21st century skills to effectively teach the students (Davis, 2016).

The content and skills to teach students in Social Studies are mostly related with the student-centered method. Basically, the subject itself is all about the people, environment and the world people live in. The teaching and learning should be of more outdoor activities on real world situation than being within four walls of the classroom. With the reasons mentioned above, it clearly supports that teaching of Social Studies in the Bhutanese curriculum should focus more on student-centered learning to acquire ample knowledge and skills. This can be possible by changing the teaching pedagogy and style from teacher-centered to learner-centered and letting students explore. The learnings can be effective and experiential only if the teaching technique is changed from teacher-oriented lesson to students centered (Rabgay, 2015). Through the findings and researches done by Gyeltshen and English (2021), Dorji (2021) and Dorji (2022), the performance in the Social Studies Subject has declined and wasn't up to the expectation level. This could be because of the following mention reasons:

As per Royal Education Council, 2020 the teaching period and time allocated for Social Studies in Bhutanese curriculum was less compared to other subjects. It has only 4 periods per week (160 minutes) in each class from IV to VI. Since the subject content has more of outdoor activities for students to experience and explore the real-world learning, because of the time constraint most of the lessons were delivered in the enclosed classroom. The teaching and learning approaches such as field trip, project-based learning, social inquiry and place-based learning could not be applied and thus, students were unable to develop the necessary skills for change in terms of critical thinking, collaboration, innovative and problem solving. The traditional strategies of teaching and learning in Bhutanese education has hampered students' lifelong learning and has led to low achievement in the progress (Dolma, 2018). The teaching has been more of teacher-centered and students were deprived of participating in any activities in the class for self-exploration, experimenting and hands-on learning.

According to Bhutan Council for School Examination and Assessment report (2017, 2018, 2019) of class VI Social Studies subject, an overall mean score was 51.19 in 2017, 55.83 in 2018 and 54.47 in 2019 respectively. The average mean score for Social Studies subject was 53.8 compared to other subjects like Science with 57.4 and Dzongkha with 56.7. Through the given data it can clearly state that the performance in Social Studies by students has been deteriorating. Moreover, the annual performance of grade 4 Social Studies of the research school is also declining consecutively from 69.6 in 2016 to 65.9 in 2019. There may be a number of factors contributing to the students' declining performance in the subject, but it is clear that teacher-centered instruction predominates in the classroom and that the students' lack of enthusiasm in learning was

the biggest problem. Low and deteriorating results are an outcome of the lack of exploration and hands-on learning opportunities for students.

The conventional teaching methods continue to dominate in Bhutan's educational system despite a lot of reforms in policy and curriculum. It is more of teacher- centered classroom learning or lecture oriented lessons happening in schools. Students were given less durations to learn hands-on experiences, the teaching of lessons are mostly of rote learning and use of obsolete teaching-learning materials (Rabgay, 2012). In the findings of Rigzin (2021), because of the traditional method of teaching, students were spoon-fed and duration given for them to develop their analytical thinking skills, creativity, social skills and leadership were minimal. Traditional teaching style controls the student-centered learning approach in almost all schools in Bhutan. The research done by Utha et al. (2016) proved that the teaching and learning in Bhutanese education system is mostly of teacher centered and curriculum oriented.

According to research done by Rabgay (2013), 75.71% was of lecture system which made it the most common approach in teaching. Teachers talk 85.23% in the class while delivering lessons compared to student talk time of 11.38%. There are lot of limitations in the use of lecture or teacher centered approach. As per the findings of Kapur (2020), there is less opportunity for students to participate in the classroom activities since the lecture method is in contradiction of the principle of learning by doing. Since students have different learning styles and abilities, the way of teaching has to be changed using diverse strategies and skills. The teaching approach of complex order thinking and development of motor skills is less in lecture method. The students lack social skills in the traditional method of teaching as they barely get to interact in the classroom. In the words of NCERT (n.d.) lecture method does not enhance intellectual learning skills and application capabilities in the students instead it ruins their confidence and learning interest.

Based on the above reasons, the declining in the quality of education and students' performance in Social Studies is a great anxiety in Bhutan. His Majesty the

King's nation address on 17<sup>th</sup> December, 2020 stated that the quality of education has declined and we cannot blame the students for this, it is we who have failed them (Lamsang, 2020). Students are not only affected with their cognitive level of understanding but skills and experiences learnt in their life will be minimal to adjust in the society. The quality of teaching and learning in schools has been a major focus for the Ministry of Education due to the widespread concerns held by all citizens. According to Dorji, Kinley, and Sivitskis (2021), Ministry of Education has been putting a lot of effort into a variety of reform-related plans and sequences to raise the standard of education in the nation.

His Majesty the King in his speech mentioned about the cognitive learning and development in the students at Norbuling Central School. Thinking and learning should not be within the classrooms instead students must be able to learn beyond the four corners of their classrooms (Tashi, 2021). The researcher aimed to carry out the study using field trip with multimedia technology in grade 4 Bhutanese Social Studies to focus more of student-centered. The application of field trip approach can really boost to gain social skills and experiences in the students. Many researches proved that field trip is one of the successful strategies where all the students get to explore themselves beyond the classroom and can actively engage in fruitful learning. Through field trip students can use their sense organs to learn and relate and build on what they have learnt in the classroom. According to Estawul, Sababa, and Filgona (2016), a field trip is one of the strategies where students explore and relate their observations to the subject content taught. Field trip inspire students to develop critical thinking and problem-solving skills to face the real situations when the need arises.

According to Social Studies Curriculum Framework, Royal Education Council (2022), field trip is a class visit beyond the normal classroom where students can explore, experience new things and learn value lessons. Field trip could be organized within the campus for observation and exploration too. The purpose of teaching Social Studies is to learn and create awareness about the universe and the planet, the society people live in and to update on the fast-changing world. To create students nationally rooted and globally competent, teaching scenario of Social Studies in Bhutan has to

change according to the situation and needs of the students. Similarly Social Studies Curriculum Framework, Department of Curriculum and Professional Division (2022) stated that the use of Information and Communication Technology is crucial in the lives of students in the 21st century education. Technology in the classrooms can enrich teaching and learning process thus, making teaching more appealing to diverse learners. The teaching of Social Studies subject must be given importance not only preparing teachers to use technology effectively for lesson preparation, but also on promoting strategies that allow the integration of Information and Communication Technology in improving teachers' teaching and learning strategies in Social Studies.

Puteh and Shukor (2010) revealed that incorporating multimedia technology into teaching and learning can effectively engage students and have a good impact on learning outcomes. According to Christen (2009), in every subject the use of technology-based teaching like video clips and PowerPoint presentation has been warmly received. Thus, using technology for educational and instructional purposes is crucial in teaching and learning because students do exceptionally well. Tutty and Klein (2008) asserted that the use of technology including video podcast, video streaming, PowerPoint presentation slides and video clips in teaching and learning can improve students' academic performance, skills and attitude.

Therefore, considering the poor performance and declining learning standards of Social Studies subject, the researcher was enthusiastic to do a study using field trip with multimedia technology such as short videos and PowerPoint presentation in one of the primary schools in the southern part of Bhutan. Although a number of studies were done and shown positive results of using technology in the field trip across the globe however, no research has been done on students' learning achievement and satisfaction using integration of technology with field trip in Bhutan. Though, Bhutan is in a developing stage in terms of technology use, it is genuine and high time where technology should be incorporated in teaching and learning at primary level especially subject related to teaching Social Studies. The result of the study would add an enthusiasm in teachers to incorporate the strategies and bring positive learning outcomes in Social Studies. It would not only serve as a tool to teach the subject but students

enjoyed their learning through the use of technology gadgets. Thus, the researcher opted to study the learning achievement and satisfaction on field trip with integration of multimedia technology of grade 4 Bhutanese students in Social Studies.

#### 1.2 RESEARCH OBJECTIVES

- 1.2.1 To compare grade 4 Bhutanese students' learning achievement in Social Studies before and after using field trip with multimedia technology.
- 1.2.2 To investigate the extent of students' learning satisfaction of grade 4 Bhutanese students in Social Studies after using field trip with multimedia technology.

#### 1.3 RESEARCH QUESTIONS

- 1.3.1 Would there be any improvement in grade 4 Bhutanese students' learning achievement in Social Studies after using field trip with multimedia technology?
- 1.3.2 Would there be any improvement in grade 4 Bhutanese students' learning satisfaction in Social Studies after using field trip with multimedia technology?

# 1.4 RESEARCH HYPOTHESIS

1.4.1 There would be an improvement in grade 4 Bhutanese students' learning achievement in Social Studies after using field trip with multimedia technology.

#### 1.5 SCOPE OF THE STUDY

#### 1.5.1 Participants of the Study

The study was carried out in one of the schools in the southern part of Bhutan. The participants of the research were grade 4 students from one of the schools in Chhukha district. The researcher used all of them as research participants since the research school has only one section of grade 4 in the academic year 2023. A total of 30 students were within the age range of 10 -12 years consisting of 13 boys and 17 girls. The participants of the study are shown in Table 1.1.

Table 1.1 Participants of the study

Age in Years	Gender		Total Students
	Male	Female	
Below 09	0	0	0
10 -11	7	9	16
11-12	6	8	14
Total 7	13	17/11	30
152 Content of the Study			

#### 1.5.2 Content of the Study

The research was done based on the National School Curriculum Framework in grade 4 Social Studies as developed by the Royal Education Council of Bhutan (REC, 2022). Actually, there were twelve different chapters based on five strands with multiple sub topics. The five strands consisted of My World (Strand 1), History, Civics and Culture (Strand 2), Human Wellbeing and the Environment (Strand 3), Living and Economy (Strand 4) and Process Strand (Strand 5). The research topic as prescribed in the text book was 'Local Government' under History, Civics and Cultural strand (Refer Appendix D for content of the study). The topic was selected as per the yearly plan

prepared by the subject teacher from the research school. The lesson content consisting field trip with multimedia technology are shown in Table 1.2.

Table 1.2 Table content of the lessons

Week	Topics	Activities/ Approaches	
Week 1	Local Government	1. Presentation were made on the	
	Lesson 1: Lesson was introduced on	topic by teacher through PPT to	
	Local Government, types and its	the whole class.	
	function, and the offices.	2. Field visited to the Local	
	\$\$\$	Government offices. Explored	
	Lesson 2: Field visited to the Local	different offices and the staff.	
	Government office.	3. Group 1 students recorded	
		Video clips and images.	
Week 2	Roles of Gup and Administrative	1. Students were asked to answer	
	Officer	to the questions.	
	Lesson 1: Recapitulation of the lesson	2. Field visited to the Local	
	were done (Questions and answers)	Government office. Interviewed	
	Lesson 2: Field visited to the Local	with Gup and Administration	
	Government office and interviewed	Officer and observed their work.	
	with Gup and Administrative Officer	3. Group 2 students recorded the	
	about their duties.	Video clips and images.	
Week 3	Roles of Mangmi and Tshogpa	1. Students answered the	
	Lesson 1: Recapitulation of the lesson	questions asked.	
	were done through questions and	2. Field visited to the Local	
	answers.	Government office. Met with	
		Mangmi and Tshogpa.	
	Lesson 2: Field visited to the Local	3. Group 3 members recorded	
	Government office and interviewed	Video clips and images.	
	with Mangmi and Tshogpa.		

Table 1.2 Table content of the lessons (Cont.)

Weeks	Topics	Activities/ Approaches	
Week 4	Roles of Civil servants	1. Students answered the	
	Lesson 1: Recapitulation of the lesson	questions.	
	were done.	2. Field visited to the Local	
	Lesson 2: Field visited to the Local	Government office. Interviewed	
	Government office and interviewed	with the civil servants.	
	with other civil servants and observed	3. Group 4 captured Video clips	
	their roles.	and images.	

#### 1.5.3 Location of the Study

The study was conducted in one of the primary schools under Chhukha district located in the southern region of Bhutan. The school was located in the semi urban with the total strength of 130 students and 12 teachers including the principal (Refer Appendix A for location of the study).

#### 1.5.4 Time Frame

The four weeks duration was used for the researcher to conduct the research. The researcher taught one lesson in a week which consists of 90 minutes block period. The researcher taught Social Studies of grade 4 using field trip with multimedia technology for eight periods over the course of four weeks. The data for the research were collected in May 2023. Table 1.3 shows the details of the time frame for the research process.

Table 1.3 Time frame for the research process

	Research Schedule			
Activites	From		То	
	Month	Year	Month	Year
Literature Review	January	2023	April	2023
Research Proposal	March	2023	April	2023
Data Collection	May	2023	June	2023
Data Analysis	July	2023	August	2023
Final Defense	August	2023	September	2023
Research Publication	October	2023	November	2023

#### 1.6 CONCEPTUAL FRAMEWORK OF THE STUDY

#### 1.6.1 Variables

There were two variables in this study; independent variable and dependent variable. The use of field trip with multimedia technology approach was an independent variable whereas learners' learning achievement and satisfaction were dependent variables. The conceptual framework of the study is shown below:

#### INDEPENDENT VARIABLE

#### **DEPENDENT VARIABLE**

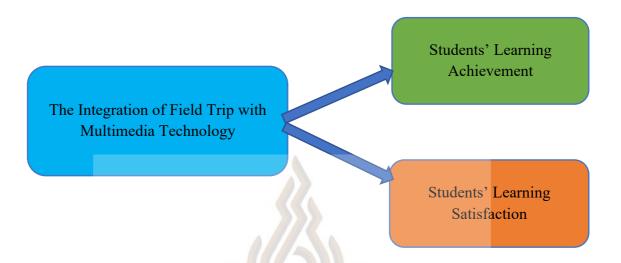


Figure 1.1 Independent and Dependent Variable

#### 1.7 LIMITATION OF THE STUDY

- 1.7.1 The study was carried out with only 30 students of grade 4 from the research school. The performance of grade 4 Bhutanese students of other schools in Bhutan cannot be generalized based on the research done.
- 1.7.2 The content of this study would be limited to only one topic from the Social Studies text book. The result of this study cannot be generalized and apply to other topics in the same subject and other subjects of grade 4 in Bhutan.

#### 1.8 OPERATIONAL DEFINATIONS

**Field Trip with Multimedia Technology** refers to school excursion or an instructional trip where students use multimedia devices to learn beyond the classroom setting with an educational intent. It is one of the effective teaching strategies where students get to explore, observe natural settings, interact and learn hands-on experience

using multimedia devices. In this study the researcher used field trip with integration of multimedia technology (smart phones) to let students record short video clips and images, explore and experience the nearby Local Government offices, its function, staff and their different roles and responsibilities.

Social Studies refers to one of the subjects from Bhutanese curriculum taught in grade IV to VI. The Social Studies subject is the integration of History, Civics, Geography and Economy. The teaching of Social Studies is all about relationships and interdependence between the human beings and the world we live in. The values and skills learned through the subject can be utilized for day to day living and be a productive citizen. So, the Bhutanese Social Studies curriculum has five strands which consisted of My World (Strand 1), History, Civics and Culture (Strand 2), Human Wellbeing and the Environment (Strand 3), Living and Economy (Strand 4) and Process Strand (Strand 5). The researcher taught the topic Local Government under the strand History, Civics and Culture.

**Short Video** refers to few minutes (4 to 5) site videos and short explanatory or interview video clips recorded by the students during their field trip visit. The clips were related to their topic of the lesson learnt in the classroom as well as during the field visit. Those clips could support and enhance their learning on the content taught.

**PPT** refers to Power Point presentation slides that contains videos, photos and audio recorded. The teacher made the PPT slides using all those images and videos related to Local Government. It was presented before the actual field trip. Moreover, the guidelines, norms and questions were also presented through PPT.

Learning Achievement refers to the accomplishment of skills and knowledge achieved by participants of grade 4 in learning Social Studies. It also incorporates their team work, self-confidence, participating and experiencing through field trip with multimedia technology approach on the topic 'Local Government'. The learning achievement was assessed by using pretest before and posttest after the intervention of the approach.

**Learning Satisfaction** refers to students' happiness and fulfillment of using field trip with multimedia technology approach in teaching and learning Social Studies. Students' satisfaction with the usage of the field trip with multimedia technology approach in learning was determined by the results of semi-structured interview.

**Grade 4 Students** refers to the participants from the research school studying in grade 4 of 2023 academic year. The research participants were of mixed gender and abilities with age ranging from 10 to 12 years. The grade 4 participants were from one of the primary schools located in the southern Bhutan.

#### 1.9 SIGNIFICANCE OF THE STUDY

- 1.9.1 Implementing field trip with multimedia technology would enhance students' learning achievement in Social Studies of grade 4 Bhutanese students.
- 1.9.2 The study would positively impact the learning satisfaction of grade 4 Bhutanese students by using field trip with multimedia technology.
- 1.9.3 The findings of this study would empower teachers to use field trip with multimedia technology as one of the effective teaching pedagogies in teaching Social Studies in Bhutan.
- 1.9.4 The use of multimedia technology (video clips and PPT) in teaching and learning would boost the teachers and students' ability to cope up in the digitalized era and be competent enough to face the challenges.

#### **CHAPTER 2**

#### REVIEW OF THE LITERATURE

This chapter consists of historical context of Bhutanese educational system, the frame work for Social Studies curriculum, the concept of Social Studies, the assessment of grade 4 Social Studies, the definition of field trip and multimedia technology, benefits and challenges of a field trip with multimedia technology, the framework for the application of multimedia technology, and finally learning theories and related researches.

# 2.1 HISTORICAL CONTEXT OF BHUTANESE EDUCATION SYSTEM

Bhutan is a small and landlock Himalayan country located in the southern Asia with approximately the population of 7,94,788 (World meter, February 2023). It is situated in between the two huge countries China to the north and India to the south sharing a border. Bhutan has an area of 38,394 square kilometers (Bhutan Satellite Map). Bhutan is a Buddhist country with magnificent topographical of beautiful mountain ranges of different height and abundant mineral resources. Bhutan is also known as Druk Yul- the land of Thunder Dragon, has favorable climate and the fertile land for an agriculture farming. Bhutan's rich vegetation cover 71% of the forest with first carbon negative country in the world, the age-old valuable culture and traditions that make Bhutan one of the happiest countries on the planet (Paul, 2017).

First King of Bhutan unified the country and was crowned as hereditary monarch in 1907 (Gyeltshen & Zangmo, 2020). His Majesty the first King Ugyen Wangchuk (1862-1926) signed a treaty of friendship with British India in 1910 and British Political Officers were assigned to look after the Bhutan affairs. King envisioned that monastic education alone may not be able to develop the country and make friendship with other

countries thus, King introduced the first ever modern education by opening two schools in Haa and Bumthang (Paul, 2017). The first modern school was started in 1914 at Haa district by Gongzim Ugyen Dorji under the command of His Majesty the King. In the same year 46 boys went to study in Kalimgpong, India was a foundation for modern education in Bhutan (Wangmo & Choden, 2010). During those days few teachers were from a Church of Scotland mission who taught English to the students. Prior to this system, monastic education was the only kind in the country. Monastic education was just one aspect of the religion that people relied upon for their spiritual and human resource needs, and monasteries were used as learning institutions. The King established many schools throughout the country and education in Bhutan expanded rapidly from 1950 onwards. Though it started in 1914, yet the systematic development of modern education could not shine much. Modern education was initiated in 1961 after the first five-year plans began (Namgyel, 2011).

Paul asserted third King of Bhutan commanded that due priority in education should be given during first five-year plan from 1961. According to Mackey (2002) during the first five-year plan (1961-1966), the Education Directorate was established and the director of education was Secretary General of the Development Wing. The first ever Bhutan Matriculation Exam was conducted in 1968 for 20 students. When modern education was first introduced, Bhutan lacked human and economic resources to initiate a new system. The education system remained as same like the Indian system until the implementation and advancement of nationalization of the Bhutanese education system in 1980s and 1990s. There were only 11 schools with 90 teachers teaching 400 students after modern education system started. Dzongkha and Buddhist scriptures were taught by our Bhutanese teachers and other main subjects like English, Mathematics and Hindi were taught by Indian teachers (Wangmo & Choden, 2010). It's main focus and goal was to develop human resources and to uplift the economy of the country. The system was new and couldn't bring much changes until the establishment of modern education system by Third Druk Gyalpo King Jigme Dorji Wangchuk (1928-1972). After introducing the five-year plans, education system in Bhutan changed drastically in terms of human and infrastructure resources. The basic infrastructure facilities like roads, hospitals, transport, communications and power were established. Many primary, junior high schools, high schools and institutes were established by the King in the country (Gyeltshen & Zangmo, 2020).

In 1971, because of scattered settlement and less enrollment in some primary schools King established more junior and central schools at suitable places with boarding and other facilities. There were 81 primary schools, 15 junior schools, 4 high schools and 2 public schools by then. With the changes in time fourth King commanded cabinet to revised intensive education policy in 1985 after first ever National Education Policy approved in 1976 (Paul, 2017). Since the curriculum was borrowed from India students were taught by Indian teachers with mostly English as the medium of instruction. That was the time when education system in Bhutan was bhutanized from Indian curriculum in the mid 1980s. The curriculum was reformed upon the King's command based on the requirements and development goals of the country (Education Division, 1989). The tremendous progress and changes took place in the Bhutanese education system after five-year development plan and curriculum being bhutanized. The number of schools shot up from 59 in 1961 to 193 in 1989. Owing to the increased in number of schools, the education headquarter was established in Thimphu for smooth functioning of the system (Dorji, 2021).

In 1974, Druk and Drukpa in Social Studies and Druk Readers a new English textbook were printed and distributed in schools. A Curriculum and Textbook Development Division was established in 1985 particularly to look after the curriculum related matters. The Division emphasized on designing a curriculum that was more pertinent to the requirements of the student, society and the nation. Later, Curriculum and Textbook Development Division (CTDD) launched a New Approach to Primary Education (NAPE) to address a growing demand from students and switching teaching methodologies from rote learning approaches to student-centered learning (REC, 2018). For the first time in the country's educational history, Bhutan History and Geography subjects were introduced to grades VI to VIII in 1990. Later in the year 1993, the subjects were taught in grades IX and X as well to have localized curriculum (Gyamtsho & Drukpa, n.d.). According to REC (2018), CTDD was retitled to Curriculum and Professional Support Section (CAPSS) in 1996. Later the name changed to CAPSD

(Curriculum and Professional Support Division) to further strengthen the system with new ideas and methodologies.

Tenzin and Lepcha (2015) asserted that in 1999 grades VII and VIII were introduced to integrated science which was a revision and fusion of key ideas and concepts from those three science subjects (Biology, Physics and Chemistry). Additionally, the Ministry of Education began reforming the curriculum for subjects like Dzongkha, English, Mathematics and Science from 2002 to 2008 within the period of 9th five-year plan. The reform was started by CAPSD to prepare students to be equally competent with the outside world and to fully localize the curriculum in the Bhutanese context. The Bhutanese curriculum till grade XII has been fully bhutanized by 2005. According to REC (2018), in 2010 the Curriculum and Professional Support Division (CAPSD) has been renamed and advanced to Department of Curriculum Research and Development (DCRD). On December 12, 2014 Royal Education Council (REC) took over DCRD and launched Education Blue Print (2014-2024). According to Education Blue Print the major curriculum reforms in Science, Technology, Engineering and Mathematics (STEM) and Technical and Vocational Education and Training (TVET) to make curriculum more pertinent to the national and worldwide context.

The Bhutan Education Blueprint (2014-2024) provide future guidelines with better educational goals and policies of Bhutanese education system. The top most priority in the reform was to focus students' learning outcome equivalent to international standard. The competency-based learning with the use of digital technology in classroom learning is the foundation of the new changes in teaching and learning. The major reframing of curriculum in Bhutan in 2016 with various stakeholders was one of the greatest reforms in education history. Further, a new reform in curriculum (New Normal Curriculum) by REC was a great paradigm move in education (REC, 2018).

Bhutan's educational system has expanded enormously throughout the country ever since the commencement of first five-year plan in 1961. The country's socioeconomic development, human resources and fundamental educational needs have steadily improved over the past few decades. Today Bhutan has 600 schools of different

levels, 10,584 teachers with 1,62,536 students studying in various schools (Annual Education Statistic, 2022).

#### 2.2 THE BHUTANESE SOCIAL STUDIES CURRICULUM

In Bhutanese curriculum, Social Studies is a major subject that is taught from grade IV to grade VI. The subject is further separated into Geography and History that is taught in the beginning of grade VII, whereas Economic is introduced from grade IX and above (Dorji, 2022). According to Social Studies curriculum frame work by DCPD (2022), in the year 1992 the first Social Studies curriculum was developed and taught in 28 primary and Junior High Schools across the country as a pilot project. The CAPSD initiated for the second edition of the subject in 2002. So, in 2009 Social Studies curriculum and text book has been corrected and updated with many facts and figures, diagrams, pictures, maps and language. The division also did a lot of researches and meetings with wide range of experts and stakeholders in the curriculum reform.

The curriculum has to be reformed and updated with a change in time and need. Through the findings and changes made, the DCRD by then in collaboration with Education Monitoring Support Services Division (EMSSD) and Bhutan Council for School Examinations and Assessment (BCSEA), teachers carried out a writer's workshop as a periodic review of the Social Studies curriculum in 2010. Subsequently, in 2012 Social Studies text books for grade IV to VI were reviewed and updated (DCPD, 2022).

Royal Education Council (DCPD) again started the drafting of first Social Studies curriculum in 2015. The initiative was further recommended and supported by all the teachers and stakeholders across the nation after attending three days National Education School Curriculum Conference (2016). The immediate intervention from different stakeholders were involved during the drafting because to make curriculum relevant to the national aspirations and in keeping Bhutanese culture and values alive. Based on the findings and feedbacks submitted from schools and concern stakeholders, the finest curriculum was developed. REC with the support from Ministry of Education

initiated the drafting of prioritized Curriculum Framework and Adapted Curriculum Framework during pandemic to keep students engaged and self-learn at home. It was a great initiative from REC during such pandemic situations to have Adapted Curriculum especially to those students who are unreachable with digital gadgets and internet services. The New Normal Curriculum Framework renamed as National School Curriculum was drafted and reformed in 2021 when the pandemic was still ongoing by the Ministry of Education for further implementation in schools (DCPD, 2022).

The Social Studies subject help students to develop the ability to make informed decisions as citizens of culturally diverse democratic society in an interdependent world. The Bhutanese Social Studies curriculum framework for grade IV-VI at Key stage II consists of 5 strands of broad theme with sub topics which students are expected to achieve through the course. The themes are: My World (Strand 1), History, Civics and Culture (Strand 2), Human Wellbeing and the Environment (Strand 3), Living and Economy (Strand 4) and Process (Strand 5) with Competency-based Standards and Key Competencies. The Social Studies curriculum also contains the Guiding Principle such like: Culture and values, Fostering GNH through Social Studies, Inclusiveness, Community involvement, Future-focused, dynamic and relevant, Developmental appropriateness, social skills, Inter-disciplinary nature, Effective Pedagogy and Integration of ICT. Like any other subjects Social Studies has the aims and goals for educating the students. The goals of learning Social Studies are to build strong sense of civic and social skills in the minds of the students, and to promote the values of Tha dhamtsi ley judrey (values of interconnectedness, interdependence and coexistence) in the students (DCPD, 2022).

The revised Social Studies text book for grade IV to VI were made available to all the schools from 2020 by DCPD. Department of Curriculum and Professional Division in collaboration with Department of Culture (DoC) has incorporated the cultural heritage values and focus in the Social Studies curriculum. With the drastic socio-economic development and globalization, awareness of cultural heritage was important for youth to understand the authentic values. The inclusion of cultural heritage would cover intangible part of cultural like Tha Damtshi and Ley Judrey. The addition

of Driglam Namzha (Bhutanese etiquette), significance of religious instruments and holy places were incorporated in the curriculum. With the implementation of such culture and values in the lessons, students definitely understand and learn how we function as an interdependent community and play a vital role as a citizen (Lhamo, 2018).

#### 2.2.1 Social Studies Assessment and Evaluation

According to Black and Wiliam (2018), assessment is one of the important tools or technique for the development of teaching and learning process in the school. Assessment helps teacher to measure students' achievement and let students to study from the information obtained and act accordingly. Such assessment will maximize learning and motivate students to improve their performance. Assessment in Social Studies is done as usual like other subjects in Bhutanese curriculum in line with consideration of all the principles of assessment. The assessment in Social Studies subject is done to enhance the quality of teaching and learning through certain method of measurement and evaluation. Learners can identify their learning strength and weaknesses with the help of teachers to boost learner's curiosity in learning. Assessment can also inform teachers about the quality delivery of the lessons made and helps to redesign and improve the teaching process (DCPD, 2022).

According to Assessment and Reporting of Social Studies Curriculum Framework, DCPD (2022) there are two types of educational assessment methods to evaluate students' academic performance in Social Studies. They are Assessment for learning or Continuous Formative Assessment (CFA) and Assessment of learning or Summative Assessment (SA). Continuous Formative Assessment (CFA) is an ongoing process where teacher provide the instant feedbacks during teaching and learning. CFA serve as one of the best tools to identify the learners who are lacking behind and need constant monitoring. This assessment can help students to recognize their abilities and provide scaffolding in their learning. Here teachers can motivate the students to do better and build up their confidence in learning at any level. The tools used for CFA are rubrics, checklists and anecdotal records maintained throughout the year. The CFA

consists of 70% marks which is divided into term I and II. Project work is the main part of CFA which is out of 20% each for both the terms. Other class activities such like debates, quizzes, discussions and extempore speeches are assessed by 15% in each term. Summative Assessment (SA) is usually rated at the end of an assessment task, unit or at the end of the year to evaluate the learning performance and accomplishment of the students. Summative assessment is done twice in the academic session to prove it as a symbol of the students' performance. SA consists of 30% marks for both the terms and it serve as evidence and record of the students' achievement to parents, teachers, stakeholders, students themselves and administrator for further reporting purpose (Refer Appendix B for Social Studies Assessment).

#### 2.3 TEACHING OF SOCIAL STUDIES AND THE PURPOSES

According to Jorgensen (2014), the concept of Social Studies was first originated from United States in 1916 as a newly created subject for the American curriculum. The report prepared by the United States Bureau of Education committee on Social Studies was the final document. Thus, implemented as a curriculum in the schools for students to learn, develop the core knowledge and skills required to be a good citizenship. Furthermore, the development of Social Studies as a subject in schools throughout many countries had a significant worldwide impact. Dwomoh (2018) stated that the best resources to trace the origin of Social Studies in United States at that era was from the text books. Many controversies regarding the year and origin of the Social Studies subject had occurred, but there lack evidences to support them. Regarding the Social Studies, different countries have their distinct histories in the curriculum. Osakwe (2010) asserted that learning Social Studies subject is to do with how human as a member in the society is organized and developed. It also deals with the study of human being and their interdependence and correlation in the society. Similarly, Social Studies is also a dynamic process that use information and skills for a better understanding of oneself, other people, societies, institutions, nations and the surroundings.

According to the (DCPD) Department of Curriculum and Professional Division Curriculum Framework (2022), Social Studies curriculum in Bhutan emerged way back

in 1992 and was first piloted in 28 selected Primary and Junior High Schools across the nation. The subject is a combination of humanities and social science that aims to enhance civic skills through scientific and historic knowledge, skills and attitudes. The Fourth King of Bhutan Druk Gyalpo Jigme Singye Wangchuk rightly said, "The future of our nation lies in the hands of our younger generations". Social Studies is one of the subjects through which help students to understand the world they live in, appreciate and respect the various culture, values and histories in the community.

Since Social Studies is a foundation for the subjects like History and Civics, Geography and Economic, it is given due importance at the primary phase. Social Studies is taught at primary level as one of the main subject form grades IV to VI. The students at that stage should learn and understand the concepts and values of the subject. The topics and content coverage in Social Studies are extensively from the environment and the world they live in. The diverse culture, history, world and an environmental science are part of the topics covered in Social Studies (Dorji, 2022).

According to DCPD (2020), the revised instructional time allocation for Social Studies subject was 4 periods with 40 minutes each in a week. The purpose of Social Studies subject in the curriculum is to create students to learn and make informed choices as a member of a society and value diversity of culture in an interconnected global community. By incorporating the diverse integration of content and methodologies within the Social Studies curriculum, it is envisioned to build transversal skills and capabilities in the students. The subject offer students to learn hands-on experiences such as field trip, inquiry learning, survey, investigation, observation and exploration to live in the 21<sup>st</sup> century world. The students' young brains are instilled with values like teamwork, respect, honesty, love and care, responsibility and honoring the rights of others. It also helps students to build problem solving, critical thinking and decision-making skills to be a capable and responsible person in their own communities, countries or in the entire world (DCPD, 2022).

#### 2.4 FIELD TRIP

#### 2.4.1 Definition of Field Trip

George Shillibeer was the first person to introduced Field trip approach for Quaker school at Abney Park in Stoke Newington, London, United Kingdom in 1827 (Akubuilo, 2010). A field trip is one of the strategies in teaching and learning process thus, many scholars defined it in various form with significance and purpose in it. According to Estawul et al. (2016), field trip is an instructional tool which focus more of student-centered learning. Teacher here act as a facilitator and assist student to involve fully in the learning process. Students here gain an experiential ideas and concepts related to the content of the subject learned. Tal and Morag (2009) described field trip as an instructional trip or school excursion were students experience to explore outside of the classroom at interactive locations. Field trip is a field excursion where students learn hands-on experiences which motivates them to learn better and gain learning satisfaction. Each student observes, explore and experience the natural settings beyond their classroom learning (Behrendt & Franklin, 2014).

Students who go for field trip beyond the four walls of the classroom can sharpen their skills of observation and perception by using their senses (Nabors, Edwards, & Murray, 2009). Field trip is where students visit a place outside the normal classroom and have different experiences through learning new things. Students try to get first-hand information of the real world through exploring, observing and investigating. Such learning can relate to their experiences and retention in memories will be long since they are directly connected to real life situations (DCPD, 2022). It is a study trip or excursion where students have outdoor activities which has a potential to influence to learn and excel (Ayaaba & Odumah, 2007). According to Tal and Morag (2009) field trip can be designed for the following educational purposes:

- 1) To provide students to learn first-hand experience.
- 2) To motivate students' interest in the subject.
- 3) To strengthen and develop the interrelationships.

- 4) To enhance observation and perception skills.
- 5) To inspire social development skills.

#### 2.4.2 Category of Field Trips

In the findings of Behrendt and Franklin (2014) formal and informal field trips can be organized based on the convenient and availability of the resources by the teacher, institute or an organization. Rennie (2014) stated that formal field trip consists of well planned, organized and documented where government agencies, museums, private firms and businesses offer thriving experiences learning for the students. For teachers it is found to be the most convenient way to organize such trip because students are bound with rules and ethics. Similarly, informal field trips are less organized where students have the authority of choosing their learning setting and the activities. Students feel much comfortable in learning and interacting during informal field trips.

According to Dema (2018), the field trip is categorized into three types: a day field trip, overnight field trip and an international field trip. Usually, a field trip happens in a day where students go beyond the classroom setting and do their activities through exploration, observation and experiencing. Also, a field trip could be organized within the school premises where students can learn in and around. In the words of Addo (2020), field trip can be a short distance instructional excursion or may require a transport service to reach the location of a trip. A field trip can take place at countless locations with an intent to learn, experience, observe and get exposed to different setting. Majority of the day field trips happen during the school days. Nadelson and Jordan (2012) asserted that a day field trip enhances students' learning with varied activities so that the students can engage themselves physically in the real learning world. Students will have ample of time and opportunities to interact and get to know each other during a long day field trip journey. Most field trips in Bhutan are organized during a day for betterment and successful learning.

Overnight field trips can be organized by teacher for students in certain exceptional case. The trip can enhance the teamwork and social skills among the

teachers, students and the community. The bond of love, respect and interaction among each will be developed. Students explore and learn to live independent in their lifetime through the experiences they get from the trip (Behrendt & Franklin, 2014). In the findings of Pace and Tesi (2004), during overnight trip students enjoy the sense of their freedom of living but some may need emotional support and guidance to stay. Not all the students will have a same taste of living their lives and doing things. According to Myers and Jones (2004), the teacher or an organizer of a trip should pre plan all the necessary documents and first aid kits for an emergency purpose. It is an overnight trip so it is unpredictable to know what is going to happen.

One of the expensive field trips is an international excursion. The international trip exposes students to a variety of cultural experiences that help them to learn about other people's culture and improve their intercultural competence and intelligence. Students also learn to familiarize and adjust to the new environment which develops their collaboration and connections among the members (Haygood, 2016). Those students returning after an international trip are found to have significant learning experiences and exposure. Students do well in terms of classroom learning and lab related work after their trip because of high retention memories (Houser, Brannstrom, Quiring, & Lemmons, 2011). Organizing such international trip is not really convenient for both the teachers and students. Many official documents need to be prepared and formalities to be completed before going on a trip. A formal field trip should be coordinated by the teacher if the visiting trip is an international level (Myers & Jones, 2004).

#### 2.4.3 Stages of Field Trip

A field trip can be in any types but should be systematically well planned and organized. Field trip needs thorough organization and administration from the teachers and administrators, moreover students should be well prepared to have a successful excursion (Dema, 2018). The purpose of a field trip is to have experiential learning from the fields and to relate students to classroom concepts. Students' interest, understanding, and motivation are the factors of an experiential learnings from the formal and informal

trips. Teachers play a vital role in preplanning, implementation and reflection to have an effective field trip for the students to learn (Behrendt & Franklin, 2014). According to Addo (2020), educational field trips will be more enriching and fruitful if it is well planned and organized, when there are affable relationships and effective communication between the head and the participants. A field trip will be successful one if the planner or an organizer genuinely consider those three stages before actually going for a field trip. Those three important stages are pre-field trip, during the field trip and post-field trip (Myers & Jones, 2004; Swaity, 2022).

# 2.4.3.1 Preparation or planning stage (Pre-field trip)

The teacher or an organizer should be aware of those places to visit or make a prior visit to the site before taking students for a trip. The diverse culture, religious beliefs and environment should be adjustable for students in a new place (Behrendt & Franklin, 2014). If the site is not suitable for the students to make a visit, teacher need to rearrange the site and the activities. Teacher should provide an orientation to the students prior to the field trip visit by describing the site and its arrangement, dos and don'ts so students understand the purposes of the excursion (Rennie, 2014). According to Swaity (2022), the teacher or an organizer's responsibility is to seek permission from the stakeholders in written, get consent approval from the students' parents or guardians, arrange transportation and scheduling the trip. It is the most important activities to complete in the pre-field trip phase before moving to the site. In a preparation phase teachers and students should arrange the trip with the text and probing questions to gather information and experiences.

Behavioral issues are the biggest concern for the teachers or an organizer to take students for a field trip. The issues can happen at any cost if it is not planned and alerted the students from the beginning of a trip (Addo, 2020). According to Myers and Jones (2004), students' safety is a key concern when a trip is organized. Students' safety and concern are held responsible to the teacher or an organizer till the field trip is completed. Thus, the teacher who organize the event should frame behavior norms based on the behavioral expectations from the students. The norms should be signed by

the students with the consequences if happens to misbehave during the trip. The teacher should print out the copies of the norms and orient to the concern stakeholders before leaving for a trip. The teacher should appoint captains to supervise and support the group in case of needs. In case of an emergency the first aid kits, an emergency contact information and numbers need to be arranged and taken by the concern teacher on the trip to evade complications.

# 2.4.3.2 Implementation stage (During the Field Trip)

The role of the teacher or an organizer is very much important during the trip stage. The teacher should encourage students to adjust in the new environment immediately after reaching the trip site and help students to become comfortable to learn new things (Behrendt & Franklin, 2014). The teacher has to supervise the overall functioning of the trip but monitoring the students' learning is the key responsibility. Teaching activities with different methodologies has to be done by the teacher throughout the trip. The teacher here acts as a facilitator or a guide to the students in learning and answering questions. During the trip students should be encouraged to ask many questions from their learning and observations and complete the worksheets designed for the trip. The worksheet assists students to learn better and keep focused in their learning to achieve the goals. The teacher has to be energetic and dynamic in motivating students to engage meaningfully in learning and promoting their interest (Myers & Jones, 2004). The student's prior knowledge learnt both from the classroom learning and through personal experiences helps to make connection with the field trip experiences. It further enhances the learning capabilities and skills in the students (Pasquier & Narguizian, 2006).

# 2.4.3.3. Evaluation stage (Post-Field Trip)

According to Myers and Jones (2004), post field trip is defined as the final stage trip for the teachers and students after having gone for an effective field trip. It is a stage where students gather their ideas, information and results for the compilation and reporting. The stage comprises of two components mainly debriefing and

culminating activity. In the debriefing session, the students share their experiences, learnings and observation made during the field trip. Similarly, students share their findings in the class for discussion and better understanding of the content learned. In this stage students are also encouraged to share their problems and feedbacks for the future learnings. The next component is a culminating activity where students apply their learnings and experiences gained during field trip into real life situations. Both the components should be put into practices as soon as the field trip is over.

With the high level of knowledge, commitment, perseverance and leadership of the teachers the students are benefitted and learn better from the field trip. Subsequently, the teacher or an organizer should be well prepared and be able to follow the field trip steps accurately in all the stages. It is the teacher who organizes the events for the students so, teachers should be given more trainings on pedagogical knowledge on field trip activities. Good teacher or an organizer has an ability to make students feel confident, enthusiastic and comfortable to go for a field trip (Ateskan & Lane, 2016).

# 2.5 CHALLENGES OF FIELD TRIP

The field trip method which is comprehensive in teaching and learning, gives students the opportunity to learn through doing rather than just hearing or reading about something. The approach is applicable and do able across all the grades and class sizes (Ezechi, 2018). Although it is the best strategy to reach out students across diverse places to explore and learn. However, taking students for field trip beyond the classroom setting has some drawbacks in the management and procedure. According to Lynch (2015), the challenges to organize field trip by the teachers are financial and time constraint, students' misbehavior and safety, arrangement of transportation, documentation and approval from the head of institutions. Addo (2020) asserted that a positive working relationship between a teacher and the institution's leader is important for an approval. It is clear that one of the issues affecting educational field trips is the teachers' attitudes.

#### 2.5.1 Financial Constraint

Institutions, parents and teachers require fund to organize field trip beyond school premises for the students to have an experimental learning. Any field trip require transportation to reach the learning destination. For an international and overnight field trip budget is essential to pay for the meals, lodging and transportation (Bower, 2016). According to Anderson, Kisiel, and Storksdieck (2010), institutional constraints can occasionally hinder teachers from maximizing the learning potential that extracurricular activities offer. If budget for field trip is not managed by the institutions, it demotivates teachers to organize the trip. Thus, teachers alone cannot bear the finance to embark the enriching trip. Some institutions and teachers just simply go for a digital field trip using computers due to lack of budget. Real field trips are replaced by the virtual field trips to overcome the budget constraint. With digital experiences students can enhance their learning but lack experiential learning with all senses involved (Behrendt & Franklin, 2014).

#### 2.5.2 Time constraint

Field trip should be made or managed with best schedule and time management. Due to time constraint many outdoor activities are cancelled especially the field trips. Teachers should be good in time management to plan a successful trip. More time is consumed in preparing documents and seeking an approval from the concern head of the institutions. Teacher has to plan and prepare the field trip that doesn't affect other subjects and activities in the school (Bower, 2016). Subsequently, teachers have to prepare the detail lists and contact information of the students for meals, medications and if in case of an emergency. That is why lack of time and preparedness kills the motivation for coordinating field trips (Looney, 2015). Preparation with full dedication and interaction with the stakeholder makes a quality and fruitful trip. The familiarization tour to the site by the teacher should be done before the actual trip begins. Thus, teacher find it difficult to manage the time in organizing the field trips. Most of the field trips are discouraged due to time constraint and management (Behrendt & Franklin, 2014).

#### 2.5.3 Behavioral issues

Teacher should model the behavior of the students during the field trips. The destructive behaviors may hamper the learning as well the trip. Teacher should keep the students engaged throughout the session to minimize the unethical behaviors. If modeled properly, the students will have a lifelong learning and experiences (Wilson, 2011). Field trip is an outdoor session and it is likely to expose unethical and ill-manner behaviors by the students. This can create havoc to all the participants in the trip leading to unsuccessful learning. Obviously, it is difficult for a teacher to guide and control a large group in a vast environment than the class. It is conceivable to have behavioral issues in the new surroundings during the trip. Unhealthy behaviors will demotivate teachers not to organize such kind of trips. Students with behavioral issues are less likely to visit the site and left out because of their prior behavior in the school premises or on excursion. Teacher here psychologically or morally lowers the students' self-esteem not academically but because of the behavioral issues. Thus, teachers should frame norms and expectations before the field trip with the students and enforce the norms strictly to minimize the misbehavior (Bower, 2016). Adults should be positioned at the front and back of the group throughout the visit. A teacher should remain at the back of the group to have clear view of all the students so it will be convenient to supervise them (Love & Roy, 2019). 2.5.4 Students' Safety/ Trans Rangsit Uni

Field trip is an enriching and inspiring session that enables students to learn and put the concepts in to practice. However, students' safety is the most essential during the whole trip. Students outside of the classroom entails dangers and hazards that may have unintended consequences as well as the potential for greater accountability. So, teachers must be conscious and vigilant to evade such issues. For the safety of a teachers, students and the institutions, a written consent document must be obtained before the trip. There are possibilities of unforeseen incidences such like accidents, sickness, and missing students are certain to happen (Dema, 2018).

Contact and medical information of the students and teachers should be obtained by the organizer before the departure. A copy should be given to the institutions or administrators for an emergency contact. In a team at least there should be a well-trained person in first aids procedures. An emergency first aid kits must be carried on a bus or any other visiting places for a safety reason. Especially during overnight and an international field trip, parents, guardian or a medical person must escort the students who require medical care (Love & Roy, 2019). According to Myers and Jones (2004), students' safety is the first priority while organizing the field trip. Checking the site safety and arranging the first aid kits for a medical emergency is the teachers' responsibility.

# 2.6 ADVANTAGES OF FIELD TRIP

Many studies have proven that field trip is the effective method for teaching students at all grade levels and have shown a significant improvement in the students' social, affective, and cognitive abilities. According to Abudu and Donkor (2014), students' lack of readiness for the job market was caused by the infrequent use of field trip approach in schools. Through the findings it is clear that field trip method in teaching and learning has a significant role and benefits in shaping students with social and academic skills.

# 2.6.1 Enhancing Academic Learning

Field trip is an enriching, offer students hands-on learning opportunities and the chance to explore in a way that improves their knowledge and cognitive abilities. Further, the academically challenged students are motivated to learn more and perform better in the academic settings (Behrendt & Franklin, 2014). According to Addo (2020), students perform extraordinarily well in the test and retain more information than those who did not participate in the field trip. Academically improvement through field trip was further supported by Kennedy (2014) that field trip expands students' educational opportunities outside the typical classroom setting, improving the learning outcome for all the students. Additionally, they also comprehend how to use the knowledge they

have learned in the class through real life situations which helps them recognize the value and practicality of their education.

In the research done by Dorji (2022) mentioned that students learn better and their academic excel when expose to the outside community and environment. Learnings based on field trip exposes students to the natural settings. Based on the findings of Musa et al. (2018), using field trips as one of the approaches for teaching topics connected to biodiversity improves the intrinsic motivation of science students and has a huge impact in the students' learning and the academic result. Belin (2018) proclaimed that experiential group students did significantly better than the controlled group during the field trip visit at science center (Museum of Discovery). The students who visited the site performed much better in their test and expressed enthusiasm to revisit the place in future.

# 2.6.2 Experiential learning

Experiential learning which is trustworthy, more exploration and sensory-based learning is best achieved through the field trips. Students must touch, listen, smell, observe and connect their learning with their previous knowledge. Students at any grade level can develop their knowledge and skills through experiential learning (Behrendt & Franklin, 2014). Researchers like Nabors et al. (2009) supported that students not only learn from their field trip site but get to experience the diversities from different neighborhoods and communities as well. Further, Rugaiyah (2018) asserted field trips can provide social trainings to students who are from different social background and learn to interact and experience. Moreover, students get relevant and concrete real-life experiences through field trips otherwise which is not possible in the classroom. In the findings of Adams (2018), students and teachers get to explore different environment and experience new learning which is not happening within the classrooms.

# 2.6.3 Enhancing skills

Students acquire different skills through the field trip visit. The following researchers has proven the acquisition and development of skills through experiential learning.

Field trip is one of the methods to learn language skills in the students. It helps in acquiring vocabularies to learn language and improve their communication skills by interacting with people from diverse background (Wulandari, 2022). Similar research done by Homfung and Makjui (2017) declared that communication skills in English language could be developed through field trip because English is spoken widely in the globe. Through field trips positive social skills among teachers and students are further developed. Students' courage and self-esteem are broadened and participation in any events are maximized. Students get to socialized and interact across various settings and situations (Behrendt & Franklin, 2014).

In addition, students interact with peers and the people from the community, learn to develop collaboration and interpersonal skills during field trips. Their critical thinking and innovation skills are enhanced by asking questions and attending expert talks (Rugaiyah, 2018).

# 2.7 MULTIMEDIA TECHNOLOGY

Multimedia term was first invented by Bobb Goldstein in 1966 at Southampton Long Island for his show "Light Work at L' Oursin". Over the forty years of the invention multimedia word has changed its meaning several times. The correct meaning of multimedia came into existence ever after 1990s. The word multimedia is a blended words of multi and media. The word multi means more than two and media is a plural form of medium which refers to mass communication. Multimedia can be described as multiple media to communicate. Multimedia is the use of digital gadgets to process all kinds of information such like images, texts, videos, audios, and etc. It helps to store and pass on the information or communicate in more than one mode. Multimedia allow

user to navigate, engage, create, and communicate the information from one location to another using computer (Shaikh, 2011).

According to Pavithra, Aathilingam, and Prakash (2018) further described multimedia as electronic devices used to store multimedia content. It comprises of computer-controlled blending of animation, audio, graphics, videos, photos and text where any sort of information is stored and communicated digitally. Multimedia can also be used in live presentations. With the processing devices such like high-tech and automated gadgets, multimedia can be captured, documented, presented and communicated. Any performance now must have a mandatory component of multimedia from entertainment to education. Similarly, researchers like Guan, Song, and Li (2018) had defined multimedia as the synthesis of many media types such as text, images, audio, video, and animations used with the help of technology for the purpose of understanding and improving the standard of learning. Moving and static images in multimedia helps to assist verbal teaching for the teachers. It can also develop students for better communication and comprehension skills (Alemdag & Cagiltay, 2018).

Multimedia technology is increasingly being used in Bhutanese educational system. Teachers use lap top, projector and smart phone to teach students through audios, videos and PowerPoint presentation (PPT). Electronic devices are necessity for classroom instruction and learning in this digital age. Consequently, the researcher here integrates field trip with multimedia technology using short videos and PowerPoint presentation on the topic 'Local Government' in Social Studies of grade 4 Bhutanese students.

# 2.7.1 Multimedia Technology (Video and Image) in Field Trip

Researchers have conducted numerous studies on the use of multimedia technology (smart phone) to record videos and images in the field trips that developed in beneficial learning outcomes. The use of multimedia technology in teaching and learning nowadays is greatly influenced by the modern era. Moreover, field trips expose students to the outside environment with positive impact in learning. The integration of

multimedia technology (video and image) in a field trip further provide enthusiasm in learning, exploring and experimenting especially students who visit zoo and museum. The use of multimedia technology with field trip can be done with all the grade level and it is a fun learning (Scott & Matthews, 2011).

In the findings of Hillman, Weilenmann, Jungselius, and Lindell (2015), the usage of multimedia technology (smart phones) during museum field trip was declared to be an enriching and heuristic learning. Students were provided with worksheets to complete it using their own mobile gadgets. They were encouraged to document their visits either through short videos or images related to the subject content. Similarly, researchers like Charitonos, Blake, Scanlon, and Jones (2012) declared that the using social media and mobile devices during a field trip to a museum was technology-enhanced museum learning allowing students to investigate the lesson and experiment the visit.

On the field trip to the museums, students use multimedia technology (smart phone) to capture images and videos. Such videos and experiences can be related by students during post-field trip activities in the classroom. It is further supported by the research done by Medzini, Meishar-Tal, and Sneh (2015) that Geography teachers in the 21<sup>st</sup> century must integrate the use of multimedia technology (smart mobile) in their lessons both inside the classroom and in the field trip. Students in geography classes used mobile devices to record videos and images from the field trips because of their portability, agility and light weight. The purpose of the field trip was to teach students how to use mobile technology for learning experiences throughout the entire excursion.

# 2.7.2 Multimedia Technology in Teaching and Learning

In order to make a lesson interesting and engaging during the teaching and learning process, teachers should come up with various strategies incorporating with multimedia technology. The following numerous researchers found out that the integration of multimedia technology in teaching and learning helps to create an excitement in the students' learning and achievement.

According to Abdulrahaman et al. (2020), the multimedia technology has to be categorized accordingly with the appropriateness and authenticity for teaching or learning in the classroom. The use of devices in the right situations during teaching and learning has huge learning impact for the students. It is further supported by Coleman, Gibson, Cotten, Howell-Moroney, and Stringer (2016) that the learning environment shifts from being traditional method to a student-centered with the proper usage of ICT in the classroom. Through the shifting methodology of teacher-centered to the student-centered, teachers here just facilitate the students and letting students to explore and learn on their own. The application of multimedia technologies in the learning were found to be interesting, motivating, enriching and interactive.

Multimedia technology strengthens the educational process by fostering greater interaction between teachers and the students. It enables teachers to create an effective and inclusive teaching and learning resources for students with the multimedia devices (Milkova, 2012). Further, the students' progress is measured in terms of an effectual used of multimedia technology in the classroom. Teachers can also provide instant feedback to the students through the utilization of technology tools. Students will be inspired to engage in collaborative team work and perform better in the academics (Rigzin, 2021).

# 2.7.3 Social Studies via Field Trip with Multimedia (Video/Image)

Teaching of Social Studies subject with incorporating multimedia during field trip has huge impact in their learnings and retention as suggested by some researchers below. Multimedia technology use in teaching and learning has grown significantly over the period which has enhanced and trend. The use of video recording for instructional purposes inside and outside the classroom has increased as a result of technological progress and innovation. The portable technology gadgets are used to film videos and record images (Seifert, 2019). According to Walker (2006), students used mobile digital technology to record audio, images and videos while on field trip to museums, botanical gardens, and other cultural heritage sites in order to document and share their experiences through social learnings. The information is uploaded to the web site where

the recorded trial can be modified, expanded upon, and rearranged in a way that makes sense to the students. Due to the visitation of many locations, such an excursion trip gained knowledge and experiences. Similarly, it was further supported by Vavoula, Sharples, Rudman, Meek, and Lonsdale (2009) that Students who participate in the field trip to the historical museums and monuments take images, make notes and record short video clips. These materials are then retrieved and explained on a website for use in follow up learning activities. However, students must be briefed well with the instructional guidelines in using multimedia devices (smart phone) during the field trip (Refer Appendix N for Instructional guidelines for using smart phones during field trip).

# 2.8 CONCEPTUAL FRAMEWORK FOR APPLICATION OF MULTIMEDIA TECHNOLOGY IN THE CLASSROOM

The technology development has created opportunities for teachers to produce educational videos for the effective lesson delivery. For successful delivery of educational content, multimedia technologies including images, videos and PowerPoint Presentation (PPT) are frequently used in the classrooms. The correct technology with the appropriate instructional devices used in the lesson can actually increase the learning capabilities and motivation of the students. Similarly, in the findings of Mayer (2002, 2003) the use of multimedia technology in the classroom has a huge impact in the students' learning and retention. Students learn more deeply from words and images and videos than from words alone. Thus, teachers must use the informative multimedia devices with right measures as mentioned below:

It is crucial for teachers to verify the appropriate instructional media with topic relevancy before actually presenting the PowerPoint and short video clips to the students. Videos and texts used in the PPT should be authentic and always adapted to suit the level of the students. Before beginning the presentation, the teacher must once again review the PPT slides and video clips. Students must be given precise instructions with learning objectives before and after watching the multimedia devices (videos and PPT). Any preparation regarding the use of media (videos and PPT) need to be done before hand so the students could enjoy the class without any obstructions. To build

students' curiosity in the learning, teachers can explain the concepts and objectives of the content before actual teaching or presentation (Lopez, 2016).

During the actual class or presentation of the lesson, teacher should be attentive enough to address the students' varied needs and encourage their learning throughout the actual class or presentation of the lesson. Teacher should create engaging lessons so students can enjoy every video and PPT. For better retention of the lesson, an interactive session should be conducted. The use of multimedia technology by the teacher should involve students in enriching activities and offer them with extra knowledge as per the lesson (Rigzin, 2021). According to the cognitive theory of multimedia learning by Mayer (2002, 2003), the system of information processing in humans has two working memory channels. Auditory, verbal and visual/ pictorial information are processed by humans using two different methods. When information is conveyed graphically, such as through animations, video or text, human brain first processes the visual and aural channels before moving on to spoken words. Prior to verbal processing, humans first process the information through the auditory channel. The processing channel's capacity assumption is very constrained. The students may only be able to mentally digest one narrated sentence and around 10 seconds of animation at once. Students can only learn actively when they watch videos and PPT and engage in cognitive processing that divides the content into verbal and graphical components based on prior knowledge. As a result, there may be significant learning outcomes with high retention. Figure 1 presents the conceptual framework for a cognitive theory of multimedia learning.

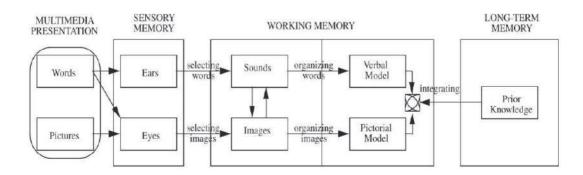


Figure 2.1 Cognitive Theory of Multimedia Learning

Source: Mayer, 2003, p.129

According to Anwar et al. (2020), the use of videos and PPT is widely practiced in various institutions and schools across the world. It is used as one of the multimedia instructional tools as a learning medium. Such incorporation of devices in lesson facilitates for interactive multimedia learning. There can be an interactive session between the teacher and the students after the multimedia (videos and PPT) lessons. Through meaningful interaction, it allows students to communicate their thoughts and understandings. Teacher can also evaluate their students' learning by posing questions and assigning written follow up tasks. Subsequently, use of multimedia technology in the teaching has huge impact over students' motivation, engagement and learning hands-on experiences with fulfillment of the lesson objectives. Thus, teachers must be vigilant while using multimedia devices in the classroom and it is obvious to take note of all the stages of using multimedia technology tools in teaching.

# 2.9 ADVANTAGES OF USING MULTIMEDIA TECHNOLOGY IN TEACHING

The advancement of technology has a significant impact on all aspects of life including education. Across the world, teachers and students are coming up with creative and new methods to enhance learning and make it more dynamic, longer lasting and even more relevant to life outside of the classroom. The lesson is being delivered in a variety of ways including multimedia materials and approaches thus, it helps students to learn effectively. Further, integration of multimedia technology in the lesson has lot of benefits to teachers and students (Almarabeh, Amer, & Sulieman, 2015).

Similarly, the researchers like Jamilah, Raharjo, and Samsudi (2012) asserted some of the benefits from the use of multimedia technology in the teaching are: 1) An interactive class increases the students' enthusiasm for learning. 2) It enables students to study independently in accordance with their learning styles with visual, auditory, and motion aptitudes. 3) Overcome physical constraints, time constraints, energy shortages, and sensory limitations. 4) Students can avail different learning material that does not always use verbalism. 5) It generates the same incitements by combining experiences.

With the advancement of technology in the digitalized era students opt for multimedia learning. Making the switch to multimedia learning has several benefits. Students can understand the complex concepts more easily using multimedia devices. It will stimulate the brain and retention power increases to solve problem skills in students. The incorporation of lessons with multimedia enriches positive emotions and with the positivity mind students learn better (Bhadauria, 2019).

The use of multimedia in teaching and learning is cost effective. Students can avail learning materials much cheaper and easily at their convenience. It can save time, money and effort to learn and access resources. People with disabilities can also access the learning facilities. Students can have realistic learning through real life situations without risk and expenses involved. Students' visual literacy skills enhances with visual aids such as images, videos and PPT. Students also can avail online information easily through the use of multimedia devices (Mantiri, 2014).

# 2.10 RELATED LEARNING THEORIES

Different psychologists introduced various theories in line with the development of human brains and the learnings. Psychologists has discovered that each human brain is distinct and that experiences play a role in the various learning styles. The application of learning theories by teachers in the classroom is vital since they support students' academic success. Among many other theories, the following experiential learning theory and sociocultural learning theory work best with field trip method.

# 2.10.1 Experiential Learning Theory

According to Kolb, A. and Kolb, D. (2005), experiential learning theory was instituted by prominent 20<sup>th</sup> century scholars and great theorist including John Dewey, Jean Piaget, Kurt Lewin, William James and Carl Rogers. Their theorists consist of how experience plays a major part in developing human learning. David Kolb was also a theorist who published a model in 1984 on experiential learning after getting an influential from other great theorists. Kolb (1984) proclaimed that in a learning there

should be an experience, and the gained knowledge and experiences should be applied it into an effective learning.

Kolb developed his theory of experiential learning on six intentions based on the great theorists. 1) Learning is viewed as a process rather than as a series of results. 2) Students' attitudes and opinions about the topics are examined and adjusted as they learn. 3) In the process of learning students should consider their past experiences and apply them to what they are learning at the moment. 4) Learning is an adaptive process that should be interwoven with students' thoughts, emotions, behaviors and perceptions. 5) Learning is a collaborative process between person and their environment. Students experience the current ideas and adjust to the new setting. 6) Through experiences students create and replicate their knowledge. Thus, the experiential learning theory allow students to experiment the concepts, reflect on what they have learned, and compare it to their earlier experiences.

Learning hands-on experience, reflecting prior knowledge and implementing it in the learning is the concept of an experiential learning theory. Experiential learning theory consists of four stages of learning, concrete experience, reflective observation, abstract conceptualization and active experimentation. 1) In concrete experience stage, students face a new experience in a new settings or situation. 2) During reflective observation of new experience stage, students reflect on the new experience based on their prior knowledge and experience. 3) Students construct a new ideas or knowledge based on the existing concepts in abstract conceptualization stage. 4) Finally in the active experimentation stage, new concept which has been created based on the observation and past experience is applied to a new learning (Mcleod, 2023). A field trip provides an opportunity for students to learn through first-hand exposure in new environment and concepts. Beyond what they learn in the classroom, it enables students to learn in real world circumstances. A field trip learning is a component of Kolb's first concrete experience stage in experiential learning cycle (Young, 2017). With the experiential learning, students get motivated and they will be enthusiastic to explore the settings and learn hands-on with the study on field trip through multimedia technology.

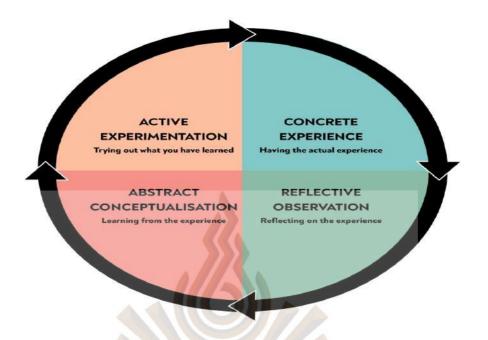


Figure 2.2 Kolb's Learning Styles and Experiential Learning Cycle.

Source: Mcleod, 2023

# 2.10.2 Multiple Intelligence Theory

Multiple intelligence theory of Howard Gardner is something to do with human intellectual potential which is inborn and difficult to modify. Human have different kind of intelligences and skills in doing and learning. It has the potential to solve the problems in multiple ways by acquiring new skills (Stevens-Fullbrook, 2019). Human relate and try to learn other abilities and talents based on their inborn skills. Human not only have an intellectual capacity but possess many kinds of intelligence. Intelligences are considered to be the talents and abilities that human acquire and do it. Human build up the other multiple intelligences based on the three broad categories of Visual learning, auditory learning and kinesthetic learning. Human beings are gifted and born with nine different types of multiple intelligences. The nine Howard Gardner's multiple intelligence are Verbal-linguistic intelligence, Logical-mathematical intelligence, Spatial-visual intelligence, Bodily-kinesthetic intelligence, Musical intelligence,

Interpersonal intelligence, Intrapersonal intelligence, Naturalist intelligence and Existential intelligence (Zhou & Brown, 2015).

The following Howard Gardner's multiple intelligences best correlate the study with field trip integrating multimedia technology. The students' multiple intelligences will be enhanced with the great positivity in learning satisfaction. Verbal-linguistic intelligence is something to do with speaking or writing. Human use it as a means of communication (Stevens-Fullbrook, 2019). Students' verbal-linguistic will be improved through speaking, sharing and writing their thoughts with the field trip method. Visual-spatial intelligence is something to do with observing with visual senses. Students understand better and their retention in learning will be developed through visual teaching aids. Interpersonal intelligence in students will definitely be enriched during the field trip with multimedia technology. Students need to plan, interact with the stakeholders and carry out their work to have an effective and efficient learning.

# 2.10.3 Sociocultural Theory

Psychologist Lev Vygotsky developed the sociocultural learning theory with the believe that people are influenced by an individual's cognitive development and social interaction around them. Social interactions are related to students' cognitive development and learning. Sociocultural learning theory helps in developing human with acquiring cultural values, beliefs, skills and problem-solving strategies through interaction with the members of society (Mcleod, 2023).

In the sociocultural learning theory, the learning process for student is greatly influenced by their environment. Cultural, language and the zone of proximal development are three key concepts of Vygotsky's theory. According to Vygotsky students from diverse cultural background get to socialize and know about its distinct culture and beliefs. Language is a part of culture where students' language acquisition develops. Through this theory students get to interact and mingle with their peers, teachers and the society. It has a great impact in their learnings and also it can influence them easily (Cherry, 2022).

Vygotsky's sociocultural learning theory is very much inclined with the field trip approach. In a field trip students get to explore the outside environment with the great intake of academic achievement. Subsequently, field trip also promotes students to discover cultural diversity and broaden cultural learnings. It can also develop communication skills in students and improve their learnings (Lanier, 2017). Field trip is an enriching approach and it is very much related with the sociocultural learning theory, thus, teachers here facilitate and motivate students to perform better in their academic learnings. Therefore, the above-mentioned theories are more related and applicable to the researchers' study on the topic integrated field trip with multimedia technology learning. It will be the best method to teach Social Studies subject in Bhutan since the contents are interrelated with field activities.

# 2.11 RELATED RESEARCH

Researchers across the globe have done numerous related research on the use of field trip with multimedia technology. The studies were done on various subjects such as Science, English, Mathematics, Geography and Social Studies with different grade levels. The findings from the research have shown that the use of field trip with multimedia is an effective strategy in the mentioned subjects. The following are some of the related findings about the recent study on field trip with multimedia technology.

In an investigative study done by Dohn (2010), a qualitative method was applied to 12<sup>th</sup> grade students in one of the public high schools on the island of Funen, Denmark. A total of 16 students (13 girls and 3 boys) were participated in the study. The teacher taught the concepts and assigned students to make the aquarium before the actual field trip. Students and the teacher visited the aquarium and fishing harbor in the heart of Kerteminde, Denmark. Students explored the aquarium with number of programs with excitement and enthusiasm. The museum docent gave talks and video presentations to the students for better learning. Students even went beneath the water and experienced with different species living. During the trip students were advice to record video clips and images of an animals and plants. The recorded videos and images were made to present in the class during post trip. The results show the field trip integrating

multimedia at the aquarium were astonishing and inspirational with knowledge acquisition, social involvement and learning hands-on.

According to research conducted by Scott and Matthews (2011), It was a field trip integrated with multimedia technology at the zoo. The qualitative research was carried out in the science subject in primary level with different grades. At the zoo students were assigned to watch different animals in their particular habitat. The activity was done in groups with data sheet to fill in. Students watch out different animals and took images and short video clips. The group leader records the students' observations on the sheet. The sheet consists of animal habitat, colors and sizes. The recorded images and videos were used for an activity during post field trip. The findings revealed that students' satisfaction and engagement was exceptionally high and the integration of multimedia in the field trip was so powerful in learning and exploration.

In another research carried out by Charitonos et al. (2012) was to investigate the effectiveness of using multimedia devices while visiting museums beyond classroom. The use of social and mobile technologies was to enhance the visiting experiences of the students. The research was carried out in a secondary school in Milton Keynes with 29 students age ranging from 13-14 years. Students were divided in to eight groups and visited the museums of Modern London. The students were advised to follow the predefined trail and collect some evidences with the use of mobile technology (images, texts and videos). The average time spent in each museum was 20-25 minutes. Back in the class students were asked to present their findings from the museums. Students presented their work to the class and exchanged feedbacks and commendations with friends. Their findings were shared with the friends for better understanding and retention. The study concluded that students could follow the trails independently and it was an enriching learning and experiences with effective use of multimedia devices.

The study conducted by Lo and Quintana (2013) was to examine the effectiveness of field trips using mobile technology to collect data and to ascertain the student's achievement. The study was conducted for a period of two weeks during summer camp. The study was carried out in a botanical garden and a local river. The

research participants were from grade 5 and 6. Students were made to do inquiry about the water quality and botanical garden. The researcher used both pretest and posttest to find out their learning achievement. They used their mobile phones to collect data through capturing video clips, images and audio. Students did far better in their posttest compared to the pretest. The data collected were reviewed in the classroom during post trip. According to the findings, field trip with multimedia technology (smart phone) had great impact in learning science. It has motivated the students' curiosity to learn science using multimedia devices and it has enhanced their learning achievement.

To study the impact of field trip with technology, Amosa, Ogunlade, and Atobatele (2015) conducted a quasi-experimental study. The main purpose of the study was to find it out which method of teaching really enhances the learning in students. The total of 50 students from the Upper basic school in Ilorin, Kwara State were selected as a research participant. Students from two intact classes were randomly divided with 25 each in experimental group and 25 students in a control group. An intervention and a control group were used in this study by the researcher. The pretest and posttest were done with both the groups before and after teaching the students. The experimental group received the treatment using field trip with technology while the control group was taught using expository approach. After the treatment, all groups were post tested using the same pretest questions. From the study, the findings revealed that students using field trip with technology performed far better than students taught expository method. Students acquired practical skills, enhanced retention knowledge and made abstract ideas concrete through the use of field trip with multimedia.

In order to investigate the impact of field trip with multimedia technology devices, Price, Jewitt, and Sakr (2016) conducted a study. An exploratory case study approach was done to examine how multimedia technology facilitate exploration and understanding of history in situ. A total of sixty students from grade 5 (aged 9-10 years) took part in the study from London primary school. The teacher divided the class into pairs to foster collaboration and better learning. The activity was designed based on history curriculum learning on World War II. With the help of multimedia devices, it enhanced students' exploration and experience of the place during the history learning

activity. Students used iPad with the app to create the historical site taking photos, recording audios and videos of different parts. The researcher even recorded every movement with videos with a camera and acted as a facilitator. The analysis and evaluation were done based on the recordings. All students enjoyed the trip with their engagement and experiencing making own visual and audio artefacts. The results indicated their learning satisfaction and lesson achievement were fulfilled through the field trip with using multimedia devices.

Demirel and Ozcan (2022) conducted a qualitative study with grade 7 students on a field trip to a waste dumping yard and recycling plant. The research was carried out with sampling of 14 secondary school students of grade 7 on the topic domestic waste and recycling. Before the trip students were briefed about the concepts and pretest on waste recycling were done. Necessary permissions and documents were obtained before the actual trip. During the trip students could view the dumping yard, recycling process and packaging wastes. An interactive session between the students and the staff made the trip enriching. Moreover, students recorded audio, video clips and images with the observation notes to collect information from the trip. After the trip students were asked to answer the questions and asked volunteers for an interview session. Students shared about their learning experiences which were video recorded for further learning. Those videos were presented to the class as a lesson recapitulation. So, through the findings, students' enthusiasm and curiosity about the lesson increased. The trip was an enriching and had broaden the concepts of waste and recycling.

Through the massive studies conducted by different researchers with different grades and the subject areas, it revealed that field trip with multimedia technology (videos and PPT) has positive impact in both students' learning achievement and satisfaction. Field trip is the only approach where students learn and experience with their senses beyond the classroom learning. Moreover, the use of multimedia technology (smart phones) to record video clips and images from the field makes it more enriching, efficient and effective lesson.

# **CHAPTER 3**

# **METHODOLOGY**

This chapter describes in detail some of the most important research methodology themes like the research design, participants and the research instruments, the procedure to collect data, validity and reliability of the instruments and data analysis procedure.

# 3.1 RESEARCH DESIGN

In this study the researcher used a quasi-experimental design with a blend of quantitative and qualitative approaches. The mixed method research design is the finest methodology which enables the researchers to generate quality research and consistent results from the study. In the mixed method the research design consists of planned blend approaches for data collecting, data analysis, and interpretation of the evidence (Shorten & Smith, 2017). The reliability and validity in the findings of the research makes the mixed methodology the best design (Mckim, 2017).

The researcher used this method to study the effectiveness of field trip integrated with multimedia technology in grade 4 Bhutanese students. Thus, the study was to determine the students' learning achievement and satisfaction through the topic 'Local Government' in Social Studies subject using field trip with multimedia.

In order to get the reliable and valid results, pretest and posttest were done. The quantitative data was collected through pretest before the use of field trip with multimedia technology to the research participants. After the teachings with the use of field trip integration with multimedia, the posttest was carried out to collect the quantitative data. Semi-structured interview was used to determine the learners'

satisfaction and achievement after using field trip with multimedia technology. Figure 3.1 below describes the research design of the study.

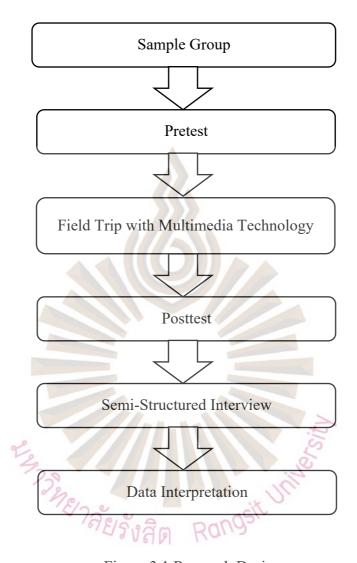


Figure 3.1 Research Design

# 3.2 LOCATION OF THE STUDY

The study was carried out in one of the primary schools under Chhukha district. The district falls under the southern region of Bhutan. The school was established in 2001 in a semi urban settlement. The school has an enrollment about 130 students with grades ranging from pre-primary to grade 6 in the academic 2023 year.

# 3.3 RESEARCH PARTICIPANTS

The target group of participants for the study was grade 4 students from the research school. The research participants consisted of 30 students with mixed gender within the age range of 10-11 years. The research school has only one section of grade 4 during the academic 2023, thus, the researcher used all of the students from grade 4 as the research participants during the entire study period. Table 3.1 presents the detail of the research participants.

Table 3.1 Demographic profile of the research participants

Age	Ge	Total students	
	Male	Female	
10-11	7	9	16
11-12	6	8	14
Total	13	17	30
Percentage	43.3%	56.7%	100%

# 3.4 RESEARCH INSTRUMENTS

Research instrument is the specific tools used by the researchers in collecting the information from the research participants. This research tools assist researcher to collect, measure and analyze the data and information from the ground (Lee, 2018). To produce quality research with reliability and valid results, the study was carried out based on the three intervention research instruments, that is lesson planning, pretest and posttest (learning achievement exams), and semi- structured interview.

#### 3.4.1 Instructional Instrument

The researcher used four lesson plans as an instrument tool to teach the students on the topic 'Local Government' from grade 4 Social Studies curriculum. The lessons were delivered through the integration of field trip with multimedia technology.

#### 3.4.1.1 Lesson Plans

The researcher designed 4 lesson plans to teach the Bhutanese students of grade 4 on the topic 'Local Government' from the Social Studies subject. The four block lesson plans consist of 90 minutes each. The lesson plans were prepared with incorporating field trip and multimedia technology (videos and PPT) to have an effective teaching and learning unlike the traditional field trip plans. The researcher used PPT to deliver the lesson context with videos, images, and even field trip instructional guidelines in order to make the lessons more entertaining for students and to enhance their learning retention (Refer Appendix O for the lesson comparison and the PPT images used). The topic in the lesson plan was further divided into four sub topics: Local Government, Role of the Gup and Gewog Administrative Officer in the gewog, Mangmi and Tshogpa's role in the Local Government and other civil servants' duties at the gewog level. The lessons were prepared infusing all the lesson components which was taught over the period of four weeks (Refer Appendix E for the lesson plans).

#### 3.4.2 Quantitative Data Collection Instrument

# 3.4.2.1 Achievement Exam (Pretest and Posttest)

The achievement test was set as per the Bloom's Taxonomy and standard guidelines of Bhutan Council for School Examination and Assessment (BCSEA). The learning achievement pretest was conducted before the actual intervention of the lessons. The same achievement test questions comprised of 10 marks multiple choice questions, 5 marks true or false and 5 marks short answer questions was conducted after the intervention as posttest to analyze the learning achievement of the students. The

learning achievement test was prepared out of 20 marks from the topic 'Local Government' from grade 4 Social Studies (Refer Appendix G for Achievement Exam Questions).

#### 3.4.3 Qualitative Instrument

#### 3.4.3.1 Semi-Structured Interview

In order to find out the students' learning satisfaction, qualitative instrument of semi-structured interview was used. According to DeJonckheere and Vaughn (2019), semi-structure interview in the research will assists researcher to conduct their study efficiently by collecting open ended data from the participants. Those open-ended data from the students can be observed as their feelings and perceptions about the topics and strategies covered. It provides researchers with the true thoughts and understandings of the participants.

To find out the learning satisfactions of the participants from this study, the researcher used semi-structured interview to collect data on the use of field trip integrated with multimedia technology after the intervention. It consisted of 5 questions framed for the semi-structured interview (Refer Appendix I for the Semi-Structured Interview Questions). The informal interview with the research participants was done face to face for around 4 to 5 minutes. The language used for the interview was optional, participants had the choice of language either in English or Dzongkha (national language) to respond. Their responses were audio-recorded by the researcher for further translation into English. Those semi-structured interview data were further analyzed using thematic analysis system.

# 3.5 CONTENT VALIDITY AND RELIABILITY OF RESEARCH INSTRUMENTS

# 3.5.1 Content Validity

Validity of the content is defined as how well a method measures what it is designed to measure (Taherdoost, 2016). In this study, three seasoned expertise validated the research instruments. The lesson plans, tests items, and semi-structured interview questions were validated by a professor from Rangsit University, Thailand and two experienced Social Studies teachers with master's degree from the schools in Bhutan (Refer Appendix K for the expertise details). The validity of the instruments was carried out using the Item Objective Congruency Index (IOC) by the expertise to check the alignment of the items with the learning objectives. The following describes the results of the IOC index ranging from -1 to +1. The rating +1 on the Item Objective Congruency Index signifies  $\Sigma$  that the items clearly match with the objectives set. If the rating is 0, it means that the items set as per the objectives are neutral. It is uncertain whether the items meet the objectives or not. Further, if the rating is -1, it clearly indicates that the items set for the research does not meet the set objectives.

The formula for calculating Item Objective Congruency Index (IOC) is  $\Sigma$ =r/n, where 'r' stands for the sum of the score of an individual experts and 'n' refers to the number of experts. To be more precise the value of the test item is more accurate and reliable between 0.67 and 1. Subsequently, the value of the test item below 0.67 is considered invalid and items in the instrument required to reset it.

The research instruments were validated and rated by an expert from Rangsit University and two seasoned teachers from Bhutan. The IOC for lesson plans, learning achievement test questions and the semi-structured interview were rated +1 which was above 0.67 (Refer Appendix K for the names of experts and Appendix L for paired sample t-test result).

# 3.5.2. Reliability

The reliability test is important to know and validate the achievement test items for the study. To check the reliability of the achievement test items of the study, the researcher conducted a reliability test of 10 marks multiple choice, 5 marks of true or false and 5 marks of short answer questions with 31 students of grade 5 in the same school. According to Flateby (2017), the most standard and reliable way of finding reliability coefficient of the learning outcome test is Kuder-Richardson equation (KR-20). The researcher used Kuder-Richardson formula KR-20 to check the reliability of the achievement test, where the reliability score was greater than 0.70. The reliability test result obtained for the study was 0.80 which was higher than 0.70 (Refer Appendix M for the Reliability Test). Therefore, the test instruments were reliable and satisfactory to be used in the study.

# 3.6 DATA COLLECTION PROCEDURES

#### 3.6.1 Ethical Consideration

3.6.1.1 Approval

For an ethical consideration, firstly the researcher requested permission to conduct the study from the research and development institute, Rangsit University. With the permission granted from the University, the researcher also obtained an approval from the Ministry of Education in Bhutan (MoE) to carry out the research works. The consent approval from the Gup (Local Government Head) and Principal of the research school were also sought before the actual data collection (Refer Appendix C for the Letter of Approval/ Consent). Subsequently, the parent of all research participants was requested to read and understand the consent letter before signing it because all the research participants were below the legal age limit. It was mainly done to evade complications during field trip and violation of the right of every participant.

# 3.6.1.2 Anonymity and Confidentiality of the Participants

The location of the research school, details of the participants, the study records from the research participants were kept confidential and anonymous. Each and every research participant were informed before the actual test, their anonymity and confidentiality were maintained. The researcher used coding system (serial numbers) instead of their names as an alternative measure in ensuring confidentiality. (Example: Student 1, Student 2, Student 3).

# 3.6.2 Data Collection Steps

# 3.6.2.1 Reliability Test

The researcher conducted the reliability test with grade 5 students of the same school before the actual teaching and data collections were done. The conduct of the test was to ensure the reliability of the achievement test items. The reliability of the test instruments was obtained 0.80 for the study which was greater than 0.70.

# 3.6.2.2 Pretest

Before the actual research was conducted, the pretest was done for research participants of 30 students to ensure and ascertain the knowledge level about the study topic. The duration to do the test was given 1 hour to complete it. The preparation of a week-long duration was provided to the research participants before the pretest. The total of 20-mark questions were set as per the Bloom's Taxonomy for the achievement test. The questions comprise of multiple choice, true or false, and short answer questions.

# 3.6.2.3 Field trip with Multimedia Technology as an Intervention

The grade 4 Social Studies subject was chosen from the Bhutanese curriculum for the study. The total four lesson plans of 90 minutes each was used to

teach the research participants on the topic 'Local Government'. One lesson plan consists of two sessions with 45 minutes each. The approaches used for the study were field trip with multimedia (videos and PPT). Before the actual class, the researcher briefed on the location of the study, dos and don'ts, and appointment of group leaders.

Over the period of four weeks with two sessions in a week, the research participants got to explore the local government offices and different structures. The roles and responsibilities of different person in the office. The first week lesson was on the field visit to the local government office learning in depth about the Local Government. The second week lesson of course was learning about the roles and responsibilities of Gup and Gewog Administrative Officer. During the third week lesson participants visited offices of Mangmi and learned about the duties and roles of Tshogpa as well. The last lesson learned was about duties of different civil servants at gewog level. The assigned group members for the lesson used their smart phones to capture short video clips and images during the entire trip. Those recorded videos and images were later shared in their classroom social learning apps (WeChat and Google classroom) for recapitulation and better learning. For safety and ethical reasons, the students were made compulsory to delate the clips and images after completion of the study.

3.6.2.4 Posttest

The posttest was conducted at the end of the complete intervention to check the learning achievement of the research participants after teaching the topic using field trip with multimedia technology. The same test paper during pretest was used for the posttest to have reliable and authentic data for the further analysis and interpretation.

#### 3.6.2.5 Semi-Structured Interview

In the last session of the teaching, the researcher had a face-to-face interview with the research participants. The interview was done informally with 5 semi-structured questions to analyze the understanding of the participants' learning

satisfaction. The questions were based on the topic related to integrating field trip with multimedia and participants had an option to use the language either in English or Dzongkha. The total of 30 research participants' responses were audio recorded in the researcher's phone for further translation.

# 3.7 DATA ANALYSIS

The following two areas was used to carry out the data analysis of the study. They are pretest and posttest's result to find out the learning achievement of the research participants. Through thematic analysis of the semi-structured interview to find out the learning satisfaction of the participants.

# 3.7.1 Learning Achievement Analysis

The learning achievement level of the research participants could be determined by conducting pretest and posttest. Pretest was conducted before the actual intervention and posttest after the teaching incorporating field trip with multimedia. Marks scored by the participants from pretest and posttest were calculated using paired sample t-test with reliable computer software program (Refer Appendix L for paired sample T-Test analysis).

# 3.7.2 Learning Satisfaction Analysis

In a mixed method research, semi-structured interview was conducted to obtain quality data regarding the learning satisfaction level of the participants towards using field trip with multimedia technology. With the help of the quality data, researcher could learn the understanding and perception of the students' learning satisfaction. The researcher gathered the data after the semi-structured interview to analyze, develop themes and patterns through coding system.

# **CHAPTER 4**

# RESEARCH RESULTS OF DATA ANALYSIS

This chapter discusses the most important findings of the study done on the topic 'The Integration of Field trip with Multimedia Technology in Social Studies of grade 4 Bhutanese students' of the research school. The data analysis was carried out based on quantitative and qualitative results from the study. Relevant quantitative data was collected based on the results of the learning achievement test through pretest and posttest. The qualitative data was collected through semi-structured interview related to students' learning satisfaction in using integration of field trip with multimedia.

# 4.1 QUANTITATIVE DATA ANALYSIS

The pretest and posttest comprising of 18 questions were conducted with 30 students of grade 4 Bhutanese students before and after the intervention. It was administered to find and collect data based on the first research question: Would there be any improvement in grade 4 Bhutanese students' learning achievement in Social Studies after using field trip with multimedia technology? The data analysis and comparison of the learning achievement test (pretest and posttest) were done using paired sample t-test based on mean, standard deviation and significance (p) value.

# 4.1.1 Data Analysis of Pretest and Posttest

The pretest and posttest marks scored by the research participants and drastic increase in score percentage in posttest were shown in table 4.1. Paired sample t-test was used to compare and analyze the scores of both the learning achievement tests. Research participant-student code 02 and 28 scored 7 marks in pretest which was the lowest compared to others. The highest score was 15 marks by participant 07 in the pretest. Similarly, 19 was the highest score scored by participant 07 in the posttest.

Participant 02 and 18 scored 13 marks which was the lowest score scored after conducting the posttest. The highest score difference between pretest and posttest was 9 marks by participant 25 and lowest was 3 marks by participant 04 and 18 respectively. All the posttest marks scored by the research participants were higher than the pretest.

Table 4.1 Score difference between Pretest and Posttest

Student code	Pretest Score	Posttest Score	Improvement	Percentage
	(20)	(20)	Score	difference
01	10	16	6	30%
02	7	13	6	30%
03	12	17	5	25%
04	13	16	3	15%
05	9	15	6	30%
06	9	15	6	30%
07	15	19	4	20%
08	- 11	16	5	25%
09	8	15	7	35%
10	12	18	6	30%
11	9	17	8	40%
12	2 12	18	6	30%
13	\$10agg	16 pand	6	30%
14	13	17	4	20%
15	9	15	6	30%
16	8	14	6	30%
17	12	18	6	30%
18	10	13	3	15%
19	9	16	7	35%
20	11	16	5	25%
21	13	18	5	25%
22	10	16	6	30%
23	9	14	5	25%

Table 4.1 Score difference between Pretest and Posttest (Cont.)

Student code	Pretest Score	Posttest Score	Improvement	Percentage
	(20)	(20)	Score	difference
24	12	17	5	25%
25	9	18	9	45%
26	10	18	8	40%
27	10	17	7	35%
28	7	15	8	40%
29	11	17	6	30%
30	14	18	4	20%
Mean	10.47	16.27	5.80	29%

The following figure 4.1 also represents the individual student's learning achievement scores in pretest and posttest. The blue line represents the marks obtained by individual students from the pretest and an orange line for the posttest respectively. The highest marks obtained in the pretest and posttest was 15 and 19 and the lowest marks was 7 and 13. The graphical presentation proved that all the participants scored better and higher marks in the posttest after the treatment (Integration of field trip with multimedia technology).

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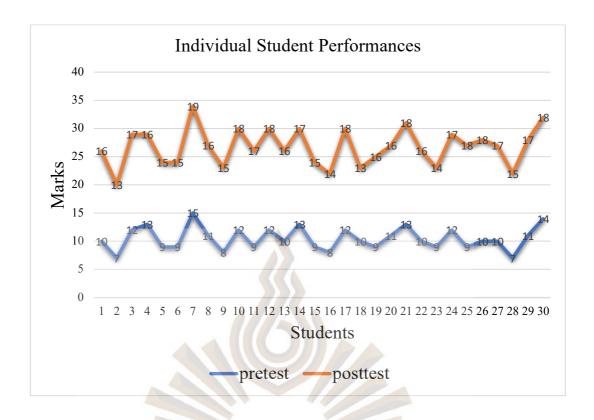


Figure 4.1 Comparative graphical representation of individual student learning achievement marks in Pretest and Posttest

The marks obtained from the learning achievement tests before and after the intervention on the integration of field trip with multimedia technology were analyzed and compared as shown below in the Table 4.2.

Table 4.2 Paired T-Test Analysis

Group	Pret	test	Posttest		Mean Difference	t	P-Value
Sample Group	X	SD	$\overline{\mathbf{x}}$	SD	10.47–16.27= 5.80	-22.31	.01
	10.47	2.01	16.27	1.57			
Significance level (p): < 0.05-Significant							

As shown above, the mean score obtained by the research participants for pretest was 10.47 with the standard deviation of 2.01. It was evident from the given table that the mean score for posttest was 16.27 with the standard deviation of 1.57. A paired sample t-test also proved that the posttest mean score obtained was higher than the pretest mean score with the mean difference of 5.80. Upon thorough analysis of the test scores, it was found that the significance p-value to be .01 which was lower than the significance value (p) < 0.005 (Refer Appendix L for paired sample t-test analysis).

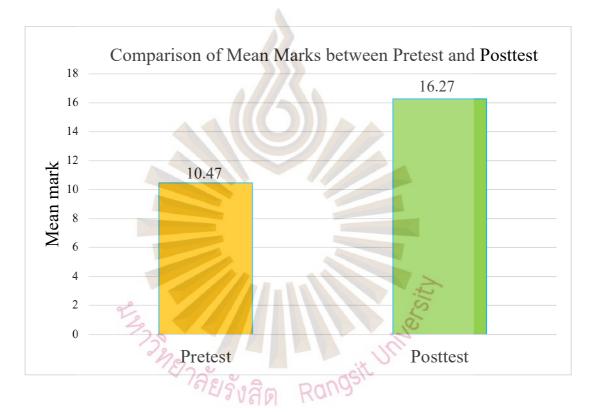


Figure 4.2 Pretest and Posttest Mean Score Comparison

The above graph provides conclusive visual evidence of the significant difference between the mean score of pretest and posttest. Through comprehensive analysis of the mean scores, the posttest was comparatively higher than the pretest with a mean difference of 5.80. Comparing all of these scores exhibited that the integration of field trip with multimedia technology in Social Studies of grade 4 Bhutanese students was effective and successful. As a result, the first research question, objective and hypothesis were answered favorably.

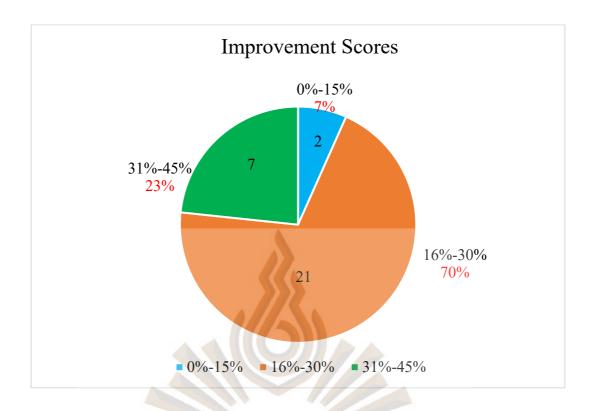


Figure 4.3 Illustration of improvement scores through pie chart

The above pie chart illustrates the majority of 21 out of 30 students, which was almost 70% managed to improve their scores within the range of 16-30% in the posttest than the pretest. It was followed by 7 students equaling 23% of them improved the scores in 31-45% range while the least of 2 students equaling 7% was in 0-15% range. Although there was a diverse degree of improvement between the students, however the intervention had a positive overall impact on all of the students. The integration of field trip with multimedia technology clearly has a significant impact in their learning, as seen by the improvement scores.

# 4.2 QUALITATIVE DATA ANALYSIS

At the end of the study, all the research participants were interviewed. The researcher used semi-structured interview to collect the qualitative data from the students. To investigate students' perception and achieve the second objective of the research, five open ended interview questions were used: To investigate the extent of

students' learning satisfaction of grade 4 Bhutanese students in Social Studies after using field trip with multimedia technology. The semi-structured interview was conducted with grade 4 students at the end of the study. To maintain the confidentiality and privacy of the participants, all students were numbered as student 1, student 2, student 3 instead of their names. When responding to the questions, the participants were free to choose any language they wanted. Almost all the students expressed their opinion in Dzongkha (National language of Bhutan). In order to collect data, the students' responses were audio taped in a phone by the researcher and were later written down in English for qualitative analysis. The data was then further examined using thematic analysis approach.

The data were read, analyzed and coded into themes as per the research objectives and questions. The students' interviews were recorded and analyzed under five themes: 1) Learning enjoyment, 2) Experiential learning, 3) Motivation for learning, 4) Positive relationship, and 5) Transformation in learning.

#### 4.2.1 Learning Enjoyment

Question 1: Did you enjoy the lessons using field trip with videos and PowerPoint presentation? Why?

The above question was asked to get the information on learning satisfaction and enjoyment from the participants after the study. According to the responses mentioned below, students enjoyed the lesson when it was taught with integration of field trip using multimedia technology. The lesson was totally different for them to learn and explore beyond the classroom situation. Moreover, through their interview responses it was learnt that everyone was excited and had enjoyed the classes with full learning satisfaction. Thus, it clearly indicated that the use of field trip with multimedia technology in learning Social Studies has excitement and satisfaction.

"I enjoyed learning Social Studies using field trip with multimedia technology. I got a chance to see gewog offices and meet the local leaders" (Student 12) "I enjoyed the class when we went for a field trip. I learnt a lot about gewog offices and local government" (Student 3)

"It was fun learning and I like the most when we recorded video clips and photos during field trip" (Student 10)

"I enjoyed the lesson because I got the opportunity to meet Gup, Mangmi and Gewog Administrative officer and ask them the questions" (Student 7)

## 4.2.2 Experiential Learning

Research participants were overwhelmed and had an experiential learning knowledge through field trip. Each and every student were involved individually or collaboratively in learning that provided them hands-on experiences. Students visited the local government offices to learn and explore beyond what has been actually prescribed in Social Studies text book. Students met with the local leaders, gewog civil servants and observed the different infrastructures. In order to check their experience and learning, the following question was asked during the interview.

Question 2: Do you agree that the use of field trip incorporating multimedia is enriching? In what ways?

"I agree that learning through field trip is enriching. We can learn and get more information than from our text book" (Student 11)

"I have learned a lot after going to the gewog offices. I saw different offices and local leaders" (Student 17)

"After the field trip the recorded videos and images helped me in learning better about the local government's role and responsibilities" (Student 10)

Students had an opportunity to explore the local government offices, interacted with different leader including the civil servants. They acquired an additional information and knowledge beyond what was taught. Students got an opportunity to use their smart phones to capture short video clips and images from the trip. Moreover, it was proved that learning becomes more effective and authentic when students explore, experience and learn hands-on.

#### 4.2.3 Motivation for Learning

When the following question was posed, majority of the students responded that they were extremely motivated to learn more effectively through the integration of field trip with multimedia technology in Social Studies. Moreover, students shared that they feel more confident to work with peers especially on field trip.

Question 3: Which activities did you like the most? Why?

"I like the field trip part mostly because we can see and feel things in real. It helped me to learn better on the topic" (Student 20)

"The use of field trip and PowerPoint presentation motivated me to explore and share our feelings. It also helped us to work in team" (Student 23)

"I like the field visit because we can learn more things beyond the content taught in the class. It inspired me to learn more in various subjects, as well as to work collaboratively with my friends" (Student 10)

"Through field visit I learned more about the role and responsibilities of Gup, Mangmi and Tshogpa. I also saw their working offices. Such kind of field trip motivate us to learn better" (Student 18)

#### 4.2.4 Positive Relationship

Question 4: Are you satisfied with learning Social Studies using field trip with videos and PPT? Why or Why not?

The above question was asked to understand students' learning satisfaction and positive relationship about the study. Field trip had provided them an ample of opportunities to build community vitality and team. Through the field trip students had an opportunity to interact with the people and helped to foster excellent student-teacher relationships. Students not only received answers through interaction but they also developed and strengthened good relationships and a sense of community. Students even mentioned that field trip with the use of multimedia has built friendships with their mates.

"I am satisfied after going field trip with my teacher and could share my opinion with my friends" (Student 11)

"Through field trip I could interact with people more than learning from the class. And also learnt more information about the topic" (Student 21)

"I am happy and satisfied because teacher helped us throughout the field trip for better learning" (Student 17)

"I got an opportunity to visit gewog office, interact with local leaders and people. Moreover, my teacher and friends helped me in my learning" (Student 4)

#### 4.2.5 Transformation in Learning

Question 5: Would you like to continue using field trip with videos and PPT in other topics in Social Studies? Why? This was the last question asked during face-to-face interview with research participants. In most of the answer students mentioned that such kind of strategy should be used in other topics too. Field trip was an effective tool

which can enhance students' learning and build relationships. Most students responded the use of multimedia technology (videos and image) using smart phone was new for them during field trip.

"Yes, I would like to continue using field trip with videos and PPT in other topics because it is interesting. The use of smart phones during field trip was new for us" (Student 25)

"The short video clips and images from the field trip help us in revisiting the lesson taught. Lessons without recording can be easily forgotten" (Student 11)

"I think the use of phone to record videos during field trip was helpful. In most of the field trip activities, it was recorded in note book and paper. So, it was a kind of dull lesson for us" (Student 19)

It was evident from the aforementioned quotes that every student enjoyed learning and valued the lessons using field trip with multimedia technology (videos and PPT). Students were found curious and motivated while doing the activities especially during field trip. The possible reasons for such findings could be because of outdoor activities with full of exploration, collaboration, coordination and experiential learnings for the students. Moreover, the use of relevant PPT and videos during the class activities had exhibited positive learning satisfaction towards the use of field trip with multimedia technology. Therefore, the above findings revealed and justified that the integration of field trip with multimedia technology positively impacted the overall learning outcomes of the students.

#### **CHAPTER 5**

## CONCLUSION, DISCUSSION, AND RECOMMENDATION

The conclusion to the study's findings given in chapter 4 are presented in this chapter. It also presents the conclusion and discussion of the finding and finally concludes with the recommendations for practice and future research.

#### 5.1 CONCLUSION

The researcher conducted the study based on the two questions: 1) Would there be any improvement in grade 4 Bhutanese students' learning achievement in Social Studies after using field trip with multimedia technology? and 2) Would there be any improvement in grade 4 Bhutanese students' learning satisfaction in Social Studies after using field trip with multimedia technology? The data were collected and analyzed from the learning achievement test and semi-structured interview. The following conclusions were drawn after collecting and analyzing the data.

# 5.1.1 The Result of Test Score Analysis

The first research question was: Would there be any improvement in grade 4 Bhutanese students' learning achievement in Social Studies after using field trip with multimedia technology? The question was answered using the results of the pretest and posttest after the intervention. A paired sample t-test was used in a comparative statistical analysis within the sample group to identify any differences in the level of achievement between the pretest and posttest.

The pretest and the posttest had respective mean scores of 10.47 and 16.27. The average gap between the pretest and posttest was 5.80. According to the analysis findings as indicated in Table 4.2 from chapter 4, the mean score of the posttest was

significantly higher compared to the pretest. The significance (p) value was .01 which indicated that there was a statistically significant improvement in the posttest than the pretest. The positive results from the quantitative data analysis as described above revealed a considerable improvement in the posttest achievement levels for all students. According to the research findings, the integration of field trip with multimedia technology (videos and PPT) had significantly improved their learning outcomes. As a result, the first research question which was to examine the improvement in grade 4 Bhutanese students' learning achievement in Social Studies after using field trip with multimedia technology was successfully achieved. Thus, the research hypothesis that there would be an improvement in students' learning achievement after using field trip with multimedia (videos and PPT) has been shown to be true.

#### 5.1.2 The Result of the Semi-Structured Interview

The study's second objective was to investigate the extent of students' learning satisfaction of grade 4 Bhutanese student in Social Studies after using field trip with multimedia technology. To ascertain the learning satisfaction of the students, the semi-structured interview was carried out with 30 students at the end of the treatment. To find out how the students felt about the usage of a field trip with multimedia, five open-ended interview questions were used. The obtained data were analyzed through thematic analysis based on five themes Learning Enjoyment, Experiential Learning, Motivation for Learning, Positive Relationship and Transformation in Learning.

According to the study's findings, using a field trip combined with multimedia technology made learning fascinating and enjoyable. In contrast to traditional classroom teaching, the students expressed they preferred learning experiences that involved field trip with multimedia devices. The students stated such kind of lessons motivate them to learn better when working in groups and learning hands-on experiences. Students' attitudes toward the use of field trip with multimedia technology in learning were clearly positive, as seen by the participants' responses. Students even responded in their interview that visiting places with friends and learning enhances their relationships and

community vitality. In the end, the data analysis revealed that students were happy and encouraged to use field trips with multimedia (videos and PPT) in their lessons.

Therefore, students stated that they would like to use the integration of field trip with multimedia technology in their learnings with other topics in future as well. Thus, those genuine responses strongly validated the second research question- to investigate the extent of students' learning satisfaction of grade 4 Bhutanese student in Social Studies after using field trip with multimedia technology.

#### 5.2 DISCUSSION

According to the findings done, it was evident that the integration of field trip with multimedia technology (video clips and PPT) was effective in teaching and learning Social Studies of grade 4 and it revealed the positive learning satisfaction towards the strategy used. Moreover, the findings of the study were supported and proved by the previous researches that the use of field trip integrated with multimedia technology has positive effects in teaching and learning. The study concluded with the strong findings based on the two major research objectives. The first research objective was to compare grade 4 Bhutanese students' learning achievement in Social Studies before and after using field trip with multimedia technology. The second objective was to investigate the extent of students' learning satisfaction of grade 4 Bhutanese students in Social Studies after using field trip with multimedia technology.

#### 5.2.1 Students' Learning Achievement

The study on the integration of field trip with multimedia technology (videos and PPT) was intensely proven effective and reliable after the collection of data through the learning achievement test. The pretest and posttest were done before and after the intervention with a target group of 30 students. The posttest mean score (16.27) was revealed extensively higher than the pretest score (10.47) with the mean difference of (5.80). With the use of field trip with multimedia technology (smart phones), all students scored higher marks in the posttest. The significance (p) value from the learning

achievement test was .01 which clearly indicated that the integration of field trip with multimedia technology improved the learning outcomes of the students. The significant improvement in the posttest score after the intervention was mainly inline with the cognitive theory of multimedia learning by Mayer (2003). Multimedia technology used in teaching has a huge impact in the student's learning and retention. Students learn more deeply from words and images and videos than from words alone. Moreover, incorporating multimedia devices in lesson facilitates for interactive sessions between the teacher and the students.

According to the findings, the integration of field trip with multimedia technology has a great impact to the students in terms of their academic learning achievement. When lessons were taught through the integration of field trip with multimedia technology (videos and PPT), students even acknowledged in an interview that they understand the content better and can retain it for a longer period. The finding was comparable to study conducted by Amosa et al. (2015). A similar quasiexperimental study about the use of field trip with multimedia technology with total of 50 students from Upper basic school in Ilorin, Kware State was conducted to find it out through pretest and posttest the learning achievement between the experimental group and the control group. The study's finding revealed that students using field trip with multimedia technology performed significantly better in their learning achievement than students who were taught expository method. Through the improvement in the posttest scores, it was evident that the use of field trip with multimedia technology method enhanced retention knowledge, skills and students' learning achievement. Both the study's findings were also correlated with Mayer (2003) cognitive theory of multimedia learning.

The use of multimedia technology during field trip and in the teaching has huge impact over students' motivation, engagement and learning hands on experiences. The majority of the students' responses stated that using smart phones on field trips helped them to record sound, video clips and take images for better learning and understanding the concept taught. This was also aligned with the study conducted by Lo and Quintana (2013) was to examine the effectiveness of field trip using mobile technology and to

ascertain the students' learning achievement. The study was conducted for a period of two weeks in a botanical garden with grade 5 and 6. They used their mobile phones to collect data through capturing video clips, images and audio. Students did far better in their posttest compared to the pretest. The data collected were reviewed in the classroom during post trip. According to the findings, field trip with multimedia technology (smart phone) had great impact in learning science. It has motivated the students' curiosity to learn science using multimedia devices and it has enhanced their learning achievement.

Similarly, the responses recorded from the students revealed that integration of field trip with multimedia technology lessons were effective and enriching, they got the opportunity to learn in real world settings and experience the situations beyond the prescribed textbook and enhance their learnings. Moreover, the results of the study were also in line with Kolb's (1984) experiential learning theory, which encourages students to actively participate in learning by doing and acquire knowledge through hands-on experiences. Thus, the study revealed that the integration of field trip with multimedia technology has huge impact in students' learning achievement.

## 5.2.2 Students' Learning Satisfaction

Semi-structured interview was used for the second objective to investigate the extent of students' learning satisfaction of grade 4 Bhutanese students in Social Studies after using field trip with multimedia technology. The data from the findings were analyzed using thematic analysis technique. Almost all the students appreciated and expressed their positive learning satisfaction towards incorporating field trip with multimedia technology (videos and PPT). Through the findings from the semi-structured interview, most students found the lessons were very interesting and engaging. The lessons were perceived as enjoyment, it motivated them for learning and build up their positive relationship among each other.

According to the findings from the interview, all the students found that lessons were interesting and experiential learning. They got the opportunity to explore what was there in the real situation and interact with the people around. The integration of field

trip with multimedia technology using smart phones encouraged them to explore, experience and learn hands-on. The recorded video clips could be used for lesson recapitulation. The findings were similar to the study done by Dohn (2010). The findings from his research proved that students explored the aquarium with great excitement and enthusiasm. Students used multimedia (smart phones) to record videos, images and learned in depth about the aquarium and the surroundings. The students revealed with great satisfaction that field trip integrating multimedia at the aquarium were experiential and fun learning.

Furthermore, the findings revealed that students were extremely motivated and could positively interact with the gewog officials and with their peer mates. They were also able to progress their learning at their own pace and communicate ideas with friends and officials effectively. It was parallel with the findings done by Charistonos et al. (2012) and Scott and Matthews (2011) where the findings showed that integration of field trip with multimedia technology enhanced students' learning satisfaction and building up strong positive relationship between the school and the communities. Both the researcher's finding was supported by Vygotsky's theory that students they interact and mingle with their peers, teachers and the society. Subsequently, it can also build strong relationship leading to ultimate learning achievement and satisfaction.

Students expressed with joy and satisfaction that they had fun while going for a field trip. They said that they never had such marvelous lessons before. Through field trip their self-confidence and motivation were boosted, they could interact with people in the gewog offices and enhanced their knowledge through learning hands-on experience. Moreover, the use of videos and PPT lessons engage students actively and meaningfully in their learning. Therefore, the above findings explicated that the integration of field trip with multimedia technology (videos and PPT) had a great impact in the students' learning achievement and satisfaction.

#### 5.3 RECOMMENDATIONS

The goal of the study was to evaluate the efficiency of integration of field trip with multimedia technology in Social Studies of grade 4 Bhutanese students. The study's findings revealed that using field trip with multimedia (videos and PPT) enhanced the students' learning achievement and the learning satisfaction. As a result, recommendations have been made in light of the study's findings.

#### **5.3.1** Recommendation for Practice

The following recommendations have been made based on the results of the study for the benefits of the teachers and to enhance students' learning experience.

- 1) The integration of field trip with multimedia technology (videos and PPT) had a higher beneficial effect on the students' learning outcomes. The data clearly proved that the posttest results were significantly higher than the pretest. The use of multimedia technology in field trip is therefore highly recommended.
- 2) Only one topic (Local Government) was examined in the study when using field trip with multimedia technology (videos and PPT). Teacher may integrate it into the teaching of other Social Studies topic to determine whether using multimedia technology in field trip has the same effectiveness.
- 3) Recording video clips and images during field trip using multimedia devices motivate students to take keen interest in learning and boost their positive relationship. Video filming could be used for lesson record and recapitulation.
- 4) To enhance learning and boost students' overall academic performance, all teachers are encouraged to experiment using field trip with multimedia technology (videos and PPT) when teaching other subjects like English, Dzongkha, and Science.

5) The field trip should be organized well by the teacher/organizer in order to evade complications. Seeking of an approval from the concern stakeholders to arrangement of necessity things should be in place before the actual trip.

#### **5.3.2** Recommendation for Future Study

The following are some of the recommendations the researcher hereby would like to recommend for future researchers are:

- 1) In order to get an additional data, further research should be done to examine the efficacy of field trip with multimedia technology (videos and PPT) in other subjects such like science, geography and history.
- 2) To enhance the findings, a comparable study may be carried out with different grade levels and larger sample size in primary schools.
- 3) Future studies must be undertaken over longer periods of time to increase the reliability and significance of the research findings because this study was only conducted for four weeks duration.
- 4) The study was focused on integration of field trip with multimedia technology (videos and PPT) using smart phone. The future researcher could use different multimedia devices to record video clips and images for betterment of learning.

According to the findings and data, using field trip with multimedia technology as a teaching strategy was useful and highly effective teaching technique and beneficial especially for Social Studies subject. It was observed that students enjoyed the lesson when they were engaged through the use of field trip integrated with multimedia technology. The strategy provided them to explore and learn hands on experience. Moreover, students had an ample of time to interact with the teacher, local leaders and among themselves and could build up positive relationship. Thus, the researcher hereby concluded that the integration of field trip with multimedia technology (videos and PPT)

strategy is an important tool that can help Bhutanese students enhance their academic learning scores in Social Studies.



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LOCATION OF THE STUDY

Langsit University Paraget Paraget University Paraget University Paraget Paraget University Paraget Parage

## LOCATION OF THE STUDY



Source: https://biawhlqionidgbcs.quora.com/How-many-states-are-there-in-Bhutan-1



SOCIAL STUDIES ASSESSMENT

Para Rangsit University

#### ASSESSMENT (CFA)

- 1. Continuous formative assessment consists of 70% and written examinations of 30%.
- Continuous Formative Assessment (CFA) is out of 70%, should be divided into term I and term II (which comes to 35% in the first term and 35% in the second term).
- 3. Project work is the main part of CFA which is out of 20% each for both the terms.
- For project work learners can investigate, experiment, interview, survey, go for field trip, explore, observe, and then examine and analyse to find for solutions and submit a report.
- Class activities such as quizzes, debates, discussions, extempore speeches are to be conducted and grades calculated for the first term and second term to make it 15%.
- All CFAs, including practical and project works, shall be school-based, conducted and assessed by schools on a continuous basis as per the requirements of the respective subject.

#### **Written Examinations**

- 7. Written examinations is out of 30%.
- 8. Multiple choice, fill in the blanks, true and false, matching and short answer-questions are to be used.
- In the first term, 15% of the learners' learning is to be tested through examinations and the same in the second term making a total of 30%.
- 10. Teachers can set questions out of 50% but should be converted to 15% in both the terms.
- 11. For assessment refer following table:

Term One				Term Two				Count Total
CA		Examination	Total A	CA		Examinatio	Total B	Grand Total (Total A + Total B)
My world	20%	15%	50%	Human Wellbein g and the Environm ent	20%	15%	50%	100%
History, Civics and Culture	15%			Economy and Living	15%			





Director General

Department of School Education

Ministry of Education

Thimphu, Bhutan

Date: April 30, 2023

Subject: Request for Permission to Collect Data for Master of Education Theses

Dear Sir,

Master of Education Program in Curriculum and Instruction, Suryadhep Teachers College would like to request your permission for five Master of Education candidates to collect data for theses in Bhutan in the period of May 3, 2023 to June 15, 2023. The details of the candidates are shown as follows:

Sl.no	Name	Research title	Research School
1	Nima Dorji	The use of mobile -assisted language learning (mall) through cake application to improve speaking skill of grade 6 ESL bhutanese students	Wangchu MSS, Chukha
2	Nima Tshering	The integration of Field trip with Multimedia Technology in Social Studies of grade 4 Bhutanese students.	Trashigatshel PS, Chukha
3	Kezang Wangmo	The use of Task-Based learning Approach to enhance the speaking skill of grade 4 Bhutanese Students.	Rinchengang PS, Chukha
4	Jamyang Lhamo	The Effectiveness of Audio Assisted Reading to Enhance Reading Comprehension Skill for Grade 5 Bhutanese Students	Doonglagang PS,Tsirang
5	Kinzang Lhaden	The impacts of using visual images in teaching mathematics to grade 4 bhutanese students	Wangchu MSS, Chukha

Thank you for your kind consideration.

Truly yours,

Mipaporn Sakulvongs'
Assistant Professor Nipaporn Sakulvongs, Ed.D.

Director of Master of Education Program in Curriculum and Instruction

Suryadhep Teachers College, Rangsit University

Muang-Ake, Paholyothin Road,

Lakhok, Pathum Thani 12000 Thailand

Mobile Number: +66-868846226 Telephone: +662997-2222 ext. 1275



# नेयन्तर्मा स्था स्था मित्र तथेया सूत्रावणी

# Ministry of Education & Skills Development Department of School Education School Liaison and Coordination Division



DSE/SLCD/SLCU(2.2)/2023/604

May 10, 2023

The Principals

Wangchu MSS, Trashi Gatshel PS, Rinchengang PS, Doonglagang PS

#### Subject: Approval to conduct a study and collect data

Dear Principals,

The following teachers are pursuing a Master of Education Program in Curriculum and Instruction at Suryadhep Teachers College in Rangsit University, Thailand. In partial fulfillment to complete the program successfully, they are required to conduct a research study on various topics related to education.

Sl.No.	Name	Research Title	Research School
1	Nima Dori	The use of mobile-assisted language learning (mall) through cake application to improve speaking skill of grade 6 ESL Bhutanese students	Wangehu MSS, Chhukha
2	Nima Tshering	The integration of Field trip with Multimedia Technology in Social Studies of grade 4 Bhutanese students.	Trashi Gatshel PS, Chhukha
3	Kezang Wangmo	The use of Task-Based Learning Approach to enhance the speaking skill of grade 4 Bhutanese Students	Rinchengang PS, Chhukha
4	Jamyang Lhamo	The Effectiveness of Audio Assisted Reading to Enhance Reading Comprehension Skill for Grade 5 Bhutanese Students	Doonglagang PS, Tsirang
5	Kinzang Laden	The impacts of using visual images in teaching mathematics to grade 4 Bhutanese students	Wangchu MSS, Chhukha

Therefore, you are requested to support and allow them to collect data from the schools, subject to the following conditions:

1. The study will not interfere with the regular academic activities of the school.

The confidentiality and privacy of the participants will be strictly maintained, and the data collected will only be used for academic purposes.

 Any inconvenience caused to the school during the data collection process will be minimized.

(Karma Galay)

Director General

CC: 1) Director of Master of Education Program in Curriculum and Instruction, Suryadhep Teachers College.
2) Person concerned.

Date: 9/05/23

To

The Principal

Trashigatshel Primary School

Sub: Seeking permission to conduct research work.

Sir,

I was honored to receive the prestigious Trongsa Penlop Scholarship and I am currently pursuing M. Ed course in Curriculum and Instruction at Rangsit University, Thailand. As a part of the course, I am conducting a research study on "The Integration of Field Trip with Multimedia Technology in Social Studies of grade 4 students," I will be teaching eight lessons for four weeks from mid- May to mid- June 2023. The content of the teaching will be done from chapter seven on the topic "Local Government" as per the Social Studies curriculum of Bhutan. During the research I will be conducting pretest prior to the lesson implementation, posttest and semi-structured interview after using field trip with multimedia technology as my lesson approach to obtain the required data. The main aim of conducting field trip with multimedia is to accustom students with the methodology and learn hands-on experience. The students will be escorted well by a researcher during the entire field trip to the Gewog office.

Therefore, I would like to seek your prior consent to let grade 4 students to take part in this study. I assure to maintain anonymity and confidentiality of the research participants and the school's identities and the information.

Your kind support and an approval for this research will be highly appreciated.

Thanking you

Yours Sincerely

Nima Tshering Researcher

Rangsit University, Thailand

PRINCIPAL

Trashigatshe Primary School

#### **Gup Consent letter**

To

The Gup

Bjapcho Gewog

Chhukha

Sub: Seeking permission to conduct research

Sir,

I was honored to receive the prestigious Trongsa Penlop Scholarship and I am currently pursuing M. Ed course in Curriculum and Instruction at Rangsit University, Thailand. As a part of the course, I am conducting a research study on "The Integration of Field Trip with Multimedia Technology in Social Studies of grade 4 students." During my entire study, my research participants will be the students of grade 4 from Tashigatshel Primary School. The topic that research participants are going to learn is "Local Government". Through this field trip students are going to explore and learn hands-on experience which will enhance their learning.

I have got an approval from Rangsit University, Ministry of Education, Dzongkhag Education Office and the Principal of the research school.

Therefore, I would like to seek your prior consent to conduct my research at your good office. I assure to maintain anonymity and confidentiality of the gewog's identities and the information.

Your kind support and an approval for this research will be highly appreciated.

Thanking you

Yours Sincerely

Nima Telering

Researcher, Rangsit University, Thailand

11/05/2023

Administrative Officer

#### Parents' Consent letter

Dear Parents,

Through the prestigious Trongsa Penlop Scholarship, I am currently pursuing M. Ed course in Curriculum and Instruction at Rangsit University, Thailand. I am conducting a research study on "The Integration of Field Trip with Multimedia Technology in Social Studies of grade 4 students." The research requires student participants; thus, I have chosen Tashigatshel Primary School as my research school. In this research, I would like to invite grade 4 students as my research participants.

The main aim of conducting field trip with multimedia is to accustom students with the methodology and learn hands-on experience. The students will be escorted by a researcher during the entire field trip to the Gewog office. I would like to seek your permission to let your child participate in this study. Since the research participants are below the age of 18 years, I am sending this consent letter to be signed by you on behalf of your children. I assure to maintain anonymity and confidentiality of the research participants' identities and the information. I will remain deeply indebted to you for your kind support in approving your child to participate in this study.

you for your kind support in approving your child to participate in this study
Thanking you
Yours Sincerely
Nima T shering
Researcher

Name: CHOGYEL WANGDJ Relation to child: FATHER

ignature Date: 19:05: 2023



CONTENT OF THE LESSON

Egggerger Pangsit University

# Chapter 7 Local Government

# Learning objectives

- · Explain local government
- · Discuss the roles of Gup, Mangmi and Tshogpa
- · Identify kabney and rachu used by Gup and common people
- Explain the importance of kabney and rachu

#### Introduction

Local Government is formed to encourage people to participate in the decision making. This is to ensure that people are involved in the development and management of social, economic and environmental well-being in the communities.

#### 7.1 Local Government

Local Government looks after the welfare of the people in terms of social, economic and environmental well-being. It conducts public meetings to plan and carry out local developmental activities.

Local government is also responsible for making rules and regulations for the communities in accordance to the laws. The local government comprises of Dzongkhag Ishogdu, Gewog Tshogde and Thromde Tshogde. In this chapter, only about Gewog Tshogde will be discussed.

โลยรังสิต Rangsi

31 Reprint 2022

#### C. Roles of Tshogpa

Tshogpas assist Mangmis and Gups. They look after the welfare of their Chiwogs. Tshogpas prepare plans for development of their Chiwogs by discussing with people. Disputes among the people in the Chiwogs are settled by Tshogpas. They wear ordinary kabney and rachu.

The Local government at the *Gewog* is supported by civil servants such as *Gewog* Administrative Officer, extension officers and health personnel. The roles of these officials are to plan and implement the developmental activities of the *Gewog*.

Bhutanese wear *kabney* and *rachu* while visiting offices, *lhakhangs* and *Dzongs* as a sign of respect. Wearing *kabney* and *rachu* is an important part of Bhutanese culture.

Class IV Social Studies

#### 7.2 Gewog Tshogde

Gewog Tshogde is the highest decision making body in the Gewog. It is supported by Gewog Administration. All important decisions for the development of Gewog are discussed in Gewog Tshogde. The members meet at least three times a year. Gup is the chairperson and Mangmi is the Deputy Chairperson of Gewog Tshogde. Tshogpas of different Chiwogs are the members. Members are elected by people as per the laws.

#### A. Roles of Gup

Gups are the heads of Gewog administration. They monitor the developmental activities in the villages, such as improving farming practices, and construction of roads and schools. Gups also settle disputes among the people in the Gewogs. They ensure that people follow the law. Male Gups wear kabney and female Gups wear rachu. Kabney and rachu worn by Gups are called Khamar.



Figure 7.1 A Gup



Figure 7.2 A Mangmi

#### B. Roles of Mangmi

The roles of the *Mangmis* are to support the *Gups* in managing the *Gewog* offices. In absence of *Gups*, *Mangmis* officiate and carry out the activities of the *Gewogs*. They are also responsible for settling disputes among the people in the *Gewogs*. *Mangmis* wear the ordinary *kabney* and *rachu*.



SAMPLE LESSON PLANS

Bongsit Urive

**Lesson Plan**: 2 (session 1 and 2) **Date:** 

Class: IV Subject: Social Studies Period:

**Number of students: 30 Duration: 90** minutes

**Topic:** Gup and Gewog Administrative Officer's role and responsibilities.

**Competency:** Explore the roles and responsibilities of local leaders, and understand how development takes place in the community.

**Strand:** History Civics and Cultures

Teaching Learning Materials: Chalk and chalk board, projector, text book, note book, and smart mobile.

**Prior Knowledge:** Students have seen the Local Government office and leaders.

**Teaching Learning Strategies:** Field trip with multimedia technology (video, image and PPT)

Lesson Objectives: At the end of the lesson, each student should be able to:

- Tell what are the roles and responsibilities of Gup (local leader).
- Tell what are Gewog Administrative Officer's duties at the gewog level.
- List down few notes about their roles and responsibilities.

**Lesson Introduction:** (10 minutes)

Teacher exchange greetings with the students and will ask few questions to check the students' experiences, opinions and learning about the past field trip. Teacher will call out few random rolls number of the students to answer in order to avoid chorus answers. Example:

- How was the last field trip to the gewog office?
- What else did you see during our trip to the gewog office?
- Who all did you meet during the trip?

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Then teacher will briefly explain about the day's program for the lesson. The field visit

to the gewog office and meeting the local leaders. Write the title of the day's program

on the chalk board for further clarity.

**Lesson Development:** (70 minutes)

**Activity I:** Pre-trip (20 minutes)

Teacher will inform students about their field trip to the Local Government offices as

usual and this time they are going to meet the local leaders. Teacher will ask students

whether they know them in person or not. With the use of PPT, teacher prepare few

questions to ask the gewog officials in collaboration with the students during the field

excursion. Few questions each will be framed and asked to Gup and Administrative

Officer during the visit by the students. Students then copy the questions in their note

book to explore about their roles and the duties.

Example:

What is your name?

Which chiwog do you belong?

What is the name of the kabney that you wear?

What are your roles and responsibilities in the gewog?

Then the guide lines and norms written will be presented (PPT) by the teacher and

explain to the students. Once more, the dos and don'ts written will be read by students

themselves and make it very clear before the departure.

**Note:** Teacher has already divided the students in to 4 groups from the first lesson.

When and who else can bring the smart phones during the trip is already presented in

guidelines during the first trip. This time Group 2 leaders alone with the class captains

will provide an assistance to the teacher during the entire field trip. It is the sole

responsible for Group 2 members to record the day's programs of the trip using their

smart phones through images and short video clips. The day 2 program has been already

informed to the gewog leaders in advance with an approval.

# **Activity II:** During field trip (50 minutes)

Since students has to walk around 10 minutes from the school to reach the field site, they will move in the line to minimize the discipline issues and to follow the norms strictly. The group of students will be supervised by their concern group leaders, class captains and the teacher. Upon arriving at the field site (gewog office), teacher will inform the gewog leaders about the students' arrival for the trip. During the entire trip teacher will guide and facilitate the students in exploring about the content topic. Teacher will help students in questioning and writing answers if it is not clear enough.

**Activity** A: Questions and answer session with Gup (Gewog head)

For this activity around 15 minutes, students will meet Gup and ask their written questions and jot down the responses in their note book. Teacher will encourage students to asked questions by raising their hands from the different groups of mixed gender.





Sample photo of Gup

Source: http://www.bbs.bt/news/?p=66188

**Activity B:** Questions and answer session with Gewog Administrative Officer (15 minutes)

After the session with Gup, Gewog Administrative Officer will be invited for the session by the teacher. In a similar manner students will ask questions based on Administrative officer's career and the roles. Every answer from Administrative officer will be written down in their note book for further learning in the class.



Photo sample of Gewog Administrative Officers
Source: http://www.bbs.bt/news/?p=66188

**Note**: For the both sessions, the group 2 members will record the conversations through images and videos for further learning. Teacher will appoint students for asking the question so all have to be prepared with the written questions. During the question-and-answer session, students can use the language which is more convenient in speaking (English or Dzongkha). The gathering for the session will be in the gewog conference hall.

#### **Lesson Closure** (10 minutes)

# Activity III: After field trip

After the field trip teacher will randomly pick and ask few students to read out their written work to the whole class. Necessary support and motivations will be given for better learning. Group 2 members will send the recorded images and videos in the class group WeChat and Google classroom for better reference for other students.

**Lesson Plan**: 3 (session 1 and 2) **Date:** 

Class: IV Subject: Social Studies Period:

**Number of students: 30 Duration: 90** minutes

**Topic:** Mangmi and Tshogpa's role and responsibilities.

**Competency:** Explore the roles and responsibilities of local leaders, and understand how development takes place in the community.

**Strand:** History Civics and Cultures

**Teaching Learning Materials:** Chalk and chalk board, projector, text book, note book, and smart mobile.

Prior Knowledge: Students know the Local Government office, leaders and their roles.

Teaching Learning Strategies: Field trip with multimedia technology (video, image and PPT)

Lesson Objectives: At the end of the lesson, each student should be able to:

- Tell what are the roles and responsibilities of Mangmi.
- Tell what are the roles and duties of Tshogpa.
- Tell what are the initiatives taken by Mangmi and Tshogpa at the gewog level.
- List down the roles and responsibilities in their book.

**Lesson Introduction:** (10 minutes)

Teacher and students exchange greetings and will ask few questions to check the students' understanding about the past field trip, the roles and responsibilities of Gup and Gewog Administrative Officer. Voluntarily students will raise their hands to answer the questions. Answers from different groups will be encouraged. The following are the example questions such as:

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What is the name of Gup?

What type of kabney do Gup wear?

What are Gup's role and responsibilities?

What is Gewog Administrative Officer's roles in the gewog?

It will be followed by teacher's brief explanation about the day's program. The field visit to the gewog and meeting with Mangmi and Tshogpa. Students will learn more about the roles and initiatives taken by Mangmi and Tshogpa. Then teacher write the title of the day's program on the chalk board.

**Lesson Development:** (70 minutes)

**Activity I:** Pre-trip (20 minutes)

Before the actual field trip, the guide lines and norms will be presented by the teacher and explain it once again to the students. The dos and don'ts written will be read by students themselves and make it very clear before the departure in order to maintain decorum and effectiveness of the trip.

Then teacher will inform the class about their field trip to the gewog as usual to meet Mangmi and Tshogpa. Teacher will ask students whether they know any of Tshogpas from their village. With the use of PPT, teacher prepare few questions to ask Mangmi and Tshogpa in collaboration with the students during the field excursion. Few questions will be framed and asked to Mangmi and Tshogpa during the visit by the students. Students then copy the questions in their note book to explore about their roles, the duties and an initiative taken. Following are some of the example questions to ask Them.

What is your name?

Which chiwog do you belong?

What is the name of the kabney that you wear?

What are your roles and responsibilities in the chiwog

What are the initiatives you have taken for the chiwog?

**Note:** This time Group 3 leaders and the class monitors will provide an assistance to the teacher during the field trip. It is the sole responsible for Group 3 members to record the day's programs of the trip. They will use their smart phones and record images and short video clips. The day 3 program has been already informed to Mangmi and Tshogpa in advance.

# **Activity II:** During field trip (50 minutes)

Students will move to the gewog office to meet Mangmi and Tshogpa. The students will move in the line to minimize the discipline issues and to follow the norms strictly. The group of students will be supervised by their concern group leaders, class captains and the teacher. Upon arriving at the site, teacher will inform Mangmi and Tshogpa about the students' arrival for the trip and to have necessary arrangements. During the entire trip teacher will guide and facilitate the students in exploring about the content topic. Teacher will help students in questioning and writing answers for further understanding of the content.

Activity A: Questions and answer session with Mangmi.

For this activity around 15 minutes, students will meet Mangmi and ask their framed questions and write the responses down in the note book.





Sample photo (Mangmi and Tshogpa)
Source: http://www.bbs.bt/news/?p=66188

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**Activity B:** Question and answer session with Tshogpa (15 minutes)

Similarly, students will also ask the questions to Tshogpa about their roles and

responsibilities in their gewog and chiwog level. The answers from Tshogpa will be

written in their note book.

**Note**: The group 3 members will record the conversations and initiatives through images

and videos for further learnings. Teacher will appoint students for asking the question

so all have to be prepared with the written questions. During the question-and-answer

session, students can use the language which is more convenient in speaking (English

or Dzongkha). The meeting will be done in the gewog conference hall.

**Lesson Closure** (10 minutes)

Activity III: After field trip

As a closure part, students in group will be given an activity to complete by the next

class. They have to write about roles and responsibilities of different local leaders and

submit it to the teacher. Group 1 will write about Gup's role, group 2 about Gewog

Administration Officer's duties, group 3 about Mangmi's role and the last group 4 will

write about Tshogpa's duties. Here students can use their creativity to write the activity.

Their work will be assessed by the teacher using the rubrics (B) and the best written

work will be awarded some prizes for further motivation.

Group 3 members will send the collected images, audio and video clips to the class

WeChat and Google classroom groups so other students can see and enhance their

learning.



# IOC FOR LESSON PLANS BY THE EXPERTS

Sl. No	Attributes	Expert 1	Expert 2	Expert 3	ЮС	Remarks
1	Lesson 1	+1	+1	+1	+1	Congruent
2	Lesson 2	+1	+1	+1	+1	Congruent
3	Lesson 3	+1	+1	+1	+1	Congruent
4	Lesson 4	+1	+1	+1	+1	Congruent
Over	all Average	+1	+1	+1	+1	Congruent

กับวลัยรังสิต Rangsit

# APPENDIX G

LEARNING ACHIEVEMENT TEST QUESTIONS

Langsit University Paragraphical Rangsit University

# LEARNING ACHIEVEMENT TEST

Class:	IV	Subject: Social Studies.	Total Marks: 20					
Stude	nt N	No:	Writing Time: 1 hour					
		<b>Section A: Multiple Choice Ques</b>	stions					
<u>Instru</u>	<u>Instruction</u> : Read the questions carefully. There are four possible answers against							
each question. Choose the correct answer and write it in the space given. (10 marks)								
Quest	ion	1						
1.	An	mong the local government bodies, the smallest a	and the highest decision-					
	ma	aking body that works very close with the people	e is					
	a.	Dzongkhag Tshogde						
	b.	Gewog Tshogde						
	c.	Chiwog Tshogde						
	d.	Chitshog Tshogde						
	An	nswer	T. Z.					
		4	5					
2.	<b>A</b> 1	l of the following are the Gewog officials Excep	ot the					
	a.	Mangmi Pagit						
	b.	Gewog Administrative Officer						
	c.	Gup						
	d.	Drungpa						
	An	nswer						
3.	Wl	hich of the following Gewog officials wear the I	Khamar kabney?					
	a.	Tshogpa						
	b.	Mangmi						
	c.	Gup						
	d.	Gewog Administrative Officer						

4.	Dorji was elected as Gup in the year 2018 and completed his term by 2022.
	What is the serving period for Dorji?
	a. 4 years
	b. 5 years
	c. 6 years
	d. 7 years
	Answer
	Kilswett
5.	The elected people in the Gewog are Gup, Mangmi and
	a. Gewog Administration Officer
	b. Accountant
	c. Tshogpa
	d. Gewog Agriculture Officer
	Answer
6.	How many Gewogs are there in our country as of now?
	a. 205 Gewogs Range
	b. 204 Gewogs
	c. 206 Gewogs
	d. 207 Gewogs
	Answer
7.	Who are the members of Gewog Tshogde?

a. Gup, Mangmi, Tshogpa and farmers.

d. Gup, Mangmi, Tshogpa and students.

c. Gup, Mangmi, Shopkeepers and Tshogpa.

b. Gup, Mangmi, Tshogpa and Gewog civil servants.

Answer.....

	Ar	iswer						
8.	W	ny do women wear a Rachu while visiting offices?						
	a.	Women like to wear it as a fashion.						
	b.	To make the officials happy in the office.						
	c.	It is a part of our culture, customs and traditions.						
	d.	It is very easy to wear.						
	Ar	iswer						
9.	W	hy it is important to have Tshogpa in the chiwog?						
	a.	To reduce the developmental activities in the chiwog.						
	b.	To be the boss in the chiwog.						
	c.	To punish people in the chiwog.						
	d.	To hold meeting with the people and plan for developmental works.						
	Ar	aswer.						
10	. W	ho elects a Mangmi?						
	a.	People of the village.						
	b.	People of the Dzongkhag.						
	c.	People of the village.  People of the Dzongkhag.  People of the country.						
	d.	People of the gewog.						
	Ar	iswer						

# **Section B: True or False**

<u>Instruction</u>: Write TRUE or FALSE for each sentence in the space given. (5 marks)

# **Question 2**

1.	Gup is the head of gewog administration. ()						
2.	Tshogpa looks after the welfare of their chiwog. ()						
3.	Animal Husbandry Officer looks after the agricultural farming. ()						
4.	Male should always be elected as the local government leaders. ()						
5.	Mangmi is responsible for settling disputes among people in the Gewog.						
	()						
	Section C: Short Answer Questions						
<u>Instru</u>	ction: Read the questions carefully and answer the questions in the spaces						
given.	(5 marks)						
Questi	ion 3						
Questi	OII 3						
1	If you were a Gup, what changes would you bring in your community? (2)						
1.	if you were a Gup, what changes would you offing in your community: (2)						
	Answer						
	Tallower						
	Le Company of the Com						
	333						
2.	Why it is important to wear kabney and rachu? Justify? (2)						
۷.	Answer						
	Allswei						
2	Teal and its definition makes the description of the control of th						
3.	If there is a drinking water shortage in your village, who are you going to						
	approach in the Gewog? (1)						
	Answer						



# IOC FOR LEARNING ACHIEVEMENT TEST BY THE EXPERTS

Sl. No	Item Test	Expert 1	Expert 2	Expert 3	IOC	Congruence
1	Multiple Choice	+1	+1	+1	+1	Congruent
	Question 1					
2	Multiple Choice	+1	+1	+1	+1	Congruent
	Question 2					
3	Multiple Choice	+1	+1	+1	+1	Congruent
	Question 3					
4	Multiple Choice	+1	+1	+1	+1	Congruent
	Question 4	1///	0.0			
5	Multiple Choice	+1	+1	+1	+1	Congruent
	Question 5					
6	Multiple Choice	+1	+1	+1	+1	Congruent
	Question 6					
7	Multiple Choice	+1	+1	+1	+1	Congruent
	Question 7					
8	Multiple Choice	+1	+1	+1	+1	Congruent
	Question 8			100		
9	Multiple Choice	+1	+1	147	+1	Congruent
	Question 9	810.0	Dands	K		
10	Multiple Choice	1944B	Khina	+1	+1	Congruent
	Question 10					
11	True or False	+1	+1	+1	+1	Congruent
	Question 1					
12	True or False	+1	+1	+1	+1	Congruent
	Question 2					
13	True or False	+1	+1	+1	+1	Congruent
	Question 3					
14	True or False	+1	+1	+1	+1	Congruent
	Question 4					

15	True or False	+1	+1	+1	+1	Congruent
	Question 5					
16	Short Answer	+1	+1	+1	+1	Congruent
	Question 1					
17	Short Answer	+1	+1	+1	+1	Congruent
	Question 2					
18	Short Answer	+1	+1	+1	+1	Congruent
	Question 3					
(	Overall Average	+1	+1	+1	+1	Congruent





SEMI- STRUCTURED INTERVIEW QUESTIONS

Langsit University

# SEMI-STRUCTURED INTERVIEW QUESTIONS

Sl. No	Questions
1	Did you enjoy the lessons using field trip with videos and PPT? Why?
2	Do you agree that the use of field trip incorporating multimedia is enriching? In what ways?
3	Which activities did you like the most? Why?
4	Are you satisfied with learning Social Studies using field trip with videos and PPT? Why or Why not?
5	Would you like to continue using field trip with videos and PPT in other topics in Social Studies? Why?

(Adapted from Rai & Rigzin, 2021)



IOC FOR SEMI-STRUCTURED INTERVIEW

Par Rangsit University Par Rangsit University

# IOC FOR SEMI-STRUCTURED INTERVIEW QUESTIONS BY EXPERTS

Sl. No	Questions	Expert 1	Expert 2	Expert 3	ЮС	Congruence
1	Did you enjoy the lessons using field trip with videos and PPT? Why?	+1	+1	+1	+1	Congruent
2	Do you agree that the use of field trip incorporating multimedia is enriching?  In what ways?	(+1)	+1	+1	+1	Congruent
3	Which activities did you like the most? Why?	+1	+1	+1	+1	Congruent
4	Are you satisfied with learning Social Studies using field trip with videos and PPT? Why or Why not?	+1 রিল R	angsit	)/il/+1	+1	Congruent
5	Would you like to continue using field trip with videos and PPT in other topics in Social Studies? Why?	+1	+1	+1	+1	Congruent
	Overall average	+1	+1	+1	+1	Congruent

# APPENDIX K

# EXPERTS WHO VALIDATED THE RESEARCH

INSTRUMENTS

# EXPERTS WHO VALIDATED THE INSTRUMENTS

Sl. No	Name	Qualification/	Institution
		Position Title	
1	Mr. Gary Torremucha	Associate Professor	Rangsit English Language Institute (RELI), Rangsit University; Thailand
2	Mrs. Deki Peldon	Sr. Teacher I Master of Education	Darla Middle Secondary School, Chhukha Bhutan
3	Mr. Tashi Dorji	Sr. Teacher II  Master of Education	Tshemalakha Middle Secondary School, Chhukha Bhutan

The following are the instruments validated by the experts:

- 1. Four Lesson Plans
- 2. Learning Achievement Test
- 3. Semi-Structured Interview Questions

# APPENDIX L

PAIRED SAMPLE T-TEST

Para Rangsit United

# PAIRED SAMPLE T-TEST

# **Paired Sample Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	10.47	30	2.013	.367
	Posttest	16.27	30	1.574	.287

# **Paired Sample Test**

	Paired Differences							
				95%				
			Std.	Confide	ence	2		
	200	Std.	Error	Interval	of the			
	Mean	Deviation	Mean	Differen	nce			Sig.
	1	6/7200		asit	, O.			(2-
		" निधुनुँ गर्द	in R	Lower	Upper	t	df	tailed)
Pair Pretest 1 Posttest	-5.800	1.424	.260	-6.332	-5.268	-22. 310	29	.01



RELIABILITY TEST KR-20

Lassit University Property Privates

# RELIABILITY TEST RESULTS

# **Case Processing Summary**

		N	%
Cases	Cases Valid		100.0
	Excludeda	0	.0
	Total	30	100.0

# **Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
L.	E S	
.803	** svan Rangsit Uring	18

# APPENDIX N

# INSTRUCTIONAL GUIDELINES FOR USING MULTIMDEIA

DEVICES (SMART PHONE)

#### INSTRUCTIONAL GUIDELINES FOR USING SMART PHONE

#### 1. Before field trip

- Get consent letter signed from the school administration, parents or guardians.
- According to the field trip schedule and group division, the concern group members should bring their phone for the day trip to record videos and images.
- Students should hand over their phones to the teacher upon reaching the school.
- In presence of the students, teacher will check the phones before taking over from the students.

#### 2. During field trip

- Upon reaching the site, students should collect their phones from the teacher.
- Concern group of the day will only record the video clips and images.
- Students are not allowed to call and message during the entire trip unless otherwise stated by a teacher. Phones must be in silent mode.
- The recording of video clips must be of 4 to 5 minutes.
- After the recordings, students should give their phone to the teacher for the safety reasons.

#### 3. After field trip

- Concern students must collect their phones from the teacher.
- The recorded video clips and images should be sent through their social learning groups app (WeChat, Telegram).
- Students will not be permitted to bring their phones after the completion of the study.

# APPENDIX O

COMPARISON OF LESSON PLANS AND PPT IMAGES

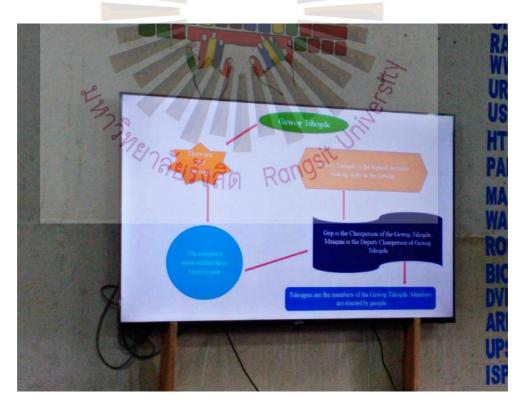
Langsit University

# COMPARISION OF FIELD TRIP LESSON PLAN (USE OF MULTIMEDIA TECHNOLOGY AND TRADITIONAL METHOD)

<b>Lesson components</b>	Field trip with multimedia	Traditional field trip			
	technology				
Teaching Aids	PPT, videos, and multimedia	Chalk and chalkboard,			
	devices	Text book, notebook			
Instructions/	Instructions and guidelines	Verbal instructions/			
guidelines	projected through PPT	written on chart			
	A4((O))) A				
Lesson activities	Recording the field activities	Recording through			
	through the use of multimedia	worksheet/ notebook/			
	devices (smart phones)	paper			
Lesson follow up	Use of PPT, videos	Questions/ answers			
/closure		Chart paper			
2		5/5			
วรุ่นยาลัยรังสิต Rangsit Unit					
Pangsil					
	200901				

**PowerPoint Presentation (PPT) Lessons** 





Field Trip visit to the Local Government Office













# **BIOGRAPHY**

Name Nima Tshering

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วรั<sub>กยาลัยรังสิต</sub>