# Extended Learning Time and Students’ Academic Performance 

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#### Abstract

Extended Learning Time (ELT) in this study is defined as increased in students' study time during non-school hours, for example, outside the classroom hours. During the ELT, students invest time in reading, completing homework and other follow-up tasks assigned by teachers in the classroom. The current study used mixed methods where the duration of non-school study hours and students'performance in the continuous assessment and examinations were used as quantitative data for this study. In addition, 34 of students of grade VIII, Section D out of which 13 were males and 21 females were use appropriate word to collect the quantitative data. For the quantitative data, sample-paired t-test was carried out using SPSS version 22 to find the impacts of the intervention. In addition, the results were analysed through descriptive analysis. Similarly, thematic analysis was carried out for qualitative data. The analysis of the data revealed that students' performance in continuous assessment has improved after the intervention where as it had no effect on the examination scores. The guided extended study gave students opportunity to improve their class works and home works. The analysis also revealed that that the extended learning time has not helped students to perform better in their examinations. The result of the learning journal and self-assessment tool depicted positive correlation between ELT and students' interest in learning which resulted in better turnover of students in the school. Similarly, the result of the semi-structured interview from the teachers and students depicted positive perceptive towards implementation of ELT in simplify the concepts and improving the learning of the subject.


Keywords: Learning time, extended, examination score

## 1. Introduction

As per the Bhutanese curriculum designed by the Royal Education Council (REC), 180 hours of instructional hours for teaching-learning is required to deliver the standard quality of curriculum to the students (Royal Education Council, 2020). However, schools in the country faces a great challenge to meet the instructional hours in one academic year due to ad-hoc programs and multiple regional, national and international holidays. In the due course, the quality of the teaching and learning process in the stipulated time is compromised. Therefore, there is a need of finding strategies to overcome the compromised teaching learning time that is lost.

Numerous studies show extended learning time (ELT) as one of the many approaches to help students catch up to meet high standards (Ed Trust and MDRC, 2021; Great Schools Partnership, 2013; Sahni, 2013). In line with it, the above studies entails that the ELT encompasses programs or strategies to increase the amount of instruction and learning student's experience. In addition, the studies state that the extra instruction can take place after school, during breaks, or during the summer. However, Instruction during any of these periods can be effective if the instruction is carried out by certified teachers and if the curriculum is both individualized and aligned with the content in the regular school day. Furthermore, according to the studies, scheduling decisions should be made fairly to guarantee that children and families who already suffer significant disadvantages are not subjected to further obstacles.

Studies have also depicted a complex relationship between the student learning time and students' academic achievement; however, those studies also depict positive correlation of extended learning time (ELT) with the academic performance of the students if the time is spent
effectively (Ackerman \& Gross, 2003; Dehne \& Dehne, 2018) . In addition, Radinger \& Boeskens (2021) stated that the students' learning time is a key educational resource. Similarly, optimizing ELT has been presented as one of the key measures in improving students’ achievement (Carroll, 1989; Scheerens and Bosker, 1997; Marzano, 2003) .

ELT in this study is defined as increased in students' study time during non-school hours, for example, outside the classroom hours. During the ELT, students invest time in reading, completing homework and other follow-up tasks assigned by teachers in the classroom. This is in line with a study conducted by Great Schools Partnership (2013) which entails ELT as any educational program or strategy intended to increase the amount of time students are learning, mostly to improve academic performance and exam scores, as well as to reduce learning loss, learning gaps, and achievement gaps. Similarly, ELT is a practice that entails increasing the length of the school day for all students, with the goal of improving student outcomes, especially in low-performing schools (Marek, et al., 2016. p.1).

At Samtengang Central School (SCS), the ELT was increased in the second half of the academic year 2019 as one of the interventions to improve the academic performance of the students. The study considers ELT as the whole school initiative implemented at SCS as an intervention and reports its impact on students’ academic performance. In addition, the current study is conducted to explore the impact of extended learning time in improving the academic performance of class eight students in history subject.

## Reconnaissance

Reconnaissance is a step of action research, according to action researchers. Dillon (2008) describes reconnaissance as those activities that allow a determination for the action
researcher of 'where I was at, what I hoped to achieve and how I thought that I would get there. Finally, the tasks of action research's reconnaissance phase establish "where I started from in my real-world scenario". Maxwell (2012) conceptualized reconnaissance as consisting of three parts, namely, situational analysis, analysis of competence of the researcher and literature review. The reconnaissance's main purpose is to assist the researcher in formulating a suitable action research topic.

## Situational analysis

The Ministry of Education has established central schools in the country to help destitute (it is not only for destitute) students get all the facilities to achieve academic excellence (Kaka \& Wangdi (2016) . Thus, Central Schools are expected to bring better performance in academic and other fields compared to non-central schools.

Samtengang Central School (SCS) became central school in the year 2015. Since then, the school has been working to fulfill the objectives of achievingg academic excellence. However, it was observed that the academic performance of the students in SCS is poor.

Samtengang Central School is located under Wangduephodrang Dzongkhag about 20 kilometers away from the Dzongkhag headquarter. The total number of teachers and students in the school are 40 and 966 respectively. Like any other boarding schools around the country, students are engaged in extended learning thrice a day during the week days for the duration of an hour each. The students' engagement in the extended learning time is supervised by the teachers.

Despite of full support and guidance provided to the students, it was observed that some students perform very low in the exam. Therefore, based on the above observation, the researcher conducted an Action Research to improve the academic performance of students through effective use of extended learning time.

## Competence

The researcher is the Principal of the school. He has a Master degree in education and over 25 years of experience as a teacher. He also served as the Principal in various Primary Schools in the past. He has attended professional development programmes on action research both at the cluster and school level. Besides, during the planning and implementation phases of this action research, Mr. Nima Tshering provided required inputs and guidance as a critical friend. He has a Master degree in Education from Samtse College of Education, Royal University of Bhutan. He has taken part in writing of academic works such as New Normal Curriculum (biology) for classes IX - XII.

## 2. Literature Review

## Theory

In 1989, Carroll outlined the theoretical importance of time as a resource for student learning. He conceptualized the degree of student learning as a product of the time students spend learning divided by the time they need to learn. The amount of time pupils spend studying is determined by their ability to learn (time allotted for learning) and their tenacity (time engaged in learning). The time needed for students to learn depends on their aptitude, the quality of instruction they receive and their ability to understand the instruction. Carroll's model indicates that, all else being equal, increasing the amount of time students spend learning will lead to greater academic success, and that, as a result, deciding on the amount of time students spend learning will lead to better academic performance of instruction time is a key decision for policy makers (Berliner, 1990; Brown \& Saks, 1986; Carroll, 1989) . Given its relevance, Carroll's model was used to guide my study.


Figure 1: Carroll's Model of Education (adapted from Carroll (1989))

The current study has adopted Carroll's Model of Education to find the relation between the students' academic achievement and extended learning time. According to Carroll, time needed for students to learn is directly correlated to academic achievement of the students. Similarly, Carroll states that the aptitude dictates students' opportunity to learn, ability to understand the instruction and
perseverance to learn. Therefore, the current study tries to find the impact of the extended learning time in improving the academic performance of students.

Learning Time and Academic Performance of the Students

Academic success is a top goal for both students and instructors in every educational system. Several studies have found that characteristics like study time affect student success (Cote\& Levine, 2000; Singh et al., 2002). Researchers have used data from studies throughout the educational spectrum to predict students' achievement, concluding that their ability, experience, study time, effort, and surroundings all play a role significantly to academic achievement. Some students are nonchalant towards the learning and practice of social studies education despite the fact that there is availability of qualified and trained teachers to teach the subjects.

Numerous studies depicted a strong relationship between the extended learning time (ELT) and the academic performance of students (Gbore, 2006; Mendes et al., 2021\&Singh et al., 2002). A study conducted on 'Extended learning time and student accountability: Assessing outcomes and options for elementary and middle grades', stated that there is $10 \%$ and $40 \%$ increase in the academic performance of the disadvantaged and under-performing students (Smith et al., 2005) . However, the study stated that children in elementary grades have higher academic success rates than those serving older children and adolescents. Other researches, such as Mendes et al. (2021) and Smith et al. (2005), found that a combination of study time behavior and other elements in any course of study determines students' academic progress.

## Teachers and Students' Perception on ELT

A study conducted at Boston university on perception of teachers and students on ELT stated that majority of the teachers ( $98 \%$ ) are happy and less stressed on the coverage of syllabus (Marek \& Kistner, 2016) . Teachers also stated positive results such as higher-class attendance and improved student-teacher relationship. The study stated improved academic performance of students. Students who took part in the study stated that ELT helped them to understand the concepts that were abstract. In addition, Zhou et al. (2019) stated positive outcomes in the participants Mathematic and English scores due to ELT.

The findings of the perceptional study stated there is positive relation of ELT and the student's interest in learning the content (Mendes et al., 2021) . In addition, the study stated increase in the motivation of students towards school work which further contributed in the greater academic performance. However, some of the studies stated negative relationship between the ELT and academic performance of the students (Ackerman \& Gross, 2003\&Osei-Owusu et al., 2018) . The findings stated that students felt bogged down with school work leading to less time to for doing other works. In addition, the findings also stated that students' loose interest in doing the school work.

## Action Research Question

Would more time spent in non-school study hours help grade VIII students improve their academic performance in history?

## Research Methodology

The current study used mixed methods where the duration of non-school study hours and students' performance in the continuous assessment and examinations were used as quantitative data for this study. In addition, 34 of students of grade VIII, Section D out of which 13 were males and 21 females were use appropriate word to collect the quantitative data. For qualitative data, an semi-structured interview question (see appendix 2) was administered to collect the perception of four history teachers and fourteen students (seven male and seven female). Similarly, students were asked to maintain learning journal (see appendix 6) where they can note down their learning during the ELT and a selfassessment check list (see appendix 7) was developed in order to check the effect of ELT in students' academic performance. A purposive sampling technique was deployed as per the need of the study. A purposive sampling technique is a process of selecting the participant of the study based on phenomenon of interest (Palinkas et al., 2015) .

For the quantitative data, sample-paired t-test was carried out using SPSS version 22 to find the impacts of the intervention. In addition, the results were analysed through descriptive analysis. Similarly, thematic analysis was carried out for qualitative data. It is a method for identifying, analyzing, organizing, describing, and reporting themes found within a data set described thematic analysis as a translator for those speaking the languages of qualitative and quantitative analysis, enabling researchers who use different research methods to communicate with each other(Nowel, Norris, White, \& Moules, 2017).

## Baseline Data

## Study Time

All boarding students were engaged in non-school hour study thrice a day during the week days. For example, the morning study begins at 6 AM and ends at 7 AM ; evening study begins at 5: 30PM and ends at 6: 30 PM ; and night study begins at 8 PM and ends at 9PM. During these study time, students were engaged in independent learning of subjects of their choice. The study is supervised by teachers. This schedule was implemented during the Term I, for example, from February through June, 2019.

## Academic Performance

During the Term I (February to June), students' academic performance was assessed following the standard guidelines and practices in place. For example, class work, homework and examinations. The examination questions used consisted of both the closed and open-ended types.

Table 1: Homework Assessment rubrics
Home Work Marking Criteria (5\%)

| Home Work Marking Criteria (5\%) |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Deadline (1) | Neatness (1) | Originality and Language (1) | Completion of work (1) | Relevancy (1) | Full Marks (5) |

Table 2: Class work Assessment rubrics

| Class Work Marking Criteria (5\%) |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Attendance (1) | Punctuality (1) | Participation (1) | Completion of work (1) | Relevancy (1) | Full Marks (5) |  |

Table 3: Rubrics for examination


## Intervention

In the Term II (Augusts to November), two interventions were planned and implemented. First, the non-school hour study time was extended by 10 minutes for the morning, evening and night study respectively. Overall, students gained 30 minutes each day during which they were made to read, do homework and other tasks related to exclusively History. Second, the students' time use during the extended learning time were supervised and supported by teachers. In other words, teachers closely guided students in their learning.

## Post-intervention Data

The post-intervention data consisted of the students' performance in the continuous assessment and the written test results of the Term II of the academic year 2019.

## Reliability and Validity

Since the data for this study is sourced from students' performance in the continuous assessment and written examinations, a rigorous validation process was put in place to ensure the reliability and validity of the data. For example, the kind of class works and home works assigned to students were peer reviewed and improved before their implementation. Similarly, the test questions were developed strictly following the principles of test item development. Bloom's taxonomy was used to ensure that the items are of similar difficulty levels during the pre-and post-intervention tests. In addition, the weightage of the chapters that were used in the pre and post-intervention test were as per the framework provided by the Royal Education Council (2021)

For the qualitative data, semi-structured interview was administered. The trustworthiness of the data was carried out through sending the transcription of the interview to the participants. In addition, the transcription of the interview was verified by other researcher friends to confirm the interpretation of the data. Trustworthiness is an approach used in qualitative research to check the validity and reliability of the data (Efron, 2018).

## Data Analysis

The mean of the pre-intervention and post-intervention continuous assessment and examinations scores of students were compared using paired samples T-test at the confidence level of $95 \%$ using Statistical Package for Social science (SPSS) version 22. In addition, thematic analysis was carried out for the semi-structured interview, learning journal and self-assessment tools.

## 3. Result and Discussion

A paired sample T-test was conducted to evaluate whether a statistically significant difference existed between the preintervention and post intervention mean history continuous assessment scores and pre-intervention and post intervention mean examination scores separately. For the continuous assessment (Table 1) the results of the paired samples t-test were significant, $\mathrm{t}(33)=-14.95, p<.0005, \mathrm{n}^{2}=.50$. This indicates that there is a significant increase in history continuous assessment scores from the pre-test ( $\mathrm{M}=7.55$, $\mathrm{SD}=1.07, \mathrm{~N}=34$ ) to the post-test $(\mathrm{M}=9.91, \mathrm{SD}=.37, \mathrm{~N}=$ 34). The mean increase was 2.36 with the $95 \%$ confidence interval.

Table 4: Paired samples T-test between pre-intervention and post-intervention CA scores
Paired Samples Test

| Paired Samples Test |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Paired Differences |  |  |  |  | t | df | Sig. (2tailed) |
|  |  | Mean | Std. <br> Deviation | Std. Error Mean | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  |  | Lower | Upper |  |  |  |
| Pair 1 | CA PretestCA Posttest | -2.35 | 0.92 | 0.16 | -2.67 | -2.03 | -14.96 | 33 | . 000 |

Similarly for the examination the results (table 2) of the paired samples t -test were significant, $\mathrm{t}(33)=2.28, p$ $>.0005, \mathrm{n}^{2}=.50$. This indicates that there is no significant increase in history examination scores from the pre-test (M
$=43.85, \mathrm{SD}=22.92, \mathrm{~N}=34)$ to the post-test $(\mathrm{M}=37.04, \mathrm{SD}$ $=20.62, \mathrm{~N}=34$ ). The mean decrease was 6.81 with the $95 \%$ confidence interval.9.91.

Table 5: Paired samples T-test between pre-intervention and post-intervention examination scores

| Paired Samples Test |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Paired Differences |  |  |  |  | t | df | Sig. (2tailed) |
|  |  | Mean | Std. Deviation | $\begin{aligned} & \hline \text { Std. Error } \\ & \text { Mean } \end{aligned}$ | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  |  | Lower | Upper |  |  |  |
| Pair 1 | Exam_PretestExam_Posttest | 6.79 | 17.31 | 2.97 | . 76 | 12.83 | 2.29 | 33 | . 029 |

The continuous assessment's components include class works and home works. The results indicated that the extended time has helped students to do well only in these two components. The teachers' guidance during the extended learning time could have helped students to not only do well in the class works and home works but also ensured their completion rates. This explains the difference in the scores between the pre-test and post-test. When it comes to examinations, the results indicated that the extended learning time has not helped students to perform better in their examinations. This is interesting finding and at the same time difficult to explain.

The above data is supported by the perceptions by both teacher and student participants. The perceptions entailed positive correlation between the extended learning time (ELT) and the academic performance. Amongst four teacher participants, three of them stated that there is drastic improvement of the students towards learning content of the subject, however, one of them stated negligible positive change in student's interest towards learning content of the subject. In addition, thirteen of the fourteen students stated that there is improvement in their interest towards learning the subject content as ELT enables them to curate their doubts. The finding of the study is aligned to the study conducted Marek \& Kistner (2016), Mendes et al. (2021) and Smith et al. (2005) . Therefore, ELT has positive relation in the academic performance of the students.

All the four teachers stated that the current allotment of time for ELT is enough to boost the morale of the student and to avoid getting bogged down. Similarly, nine of the students perceived the time allotted for ELT to be adequate. However, five students shared that they get bogged down. This finding is supported by the study conducted on "Misuse of Instructional Time and its Effect on Students’ Academic Achievement in Four Public Senior High Schools in the Ashanti Mampong Municipality of Ghana" which stated that students and teachers gets bogged down and loose interest towards learning (Osei-Owusu et al., 2018) . Similarly, Ackerman \& Gross (2003) also concluded that students and teachers get bogged down due to extended learning time which goes beyond the normal stipulated time for the
schooling. Therefore, ELT can be tiresome for teachers as well as students.

The result of the self-assessment checklist which was administered to the students depicted positive correlation between ELT and students' interest towards learning. In addition, the assessment carried out on the learning journal supports the above claim. In the self-assessment checklist, 95 percent of the students have rated 6 (the optimum level in the scale) towards learning the concept well whereas 5 percent has rated 4 from the range of 1-6. This result of the study is in coherent with the study conducted at Boston on "Expanded Learning Time Research Collaborative" which states that students collaborate better with teachers as the difficult concepts get simplified and students take interest in learning (Marek, et al., 2016). In addition, Redd, et al., (2012) in the report on "Expanding Time for Learning Both Inside and Outside the Classroom: A Review of the Evidence Base" stated better academic achievement, better student turn over and improved interest of the students towards learning with the implementation of ELT in schools under Manhattan, New York. Therefore, ELT has positive correlation with development of interest towards learning the concept.

## 4. Conclusions and Recommendations

The analysis of the data revealed that students' performance in continuous assessment has improved after the intervention where as it had no effect on the examination scores. The guided extended study gave students opportunity to improve their class works and home works. The analysis also revealed that that the extended learning time has not helped students to perform better in their examinations.

The result of the learning journal and self-assessment tool depicted positive correlation between ELT and students' interest in learning which resulted in better turnover of students in the school. Similarly, the result of the semistructured interview from the teachers and students depicted positive perceptive towards implementation of ELT in simplify the concepts and improving the learning of the subject. However, the result of the examination score is not
aligned with the perception shared by teachers and students in the semi-structured interview, learning journal and selfassessment tool. This is very interesting and difficult to explain finding. Therefore, next cycle of action research may be undertaken for the in-depth understanding of the relationship between the extended learning time and students' performance in the tests.

Therefore, the researcher put forward the following recommendations;

1) Support students during the non-school study time to enhance their performance in the continuous assessment.
2) Allocate the right amount of time to avoid teachers and students getting bogged down.

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(Ganga Ram Gurung)
Appendix 1: Students' performance in pre and post intervention phase

| Student | Pre-intervention |  |  | Term II |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CA Scores | Exam Scores | CA Scores | Exam Scores |  |
| 1 | 8.3 | 22.0 | 10.0 | 25.0 |  |
| 2 | 7.5 | 24.5 | 10.0 | 24.0 |  |
| 3 | 6.5 | 23.5 | 9.2 | 20.0 |  |
| 4 | 6.0 | 19.5 | 10.0 | 22.0 |  |
| 5 | 7.3 | 33.0 | 10.0 | 22.5 |  |
| 6 | 7.7 | 47.5 | 10.0 | 40.0 |  |
| 7 | 8.3 | 61.5 | 10.0 | 63.5 |  |
| 8 | 7.3 | 18.5 | 10.0 | 35.0 |  |
| 9 | 8.3 | 81.5 | 10.0 | 69.0 |  |
| 10 | 8.7 | 81.0 | 10.0 | 65.5 |  |
| 11 | 6.3 | 37.5 | 10.0 | 24.0 |  |
| 12 | 8.5 | 81.5 | 10.0 | 76.5 |  |
| 13 | 4.3 | 31.0 | 8.0 | 30.0 |  |
| 14 | 7.1 | 35.5 | 10.0 | 26.0 |  |
| 15 | 6.8 | 23.0 | 10.0 | 27.5 |  |
| 16 | 7.7 | 29.0 | 10.0 | 32.0 |  |
| 17 | 8.2 | 44.0 | 10.0 | 28.0 |  |
| 18 | 9.3 | 95.0 | 10.0 | 85.5 |  |
| 19 | 6.3 | 23.0 | 10.0 | 15.5 |  |
| 20 | 7.5 | 27.5 | 10.0 | 35.0 |  |
| 21 | 7.5 | 36.0 | 10.0 | 21.5 |  |
| 22 | 8.2 | 55.5 | 10.0 | 52.5 |  |
| 23 | 7.7 | 77.0 | 10.0 | 67.0 |  |
| 24 | 5.7 | 11.0 | 10.0 | 17.0 |  |
| 25 | 8.2 | 32.5 | 10.0 | 21.0 |  |
| 26 | 7.7 | 48.5 | 10.0 | 34.5 |  |
| 27 | 7.5 | 26.0 | 10.0 | 23.0 |  |
| 28 | 7.8 | 28.0 | 10.0 | 22.0 |  |
| 29 | 7.8 | 48.0 | 10.0 | 19.5 |  |
| 30 | 8.7 | 87.5 | 10.0 | 38.0 |  |
| 31 | 6.9 | 30.5 | 10.0 | 85.5 |  |
| 32 | 7.1 | 54.5 | 10.0 | 27.5 |  |
| 33 | 7.3 | 39.5 | 10.0 | 34.5 |  |
| 34 | 8.8 | 68.0 | 10.0 | 22.5 |  |
|  |  |  |  |  |  |

## Appendix 2

## Students Semi-structured interview questions

1) What is your perspective on the allocation of extended learning time for the subject?
2) What is the impact of the extended learning time in your learning?
3) How is extended learning time able to cater your need to understand the concept?

## Appendix 3

## Teacher's Semi-structured interview questions

1) What is your perspective on the allocation of extended learning time for the subject?
2) What is the impact of extended learning time in students' learning?
3) How is extended learning time able to better understand the concept?

## Appendix 4

## Homework and class work assessing criteria of class seven, eight, nine \& ten history (2019)

Home Work Marking Criteria (5\%)

| Deadline (1) | Neatness (1) | Originality and Language (1) | Completion of work (1) | Relevancy (1) | Full Marks (5) |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Class Work Marking Criteria (5\%)

| Attendance (1) | Punctuality (1) | Participation (1) | Completion of work (1) | Relevancy (1) | Full Marks (5) |
| :--- | :--- | :--- | :--- | :--- | :--- |

Homework and class work will be assessing based upon the criteria mentioned above. You are reminded to work hard to get good marks as per the above criteria.

Ganga Ram Gurung
(Subject Teacher)
Appendix 5

## Action Research Matrix

| AR-Problem: Would more time spent in non-school study hours help grade VIII students improve their academic performance in history? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Indicators/ Area of improvement | Specific actions (new input) | Action timing <br> (Developmental sequence) | Data collection including the baseline | Data Analysis Method and Period |
| Learning Strategies and Materials | "Types of learning strategies and materials <br> (Notes, Exercise book others)" | Week 1-2 collect baseline data on the use of strategies <br> Week 3 intervention <br> Week $4^{\text {th }}$ post-intervention (exam) | Collect and Analyze baseline data (Observe strategies employed) <br> (Maintain Research diary to keep observation notes throughout the period to see the types of learning strategies used + Students' behavioural changes) Collect and Analyze Post-Intervention data (exam and CA marks) | Baseline data analysis in whole September 2019 <br> Post-intervention data analysis in $1^{\text {st }}$ and $2^{\text {nd }}$ week. October 2019 |
| Guidance \& Time spent for Study | " (Feedback <br> Advice, demand of highest degree of quality, Hand writing, communication, Checkups (Daily 2 hours of study) " | Week 1-2 collect baseline data on the communication level Week 3 intervention <br> Week 4 post-intervention data | Collect and Analyze baseline data (Observe on the communication skill) (Maintain Research diary to keep observation notes throughout the period to see the researcher's effort put into improving communication) Collect and Analyze Post-Intervention data (Observe strategies CA and exam assessment) | (Altrichter, Kemmis, McTaggart, \& Zuber-Skerritt, 2002) |
| Continuous <br> Assessments | No. Class Work Assigned (Marks) <br> No. Home Work Assigned (Marks) <br> No. Class Test (Marks) <br> Project Work (Marks) | Week 1-2 collect baseline data on the type of concerns and care shown Week 3 intervention <br> Week4th post-intervention data | Collect and Analyze baseline data <br> (Observe the type of care shown to students) <br> (Maintain Research diary to keep observation notes throughout the period to see what the researchers has been doing to show pastoral care) Collect and Analyze Post-Intervention data (Observe strategies (CA) \& Exam marks |  |
| Exam Marks | Post Exam (Marks) <br> Midterm (Marks) | Week 5 \&6 Write up of the Research Project |  |  |

Action Research Period: September $1^{\text {st }}$ week to end of October, 2019

| Data required against indicators | Source/Sample | Data collection including baseline | Data collection timing | Data analysis methods | Data analysis timing | Writing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Types of learning strategies/ approaches used. Shift from teacher-centered to student-centered learning | Purposeful sampling of 10 students-Learning observations, <br> Talking to students, feedback \& comments from a critical friend | Interviews \& Observations-baseline | September 1st and $2^{\text {nd }} w k$ baseline data | Qualitative dataColour coding for criteria and marks. Qualitative dataDescriptive statistics | Sept $2^{\text {rd }}$ wkbaseline |  |
|  |  | Observations by a critical friend \& Researcher diaryintervention data | September 3 wk intervention |  | Sept3 ${ }^{\text {rd }}$ wk intervention period |  |
|  |  | Exam-post intervention data | Sept. $4^{\text {th }}$ wk postintervention |  | Sep $4^{\text {th }}$ wk postintervention (exam) | Oct 1 \& $22019$ |
| How I communicate and encourage | Observations of learning, | Interviews \& Observations-baseline | Septmber1st to $2^{\text {nd }} w k$ baseline data | Qualitative dataColour coding for criteria and checking. | Sept $2^{\text {rd }}$ wkbaseline data |  |
|  |  | Interviews | Sep. $3^{\text {rd }}$ wk |  | Sep. $3^{\text {rd }}$ wk |  |

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| students to participate | Talking to students, feedback and comments from a critical friend | Observations, Researcher diaryintervention data | intervention | qualitative dataDescriptive statistics | intervention |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Exam-post intervention data | Sep. $4^{\text {th }}$ wk postintervention |  | Sep. $4^{\text {th }}$ wk postintervention (Exam) | $\begin{array}{\|c\|} \hline \text { Oct } 1 \& \\ 22019 \end{array}$ |
| What I do to show concern and care students | Observations of learning, <br> Talking to students, feedback and comments from a critical friend | Interviews \& Observations-baseline | August 1st to $2^{\text {nd }}$ wk baseline data | Qualitative dataColour coding for criteria and checking. qualitative dataDescriptive statistics | $\begin{gathered} \hline \text { August end to } \\ \text { Oct. } 3^{\text {rd }} \mathrm{wk} \\ \text { intervention } \\ \hline \end{gathered}$ |  |
|  |  | Interviews, Observations, \& Researcher diaryintervention data | August end to Oct. $3^{\text {rd }}$ wk intervention |  | August end to Oct. $3^{\text {rd }} \mathrm{wk}$ intervention |  |
|  |  | Interview for post intervention data (exam) | Sept. $4^{\text {th }}$ wk postintervention |  | Sept. ${ }^{\text {th }}$ wk postintervention (exam) | $\begin{gathered} \text { Oct } 1 \& \\ 2 \end{gathered}$ |

Appendix 6: Blueprint for Class VIII history 2019 (Ganga Ram Gurung)

| Chapters | Remembering | Understanding | Applying | Analyzing | Evaluating | Creating |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bhutan History Chapter 1 | Part A Q5 (1) | PartA Q1 (1), <br> Part A Q8 (1), <br> PartB, Q3d (2) | PartB, Q2b (3) | PartB, Q2a (2) |  |  | 10 |
| Chapter 2 | $\begin{aligned} & \text { Part A Q2 (1) } \\ & \text { Part A Q11 (1) } \end{aligned}$ | $\begin{aligned} & \text { PartB, Q1b (2) } \\ & \text { Part A Q7 (1) } \\ & \text { PartB, Q2d (2) } \end{aligned}$ |  | PartB, Q2c (2) | PartB, Q2 e (5) |  | 14 |
| Chapter 3 | $\begin{aligned} & \hline \text { Part A Q6 (1) } \\ & \text { Part A Q9 (1) } \\ & \hline \end{aligned}$ |  | PartB, Q3b (2) | PartB, Q1e (3) <br> PartB, Q1c (3) | PartB, Q1d (3) |  | 13 |
| Chapter 4 | Part A Q3 (1), <br> Part A Q4 (1) |  | PartB, Q1a (4) |  | PartB, Q3a (3) | PartB, Q3c (4) | 13 |
| Civics | Part A Q10 (1), <br> Part A Q12 (1), <br> Part A Q14 (1) <br> Part A Q15 (1) | Part A Q13 (1), | PartB, Q4 a (2) |  |  | PartB, Q4b (2) <br> PartB, Q4c (1) | 10 |
| Indian History Chapter 7 | Part A Q17 (1) | PartB, Q7b (2), <br> Part A Q24 (1) <br> PartB, Q7 a (4) |  | PartB, Q6d (1) <br> PartB, Q7c (2) | PartB, Q5a (2) |  | 13 |
| Chapter 8 | Part A Q16 (1) <br> Part A Q18 (1), <br> Part A Q19 (1), <br> Part A Q21 (1), | Part A Q22 (1), | PartB, Q6b (4) | PartB, Q5d (2) | PartB, Q5b (4) |  | 15 |
| Chapter 9 | Part A Q20 (1), <br> Part A Q23 (1), <br> partA Q25 (1) | PartB, 6c (2) | PartB, Q5c (2) |  | PartB, Q7 d (2) | PartB, Q6a (3) | 12 |
|  | 19 | 20 | 17 | 15 | 19 | 10 | 100 |

Appendix 6: Journal record

| Sl NO. | Date | Lesson Learned | Concepts learned and understood | Concepts learned and failed to understand |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |

Appendix 7: Self-Assessment checklist

| Sl No | Lesson Learned | Level of understanding of the concept and level of interest to study the concept |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- | :--- |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

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