CHAPTER III

RESEARCH METHODOLOGY

This research focused on the following steps:

1. Population and Samples
2. Research Instrument
3. Data Collection
4. Data Analysis

Population and Samples

1. Population

The population consisted of 53 urban public schools having the primary level of education. These schools were spread across 16 provinces of Bhutan. The schools were categorized as Primary, Lower Secondary, Middle Secondary and Higher Secondary by the Ministry of Education. The study was intended to be representative at the national level and covers areas from all the regions of the country, except the north since there were no urban schools.

2. Samples

The samples of the study were selected by employing purposive sampling method. All the 53 urban schools based on the 2013 data from the list of urban schools in Bhutan were selected as the samples. The respondents from each of the sample school consisted of 53 school principals and 53 teachers. The teacher being included was to avoid the data from being biased. The included teacher was the staff secretary and was selected as he/she worked closely with the principal and the staff. He/she understood the roles of the principal and how the school functioned. For data analysis, the principal's instructional leadership score was calculated by averaging the scores of the principal and the selected teacher from the same school.

Research Instrument

    1. Characteristics of Research Instrument

        The research instrument used in this study was two-part questionnaire: part 1 -Principal's Instructional leadership questionnaire and part 2-appendix survey form for school effectiveness.

        Part 1: Principal's Instructional Leadership Questionnaire. This part had 30 measures constructed based on the four dimensions of principal's instructional leadership, namely; General Roles and Responsibilities (X_1), Curriculum (X_2), Assessment (X_3) and Professional Development (X_4). The respondents views were gathered with reference to the 5-point rating scale as indicated below;

        5 = Strongly agree

        4 = Agree

        3 = Neutral

        2 = Disagree

        1 = Strongly Disagree

        Part 2: School Effectiveness. This part was designed to collect the existing (secondary) data of the school from the national evaluation for 2013 academic year. The principal was requested to fill out existing data in the form according to the framework of six domains of school effectiveness for evaluation:

        1. Leadership and Management Practices (Y_1).

        2. Green school   A: Physical Ambience

                             B: Psycho-Social Ambience (Y_2).

        3. Curriculum: Teaching and Classroom Management Practices (Y_3).

        4. Continuous and Holistic Students' Assessment (Formative and Summative) (Y_4).

        5. Co-curricular Dimensions: For Wholesome Development (Y_5).

        6. School-Community Relationship (Y_6).

        The rating was given as 4, 3, 2, and 1. The ratings for each indicator were added and the final rating was calculated as;

        4=This indicator was found in all individuals, classes and throughout the school at all times. Any visitor to the school shall recognize this quality (100%).

        3=The indicator was found in most individuals, classes and at most of the

times throughout the school. This is the norm in the school-not the exception (75%).

2 =The indicator was found in some individuals, classes, and sometimes in the school. It is not regular or frequent-most classes and individuals or the school do not demonstrate this. It is the exception, not the norm (50%).

1 =The indicator was seldom or never found in the individual, classrooms or the school. It is not a day to day norm, nor is it an impression that people would take away from a visit to this school (25%).

2. Research Instrument Construction and Quality

The constructions of research instrument for the principal's instructional leadership were done as follows:

2.1 Construction of Research Instrument.

2.1.1 From the literature review.

2.1.2 Definition of principal's instructional leadership and the four dimensions (Ministry of Education, Bhutan).

2.1.3 Constructed 30 instruments.

2.1.4 Consulted with the advisors for their recommendations and feedbacks for improvement.

2.2 The qualities of the instruments.

The qualities of the instruments were checked as follows:

2.2.1 The content validity was checked by five experts.

1) Associate Professor Dr.Nipon Kinawong, External Expert, Faculty of Education, Naresuan University

2) Associate Professor Dr.Vithaya Jansila, Lecturer of Educational Administration, Faculty of Education, Naresuan University.

3) Associate Professor Dr.Chalong Chatruprachewin, Lecturer of Educational Administration, Faculty of Education, Naresuan University.

4) Assistant Professor Dr.Aumporn Linchearm, Lecturer of Educational Research and Evaluation, Faculty of Education, Naresuan University.

5) Mr. Phuntsho Wangdi, Chief Program Officer, Ministry of Education, Bhutan.

2.2.2 Item Objective Congruence (IOC) validation method was employed; and the IOC for all the 30 instruments were calculated at 1.00.

2.2.3 The reliability of the instruments was tried-out with 15 respondents who were not in the sample. Cronbach's α (alpha) reliability coefficient was calculated at 0.93 which explained as excellent. This was done prior to the actual survey.

2.2.4 Completion of the questionnaire.

Data Collection

The survey data consisted of two sets: a self administered questionnaire with 30 measures was administered to collect data from 106 respondents (53 principals' and 53 teachers') aimed at collecting the response of principal's instructional leadership.

The other data was the existing secondary data of the school effectiveness for the academic year 2013 which was available in the school from the national evaluation. For this part the data collection was done from the 53 urban school principals of Bhutan.

Data Analysis

After data collection, the data analysis was conducted using statistical software package SPSS for social science. The following procedures of data analysis were carried out.

1. To study the dimensions of principal's instructional leadership, the mean ($\bar{X}$) and standard deviation (SD) of the respondents view was analyzed. And the average raw score of mean ($\bar{X}$) and standard deviation (SD) was analyzed for school effectiveness. It was with reference to 5-point rating scale [51].

4.50-5.00	Very high
3.50-4.49	High
2.50-3.49	Neutral
1.50-2.49	Low
1.00-1.49	Very low

2. To study the relationship between principal's instructional leadership and school effectiveness, the Pearson Product Moment Correlation Coefficients was analyzed by using the average sum of raw score of each school's principal and teacher's view on principal's instructional leadership (the range score is between

150-30) and school effectiveness average score (1-4). The range of r was from -1.0 to +1.0. The sign of the correlation coefficient indicated the direction of the relationship. The absolute value of the correlation coefficient indicated the strength of the relationship. The greater the absolute value, the stronger the relationship. The values below explained the range of values that was used as a guide or rule of thumb for interpreting the magnitude of correlation coefficients [52].

.90 to 1.00	(-.90 to-1.00)	Very high positive (negative) correlation
.70 to .90	(-.70 to-.90)	High positive (negative) correlation
.50 to .70	(-.50 to-.70)	Moderate positive (negative) correlation
.30 to .50	(-.30 to-.50)	Low positive (negative) correlation
.00 to .30	(-.00 to .30)	Little if any correlation