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## A Study on the Preparation and Importance of Blue Print in Teaching -Learning Process of Students of Class IX

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### Introduction:

Education has been defined differently by different educationists, educators, philosophers, thinkers, etc. Some say education is knowledge which we receive in schools; some others say education is a lifelong process and throughout our lives we, in one or the other way, receive education. In this way, there are a lot of views regarding education. However, the investigator was deeply touched by the definitions given by Swami Vivekananda and Mahatma Gandhi. According to Swami Vivekananda education is, "The manifestation of perfection already in man. Like fire in a piece of flint, knowledge exists in the mind. Suggestion is the friction which brings it out." Similarly, Mahatma Gandhi says, "By education I mean an all-round drawing of the best in child and man- body, mind and spirit." Influence by these definitions of education, the investigator felt that every child is capable in one or the other things. Teachers are only guide; they help in shaping and bringing out of the innate powers of the students. And it all depends on the way teachers provide the environment and situations in which students would bring out without hesitation their inner qualities. In academic field, it is possible through preparation of blue print which guaranties for the effective development of knowledge, understanding and expression.

Hence, it seemed quite appropriate to the investigator to inquire and investigate about the preparation and importance of blue print in teaching learning process.

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### Review of Literature:

Ajay raj Lakra conducted an achievement test in Namchi Public School and found out that his way of preparing questions was correct and concluded that the students performed very well. Chandra Gyan Tirkey, too, conducted achievement test on the students of Namchi Public School and found the similar result. Niraj Lakra conducted the achievement test on the students of Nandu Gaon School and concluded that if the students are taught well they would perform well in the examinations.

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### Objectives of the study:

The study was aimed at achieving the following objectives:

1. To present teacher made achievement test.
2. To study teaching learning outcome.
3. To find out remedial materials.

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### Delimitation of the study:

The present study was limited to the students of ninth standard of New Light Academy of Namchi, the South District of Sikkim.

The present study is an experimental study following pre-test experiment design o a single group of subjects.

#### Population

Population of the present study involves the students of class XI studying in New Light Academy of Namchi , South district of Sikkim, India.

#### Sampling and Tool:

Purposeful Sampling has been used in the present study. The investigator used Achievement test to study the teaching -learning outcome of the students.

#### Achievement test:

Its analysis and interpretation

The investigator conducted the achievement test for the students of class XI in New Light Academy, Namchi. The test is based on two units of English text book and was administered only once. The total number of the students present for the test was forty-two. The investigator divided the questions according to the objectives and the analysis of the each item based on the performance of the study.

**Table 1: Weightage to Content**

Weightage to content				
sl.no.	contents	Percentage of marks	Marks	No. of questions
1	Unit- II	56	28	9
2	Unit-III	42	21	6
Total		98	*49	15

Note: \* 1 marks for Neatness : 49+1=50

### Weightage to Objectives:

While setting the questions various domains are taken into consideration and accordingly questions are set which cover the objective like number of questions and marks allotted under each object used as in the following:

**Table 2: Weightage to Objectives**

Weightage to form of objectives				
sl.no.	Objectives	Percentage of marks	marks	No. of question
1.	Knowledge	34	17	5
2.	Understanding	40	20	5
3.	Expression	24	12	5
Total		98	*49	15

Note: \* 1 marks for Neatness : 49+1=50

### Weightage to Forms of Questions:

This indicates the forms of persons to be included in the test and the weight is to each forms of questions. The Setter should select the questions that are suitable to the objectives and content to be tested. The way it is to be given should be decided on the basis of the time needed for answering difficulty level objectives etc.

**Table 3: Weightage to the forms of questions**

Weightage to forms of questions				
Sl.no.	Types of questions	Percentage of marks	Marks	Number of questions
1	Essay	32	16	2
2	Short answer	50	25	5
3	Objectives	16	8	8
Total		98	*49	15

Note: \* One mark for neatness :49 + 1 = 50

**Blueprint:****Table 4: Blueprint :**

Sl. no.	Objectives	Knowledge			Understanding			Expression			Total
		Content	E	SA	O	E	SA	O	E	SA	
1	unit 1	-	5 (2)	1(1)	8(1)	5(1)	1(2)	-	-	1(2)	28(9)
2	unit 2	-	5(1)	1(1)	-	5(1)	-	8(1)	-	1(2)	21(16)
Total		17(15)			20(4)			12(5)			* 49(15)

NB: Number written inside the bracket indicates the number of questions and number written outside the bracket indicate the marks of the question.  
E = EssayType, SA = ShortAnswer Type, O= Objective Type

**Writing of the questions**

New Light Academy, Namchi

Class Test

Class: IX

Full marks: 50

Subject: English

Time :1HR

Group A

Objective type questions

Choose the correct answer( 4 x 1 = 4)

1. The phrase to take care of means:
  - a. Walking Through the whole year

- b. To take leave for whole year
- c. To be upset for the whole year
- d. To be creative for the whole year
- 2. The antonym of reproachful is:
  - a. Praiseworthy
  - b. Praising
  - c. Praiseful
  - d. Praise
- 3. The word..... means uses
  - a. Wear
  - b. Be passing
  - c. Worn
  - d. Better claim
- 4. On march 1st what was the incident that took place
  - a. Duke met with a fatal accident
  - b. Hopper planned to start a full day's work at office.
  - c. Hopper was paralyzed
  - d. He had guest at his new home

Make sentences using the following words. (4x1=4)

- 5. Fork
- 6. Headway
- 7. Warehouse
- 8. Trodden

#### Group B

#### Short answer type questions (5x5=25)

- 9. Discuss Duke was an extraordinary dog. What special qualities did he exhibit to justify this?
- 10. One incident changed Hopper's life. What was the change?
- 11. Describe the two roads that the poet come across in the road not taken. write the name of the poet.
- 12. What does the road in the poem the road not taken symbolises?
- 13. Describe the first meeting between Chuck and Duke after Hopper's accident.

#### Group C

- 14. Compare and contrast the characteristics of Charles hopper before and after the accident have taken place.

Or

It was like " lightning a flash", what does this situation refers to?

Or

write the central theme of the poem "the road not taken".

Answer key:

I. Objective questions:

1. b) to take leave for the whole year
2. a) praiseworthy
3. a) wear
4. b) Hopper plan to start a full days work at office
5. I often pass the fork which leads to the river.
6. It is good to overcome our fear and make a new headway
7. Our warehouse is full of old furniture
8. Fallen leaves are often trodden by the passerby

II. Short answer type questions

9. Duke was an understanding Cooperative and determined dog. He understood his master's misery. He was determined to bring Chuck back to his feet and he was indeed successful in his attempt.
10. In 1953 Hopper was a favoured young man. but one evening when she was returning home from the office, he met with an accident. He suffered from a subdural hemorrhage in the motor section of the brain. His left side was paralyzed. From being a competitive and hardworking zone sales manager, he became a crippled man in bed alone with his thoughts.
11. The two roads that the poet found were covered with yellow leaves. The diverged in a different direction, one road went to undergrowth and disappeared from the view. The other was grassy and fewer people seem to have travelled by the road. the name of the poet Robert Frost.
12. In the poem the road not taken, the road symbolises the choices that people have to make in their life. Whenever one has to make an important decision in their life they find themselves coming across a fork in the road and it becomes difficult to Retreat back.
- 13 Chuck came home from the hospital after a few days it was decided to bring Duke home Chak wanted to be standing while receiving Duke. Duke came back home from four months confinement and he was anxious to meet his master. When he saw Chuck he jumped with joy and with full force on Chuck struggling to keep his balance . Duke came to know instantly that his master was not well and he never jumped on the chuck again.

III. Essay type question:

14. a. Before the accident:

- Favoured
- hard charging
- Competitive
- Always smiling

After accident :

- Paralyzed
- Weak
- Alone
- Slacked

b) Duke came back home from four months confinement and he was anxious to meet his master. when he saw chuck it was like lighting the fuse he jumped with joy and with full force on the Chuck.

15 a) the poet is passing through the forest when he suddenly comes to the point where the two roads are diverged in two directions..... feels sorry..... Stood there for long.....Then took the other Road..... better claim.. grassy and wanted wear..... next morning..... leaves were not trodden.. kept the other Road for other day..... he was doubtful

b) the poem the road not taken by Robert Frost is about the choices..... tells about the man.... travelling upon the fore of life.....uses the fork to.... the the choices that man faces in life..... choices are faced by everyone.... difficult to retreat the path makes the difference.

**Result of the Performance of the students:**

**Table 5: Cumulative mark sheet**

Sl.no.	Gender	Marks	Percentage	Grade	Point
1	F	40	80	A	5
2	F	43	86	A	5
3	F	39	78	B	4
4	M	15	30	D	2
5	F	21	42	C	3
6	M	18	36	D	2
7	M	36	26	D	2
8	M	18	36	D	2
9	M	22	44	C	3
10	M	28	56	C	3
11	F	14	28	D	2
12	M	16	32	D	2
13	F	22	44	C	3
14	M	11	22	D	2
15	F	20	40	C	3
16	M	10	20	D	2
17	M	19	38	D	2
18	M	23	46	C	3
19	F	12	24	D	2

20	M	16	32	D	2
21	M	26	52	C	3
22	M	23	46	C	3
23	M	19	38	D	2
24	M	17	34	D	2
25	F	27	54	C	3
26	F	24	48	C	3
27	M	23	46	C	3
28	F	27	54	C	3
29	M	23	46	C	3
30	M	13	26	D	2
31	M	18	36	D	2
32	F	29	58	C	3
33	F	10	20	D	2
34	F	20	40	C	3
35	F	23	46	C	3
36	F	20	40	C	3
37	F	22	44	C	3
38	F	24	48	C	3
39	F	18	36	D	2
40	F	34	68	B	4
41	F	24	48	C	3
42	F	29	58	C	3

In the above table the results of the performance of the students or cumulative marksheet record shows different grading points. Grade A is secured by two students Grade B is secured by two students Grade C is secured by 21 students Grade D is secured by 17 students no one secured the lowest grade that is grade E.

### Marking grade

Use of Five Point grading system as it is shown in the table below:

**Table 6:Marking Grade**

Sl.No.	Mark Range	Categories	Grade	Point
1	$\geq$ to 40	Excellent	A	5
2	$\geq$ 30 but $\leq$ 40	Very good	B	4
3	$\geq$ 20 but $\leq$ 30	Good	C	3
4	$\geq$ 10 but $\leq$ 20	Average	D	2
5	< 10	Weak	E	1

According to the above table 40 or more than 40 is considered to be excellent and great reward is a with Grade Point 5; 30 or more than 30 but less than 40 is very good with grade B and Grade Point 4 respectively; More than 20 but less than 30 is regarded as good and C grade is given with Grade Point 3; students who scored 10 or more than 10 but less than 20 are called average students with the grade D and to Grade Point 2 and grade 3 is awarded with Grade Point 2 the students who scored less than 10.

### Item analysis:

Item analysis determines the effectiveness of the different items included in the test. The items have been written, reviewed, carefully edited and tried out, they are subjected to a procedure usually known as item analysis. Item analysis has two levels:

- A. Difficulty level (DL): of item is indicated by the person who Respond to the item correctly. Hence difficulty level of an item can be computed by applying the following formula.

$$DL = \frac{U + L}{TN} * 100$$

Where, U= the number of correct responses in the high group

L = the number of correct responses in the lower group

TN= the total number of student holder tried the items in upper and lower groups.

However, there is no any in uniform view on selecting items for the achievement test on the basis of indices of the difficulty. a common practice is to select some items with difficulty is at 50% level or close to and items percent passing (Freeman, 1962: 113). According to Ebeland Frisbe1991, a good test must have some easy items to test the low achievers and some difficult items to test the high achievers. According to Garrett (1981: 164) the normal curve can be taken as a curve in the selection of difficulty indices. does 50% items might have difficulty indices between 0.25 and 0.75. Similarly 25% in dices are larger than 0.75 and 25% are smaller than 0.25. the same criteria were adopted while selecting the items for the test on the basis of indices of difficulty by Patel( 1993: 163)

Difficulty level of short answer type and essay type test are calculated to with the help of the formula of Ratio method

$$DL = R/N$$

where DL refers to Difficulty level



R = number of students answering correctly

N= total number of students

- B. **Discriminating Power(DP):** Discriminating Power is the function of the subject variation with regard to an item it refers to the ability to discriminate between the high and the low achievers. the formula is:

$$DL = \frac{U-L}{TN} * 100 \text{ where,}$$

U= the number of correct responses in the high group

L= the number of correct responses in the lower group

N= total number of students who have tried in the items in upper or lower group

Generally, items are considered better if discriminating Power of item is higher so most items need to have discrimination index about is 0.20 Patel (1993-164). Remmers, Gaze and Rummel, (1967) also have similar view. according to them, items with discrimination index above 0.20 are regarded as having sufficient discriminating power to be used in most test in academic achievement. Garrett (1981: 363) also has similar view. But Ebel and Frisbe (1991: 232- 233) opine that achievement test items should have indices of discrimination of 0.30 or more. he has also classified items accordingly - 0.40 and up is very good, 0.30 to 0.39 is reasonably good but possibly subject to improve, 0.20 to 0.29 is marginal items usually subjected to improvement.

The formula used for calculating discriminating power of short answer type and essay type question is:

**DP= PQ**

Where, DP= Discriminating Power.

P= The percentage of student solving an item correctly

Q= The percentage of students solving an item incorrectly.

DL is written in percentage and DP in Ratio.

**Table 7: Item Analysis**

Item Type	Item no.	Students Solving Correctly		Difficulty Level	DL	Discrimination Power (DP)	DP
		UPPER	LOWER	$DL = \frac{U+L}{TN} * 100$ And/or $DL = \frac{R}{N}$	%	$DL = \frac{U-L}{TN} * 100$ And/or $DP = PQ$	RATIO
Objective Type	1	11	6	$DL = \frac{11+6}{22} * 100$	77.27	$DL = \frac{11-6}{11}$	0.45
	2	6	2	$DL = \frac{6+2}{22} * 100$	36.36	$DL = \frac{6-2}{11}$	0.36
	3	5	4	$DL = \frac{5+4}{22} * 100$	40.90	$DL = \frac{5-4}{11}$	0.09
	4	7	6	$DL = \frac{7+6}{22} * 100$	59.09	$DL = \frac{7-6}{11}$	0.09
	5	8	3	$DL = \frac{8+3}{22} * 100$	50	$DL = \frac{8-3}{11}$	0.45
	6	7	2	$DL = \frac{7+2}{22} * 100$	40.90	$DL = \frac{7-2}{11}$	0.45
	7	10	4	$DL = \frac{10+4}{22} * 100$	63.63	$DL = \frac{10-4}{11}$	0.54
	8	11	2	$DL = \frac{11+2}{22} * 100$	59.09	$DL = \frac{11-2}{11}$	0.81
Short	9	11	7	$DL = \frac{18}{22} * 100$	81.81	DP = 82 * 18	1476

Answer Type	10	11	7	$DL = \frac{18}{22} * 100$	81.81	DP = 82 * 18	1476
	11	11	9	$DL = \frac{20}{22} * 100$	90.09	DP = 91 * 9	819
	12	10	3	$DL = \frac{13}{22} * 100$	59.09	DP = 59 * 41	2419
	13	11	6	$DL = \frac{17}{22} * 100$	77.26	DP = 77 * 23	1771
Essay Type	14	6	2	$DL = \frac{8}{22} * 100$	36.36	DP = 36 * 64	2304
	15	6	2	$DL = \frac{8}{22} * 100$	36.36	DP = 36 * 64	2304

Interpretation of the Test Scores:

DL= from 30% to 70% are considered as appropriate

DP= about 0.20 from objective type items and about 2500 then it is considered as appropriate.

#### Difficulty Level:

##### Objective Type Test:

There are 8 items in objective type test. Among these, except items or questions number no1, all are appropriate items since the difficulty levels fall under 30% to 70% but as we see question number 1 has its difficulty level of 77.27% which indicates that the question was too easy for the students.

##### Short Answer Type Test:

Among five items in the section, only one item that is question or item number 12 is appropriate because of the reasons stated above; rest of them are quite easy for the students to answer.

##### Essay Type Test:

In the essay type test there are 2 items both items are appropriate since they have difficulty level of 36.36%.

#### Discriminating Power

##### Objective Type Test

Item no.3 does not have discriminating power since or of the item is only 0.09; which means that this item does not discriminate any good or poor student.

All the other items have different discriminating powers which separates good students and poor students.

Short answer and essay type test do not have significant discriminating power. Hence, these questions should not be used for classified good or poor students. All the items which are appropriate can also be included in the standardized test items.

#### Findings and Conclusion:

Achievement test is considered as the need for a teacher as well as a student to know his or her teaching skill whether he or she understands the label of students or not and to one's learning outcome respectively. This achievement test conducted in New Light Academy of Namchi class 9 and through the item analysis investigator came to the conclusion that the students performed fairly well because most of the discriminating power and difficulty level of the students are suitable. The suitability of DP is 0.20 and the suitability of DL is 30% to 70%. DL is written in percentage and DP is in Ratio. In this the investigator has taken 22 papers; 11 from the higher group and 11 from the lower group. The total number of students is 42 (11 is 27% of 42). From this the investigator came to know that the student's gift or 12 will understand the content and do well in tests and examinations.

Improvement in the percentage of the students depends to a great extent on the teachers way of teaching and the Teachers way of teaching depends mostly on the way they prepare themselves for their lessons. In other words, it all depends on the blue print they make for their respective classes and

subjects.

In conclusion, it can be said that blue print plays a most significant role in the improvement of the teaching learning outcome of the students.

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