

Research-led curriculum development: Pilot study on social studies

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Executive Summary

BRAC's EDU has been working to develop effective materials for its learners from very early on. In phase II the focus was on providing improved materials and refining curriculum to suit the needs of the learners. In the case of social studies it was decided to be activity based and would focus on developing the life skills of rural children (NFPE, 1999). This pilot study is an attempt to develop an assessment methodology for assessing what learners know, can do and understand for achieving expected learning outcome, in order to evaluate the curriculum towards research-led curriculum development with special reference to knowledge, and understanding level of the learners of grade II. This is a joint study of Research and Evaluation Division and Education Development Unit of BRAC.

Methodology

This pilot study was an assessment based on achievement test, interview and group discussion with different respondents, and looking at work and documents. Many sources were considered appropriate in designing the data collection which included learners, teachers, staff and their documents as well as work. The study was done in two teams of Jamalpur region of BEP. Four grade 2 schools from each of the teams were randomly selected for the study. All learners, teachers in the sample schools and all staff in sample teams were included in the study. Apart from these 6/7 learners from each sample schools were interviewed individually.

A number of different methods were examined and followed for data collection in this study. These included an achievement test, interview with individual learners, interview with teacher, discussion with staff, and looking at learners' work and teachers' documents.

Four sets of instruments those of a test instrument consisting of items measuring learners' achievements in terms of expected learning outcomes of the respective two chapters of grade 2 in social studies, three set of checklists for interviewing discussion with children, teachers and staff, and looking at work and documents, were used in this study. Data collection in this study was done by the researchers themselves, and these were coded and analyzed manually as well as using computer software.

Findings and recommendations

The mean score of 52.3% on the achievement test should be discussed with the teachers involved and the MTs in teams 1 and 2. The item analysis and spread of marks should form the basis for an action plan to remedy the areas of weakness highlighted by the research. Future research using an achievement test should widen the scope of the test to include other aspects of social studies, like writing skills, life skills etc.

The learner interview was found to be a useful method of exploring learners' logical understandings. In the light of the pilot study findings it needs to become refined so that there is a proper procedure followed by all researchers carrying out the interviews. This will generate useful data on learners' errors and misconceptions which will help developing learners' knowledge retention power.

Teacher interviews generated data which gave insights into their perceptions of their learners' abilities (very optimistic) and the clarity of the learning outcomes in the chapters they taught (some confusions). In addition, some views were given on the content, context and methodologies of the particular research focus. The interviews should be a feature of any future research but should be carried out at both the individual teacher and group of teachers level. These, allied to carefully devised and trailed interview schedules, will provide more detailed data. The teacher interview data indicated that some teachers could review content, context and methodology in a constructively critical way. However, the fear that to try anything that was not prescribed was also evident and this needs to be addressed in training days and through the work of MTs and QMs. The data concerning why teachers think some learners fail to learn indicates that the teachers do not consider themselves as part of the problem. This needs to be discussed and addressed on training days.

Each of the research methods and instruments used need refining in the light of the pilot study to increase their effectiveness in providing relevant data suited to the specific objectives of the study.

The use of classroom observation techniques should be considered in any future research study as, properly done, it would validate the teacher planning documents and the teacher interviews.

Table of contents

Executive summary	2
Contents	4
Introduction	5
Objective of the study	7
Methodology	8
The study design	8
Data source	8
Sample	8
Methods/ Technique	9
Instruments	9
Data collection and analysis	9
Findings	10
Achievement test	10
Interview with learners	17
Interview with teachers	19
Discussion with staff	28
Looking at learners' work and teachers' documents	37
Conclusions and recommendations	42
References	43

Introduction

Curriculum is indeed the heart of the educational process. The quality of education, irrespective of the system under which it is provided, depends ultimately upon the individual, and the social relevance of the curriculum and the extent to which it is effectively transacted in educational system. The direction to the curriculum is provided by its educational objectives from which, in a manner of speaking, it derives its shape as well as identity (Sabharwal, 1997).

Curriculum is everything that impacts upon the child at school, not simply a plan or series of teaching materials. Curriculum may be explained as what happens in the classroom or laboratory. It is the manner in which the teacher provides for the needs of the children and achieves the desired goals. Therefore the curriculum must be relevant to the developing child's needs and abilities, both today and tomorrow (Eliason and Jenkins, 1981).

According to Dhand, H. and Lyons, J (1991) social studies as an area of school curriculum is in a state of turmoil. Citizenship education and cultural literacy are its primary objectives. The major goals of the new curriculum in social studies are concerned with developing democratic understanding and values including national as well as personal identity, and development of abilities and skill for analyzing problems that affect us as members of a changing and complex world.

Research-led curriculum development:

Education as a means of developing human resources for a nation in the making and on the highway to development-social as well as economic-has to be multifaceted activity. While each of its facets would have some commonality with other facets, yet it should have its distinctive identity too. And this identity should be reflected in its curriculum and the curriculum should be purposive and functional in attaining its objectives. The role of research as an ongoing critical inquiry, whose result can be ploughed back to improve the curriculum, assumes tremendous significance in our context (Sabharwal, 1997).

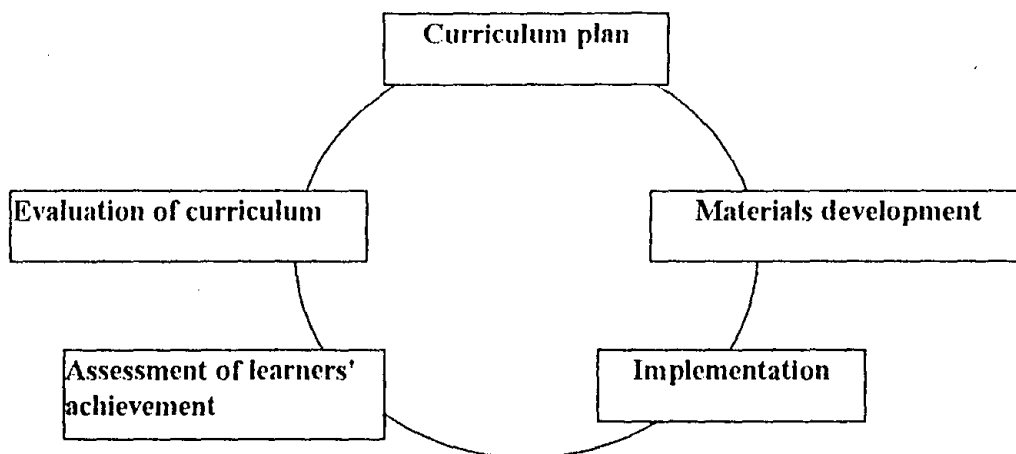
Research on curriculum development has hardly been done in Bangladesh, let alone in social studies. The scenario is not very different for BRAC, though it has a good curriculum development unit as well as a research cell. In fact, though the nearby country, India is far advance in this area, yet only 28 studies have been done on social studies out of 370 curriculum studies in the last five years. One can venture to predict consistency in this low-key effort in the coming years as well through social sciences admittedly deserve a greater focus in curriculum research (Sahbharwal, 1997).

Evaluation of the curriculum can only take place if we know what knowledge, skills and understanding pupils gain from it. Effective intervention in the curriculum development cycle can best be achieved by strengthening the quality of assessment information available. Assessment of students' achievements or learning outcome is therefore crucial in developing the curriculum to be effective as possible. So in the first stage, it is necessary to develop indicators of expected outcomes (what children know, can do and understand) to assess achieved outcome that will generate information about the strengths and weaknesses of the curriculum. This will probably give a somewhat scope to evaluate the curriculum in terms of identifying the reasons behind the weaknesses.

Cycle of research led curriculum development:

Curriculum development is a cyclic process which follows the continuum of curriculum plan, material development, implementation, assessment of students' achievement and evaluation of curriculum, and again the same cycle based evaluation. The figure shows research-led curriculum development cycle:

Figure 1: Research-led curriculum development cycle



BRAC's curriculum on social studies:

Brac had emphasized on the need for a social studies curriculum from very early on. The reason is; a child coming from a poor family deprived of basic necessities will benefit if s/he has knowledge of primary health care, hygiene care, food and nutrition and so on. The basic focus of this subject is to provide basic life skills. Effort has been given to design child-friendly curriculum. It was decided that social studies will be activity based and participatory in approach and would focus on developing life skills of rural children. New topics such as natural environment, gender, population and geographical makeup of our country were introduced in the new revised books. The skills associated with the activity based are mainly interpreting, linking, cause and effect, categorizing, communicating and critical and analytical thinking (NFPE, 1999).

This pilot study being part 2 of two studies is an attempt towards evaluate curriculum focusing on developing methodologies for research led curriculum development with special reference to social studies. of grade2. This is a joint study of RED and EDU.

Objective of the study:

The overall objective of the study is to develop an assessment methodology in order to evaluate the curriculum towards a research-led curriculum development. To achieve this objective, some methods were examined in terms of their effectiveness in assessing learners' achievements in knowledge and understanding of certain chapters of social studies, and appropriateness of content, context and methodology for teaching those chapters.

The report will describe and evaluate the findings and the methodology of each aspect in turn.

Methodology;

The study design

This is a pilot study based on the assessment of what children know, can do and understand as well as the appropriateness of content, context and methodology for achieving expected learning outcomes. These assessments would be based on achievement test, interview and group discussion with different respondents, and looking at documents and work. The assessment of what children know, can do and understand i.e. the achievements of learners against expected learning outcomes, would be in this study, basically an achievement test which aims to assess the learner by comparison with some pre-determined or negotiated criteria (eg. a competency or a specified attainment target) (Harris and Bell, 1990:101).

Data source

Many sources are considered appropriate in designing the data collection of the study. These include students, teachers and staff (immediate supervisors), and their documents as well as work.

Sample

BRAC prepared curriculum on social studies for class II, was selected for the study. Four schools were randomly be selected from two different teams of an area. All students and teachers of sample schools, and all staff members (immediate supervisors) of sample area have been included in the study as respondents.

Methods/Techniques

A number of different methods were examined and followed for data collection in this study. These are (i) an achievement test with MCQ questions; (ii) looking at children's work, and teachers' (iii) questioning to individual students; (iv) interview with teacher; and (v) group discussion with staff and students, separately.

Instruments

A test instrument consists of items measuring learners' achievements in expected learning outcomes of a particular chapter in social studies of class II, was developed for the study. Apart from this, three sets of checklists for interviewing and group discussion with teacher, staff and students, and looking at work and documents were used in the study. Details of these instruments are given in the findings section along with each method/ technique. The method and instruments were pre-tested before finalizing these.

Data collection and analysis

Data for the study was collected by the researchers themselves during a period of one and a half weeks. After the collection, the data was coded and analyzed manually as well as using computer software.

The report will describe and evaluate the findings and the methodology of each aspect in turn. As the overall objective of this study was to develop an assessment methodology in order to evaluate the curriculum towards research-led curriculum development, the findings will describe each of the methods/ techniques used and examined in this study. The description and evaluation of each methods/ techniques will follow the chronological order of rationale/ objective, description of the instrument, sample size and type, procedure, analysis, main findings and recommendation for future research. Finally the report will present conclusions and recommendation

FINDINGS

ACHIEVEMENT TEST

Rationale/ objective

Rationale or objective of the test was to assess grade 2 learners' knowledge and level of understanding in social studies specifically in relation to two chapters in their book, namely, 'House' and 'Food' of grade 2.

Detail description of instrument

A test instrument was developed consisting of 19 items measuring learners' knowledge and understanding of the expected learning outcomes related to those specific two chapters. Both national competencies and BRAC's outcomes were considered in preparing the instrument. Those are concept of healthy latrine, concept of cleanliness, location of a latrine, concept of cheap latrine, concept of healthy kitchen, location of a kitchen, concept of garbage disposal, concept of house, concept of healthy house, concept of balanced diet, knowledge on body regulative food, concept of seasonal food, concept of cheap but healthy food, knowledge on body building food, concept on food wastage etc. The items in the instrument would cover learners' observation, classification, decision making skill and ability of understanding cause-effect relationship.

The format chosen was Multiple Choice Question (MCQ) since grade 2 learners are not as yet fluent in writing.

Sample size and type

Two teams from the BRAC Education Program (BEP) regions were selected and four schools from within each of the two teams were selected randomly. The eight were from the category B. Category B is among those of A,B,C through which BEP categorizes its schools interns of performance using various indicators. All schools were single teacher schools (as are all BRAC schools). The fixed class size was 33. The total sample is described in table 1

Table 1: Distribution of sample by team and sex

School	Team 1			Team 2			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	13	18	31	10	21	31	23	39	62
2	14	18	32	10	23	33	24	41	65
3	13	19	32	8	22	30	21	41	62
4	13	19	32	12	20	32	25	39	64
Total	53	74	127	40	78	126	93	160	253

Procedure

The researchers administered the test in April 2000 after the learners completed these lessons. The test timing was flexible. It took 45 minutes to an hour for learners to complete. Learners were given a short talk about the test to make them feel relaxed.

Analysis:

a. Average number of items learners got right by team and sex

Table 2 shows the average number of items learners got right by team and sex. It indicates that out of 10 items in 'House', on average learners got 6.43 items correct (table-2a), whereas in 'Food' out of 9 items learners answered 4.08 items correctly (table-2b). This may be because in the case of 'House' BRAC's learning outcomes were the basis of the test, on the other hand for 'Food' national competencies were the basis and BRAC's book does not always follow the national competencies.

Table 2a shows that learners in team 2 scored significantly ($p < 0.002$) higher than the learners in team 1 on house. Although learners in team 2 did better in 'Food' than as well as the learners in team 1, yet there is no significant difference (table 2b). There was no MT for social studies in team 1 and this is a probable reason for team 1 low score.

In both the case of 'House' ($p < 0.001$) and 'Food' ($p < 0.009$) boys did significantly better than girls. In both the teams boys did better than the girls in house, however, the difference is significant ($p < 0.000$)

in the case of team 2. On the other hand in food (table-2b), the difference is significant ($p < .017$) in team1 (table 2).

Table 2a: Average number of items learners got right by team and sex in 'House':

Sex	Team-1	Team-2	Total	Level of Significance
Boys	6.43 (1.80)	7.59 (1.40)	6.95 (1.73)	p.001
Girls	5.77 (2.14)	6.43 (2.07)	6.12 (2.13)	P<.053
Total	6.05 (2.03)	6.82 (1.95)	6.43 (2.03)	p<.002
Level of significance	Ns	p<.000	p<.001	

Note: figures in parenthesis are standard deviation.

Table 2b: Average number of items learners got right by team and sex in 'Food':

Sex	Team-1	Team-2	Total	Level of Significance
Boys	4.64 (2.51)	4.45 (2.00)	4.56 (2.29)	ns
Girls	3.59 (2.23)	3.95 (2.16)	3.78 (2.19)	ns
Total	4.03 (2.40)	4.12 (2.12)	4.08 (2.26)	ns
Level of significance	P<.017	ns	P<.009	

Table 3 presents the overall average number of items learners got right by team and sex. Table shows that the mean score is 10.51 (53%) out of a possible 19 items, which are in learners every day experience. Result may be considered disappointing especially as the topics covered by house and food. However, the test was designed on the basis of national competencies and the BRAC learning outcomes. Some of the national competencies were absent in the BRAC books 'House' and 'Food'. So this may be a cause for comparatively low score. Also the topics had been covered a few months (4/5) before, so children will more likely have forgotten the content. The children were not prepared for the test beforehand and this has depressed the score. The nature of instrument (MCQ) was not familiar to the children, though they are familiar with ticking right answers in their social studies book. This again may be the reason. Some of the questions could not have been answered from the text anyway though they have been answered from general knowledge of life outside the classroom.

There was no significant difference between the performances of team 1 and 2 in the achievement test as a whole. The boys score was significantly ($p < .001$) higher than the girls score and this is so ($p < .013$, $p < .005$) in both teams. At first glance this seems surprising because the topics are 'House and 'Food'. There are three possible reasons for this finding. The first one is the selection process in BRAC schools. That is girls are selected from the good and average ones since the number of girls in BRAC schools are more than the boys, whereas, boys are always good ones since the number of boys are always fewer than the girls. A second possible reason may lie in the teacher bias towards male students. She may give more attention and ask more questions of them but this is a topic for further research. Thirdly, girls do not get enough time to study at home since they are the one who are still considered as responsible for household work rather than engaging herself in study. Study at home is still secondary for her. Whereas boys are encouraged to study more.

Table 3. Average number of items learners got right by team and sex:

Sex	Team-1	Team-2	Total	Level of Significance
Boys	1.08 (3.76)	12.05 (2.70)	11.51 (3.35)	Ns
Girls	9.36 (3.75)	10.38 (3.65)	9.91 (3.72)	Ns
Total	10.08 (3.83)	10.94 (3.44)	10.51 (3.66)	
	$p < .013$	$p < .005$	$p < .001$	

Note: Figures in the parentheses indicate the standard deviation

b. Proportion of learners by range of items:

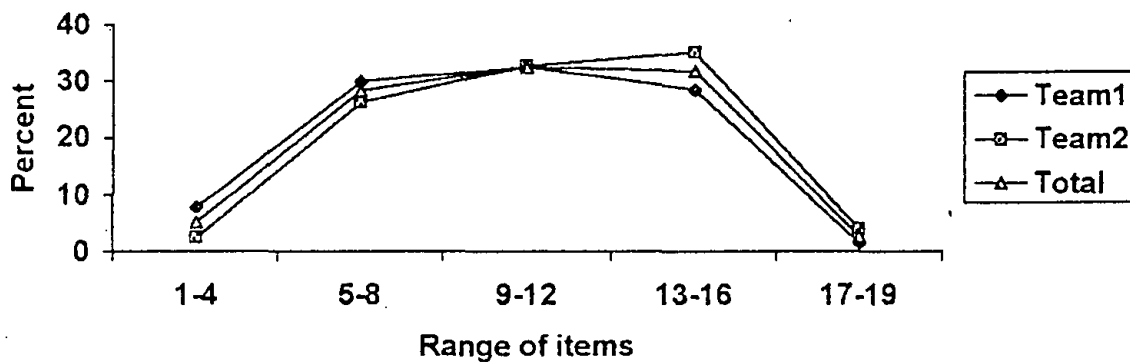
Table 4 is indicating proportion of learners got right by range of items by team and sex. Table 4a (Percentile band) and 4b (graph) indicate that 92% of learners got between 5-16 questions right, while 5% got 4 or less and 3% got 17 or more right. Most of (32.40%) learners got 9-12 items right. Most of the (32.30%) learners in team 1 got 9-12 items whereas most of the (34.90%) learners in team 2 got 13-16 right.

Although this reflects the general trend in all classrooms all over the world, yet it has been observed that the brighter children have been asked to complete the exercises because of the pressure of time, so the weaker children are just left behind.

a. Percentile band of learners by range of items

Range of items	% of learners		Total
	Team 1	Team2	
1-4	10 (7.9)	3 (2.40)	13 (5.2)
5-8	38 (29.8)	33 (26.10)	71 (28.1)
9-12	41 (32.3)	41 (32.5)	82 (32.40)
13-16	36 (28.30)	44 (34.9)	80 (31.6)
17-19	2 (1.6)	5 (4.0)	7(2.8)

Table 4b: Proportion of learners by range of items they got right and team



c. Average number of item learners made correct by school:

Average number of item learners made correct by school and sex is presented in table 5. Table 5 indicates that learners of school 4 of team 1 scored the highest (13.00) and learners of school 2 also of team 1 scored the lowest (8.50%). Boys in all the schools did better than girls, however these differences are significant in the case of school 1 ($p < .037$), school 4 ($p < .008$), school 5 ($p < .036$) and school 8 ($p < .015$). This issue needs exploring future research.

Table 5: Number of items learners got right by school and sex

Schools	Boys	Girls	Total	Level of significance
School 1	10.62 (3.66)	7.89 (2.93)	9.03 (3.49)	P<.037
School 2	8.71 (2.79)	8.33 (2.52)	8.50 (2.60)	Ns
School 3	10.46 (4.10)	9.26 (4.12)	9.75 (4.09)	Ns
School 4	14.69 (1.11)	11.84 (4.02)	13.00 (3.45)	P<.008
School 5	12.36 (1.96)	10.43 (2.98)	11.09 (2.80)	P<.036
School 6	12.55 (3.47)	11.48 (4.69)	11.84 (4.28)	Ns
School 7	13.38 (2.26)	11.27 (3.30)	11.83 (3.16)	Ns
School 8	10.42 (2.19)	8.20 (2.53)	9.03 (2.61)	P<.015
Total	11.51 (3.35)	9.91 (3.72)	10.51 (3.66)	P<.001

d. Item Analysis:

Table 6 represents the proportion of learners who got right different items by team and sex. Data shows that there are four items where the learners did excellent and those are the concept of garbage disposal (77.9%), concept of healthy kitchen (82.6%), concept of healthy latrine (75.1%), concept of location of stove in a kitchen (72.3%). Whereas they scored very low in some other six items, these are concept of house (22.1%), concept of food (34.0%), concept of balanced diet (48.6%), knowledge on body building food (42.3%), knowledge on source of food (48.6%), location of kitchen (45.1%).

Learners in team 1 did better than learners in team 2 only in 5 items, whereas learners in team 2 did better than learners in team 1 in the remaining 14 items. The result of the item analysis shows that learners made mistake in those questions, which are, absent in the book yet part of national competency.

Table 6. Item by team and sex

Item	Team-1			Team-2			Total
	Male	Female	Total	Male	Female	Total	
Concept of healthy latrine	77.4	59.5	66.9	88.1	81.0	83.3	75.1
Concept of cleanliness	88.7	86.5	87.4	88.1	84.5	85.7	86.6
Location of a latrine	54.7	49.9	47.2	85.7	67.9	73.8	60.5
Concept of cheap latrine	62.3	51.4	55.9	69.0	66.7	67.5	61.7
Concept of healthy kitchen	81.1	81.1	81.1	95.2	78.6	84.1	82.6
Location of a kitchen	39.6	36.5	37.8	61.9	47.6	52.4	45.1
Concept of garbage disposal	81.1	70.3	74.8	88.1	77.4	81.0	77.9
Location of chore in a kitchen	83.0	62.2	70.9	88.1	66.7	73.8	72.3
Concept of house	24.5	23.0	23.6	26.2	17.9	20.6	22.1
Concept of healthy house	50.9	64.9	59.1	69.0	54.9	59.9	59.3
Concept of balanced diet	47.2	45.9	46.5	57.1	47.6	50.8	48.62
Knowledge on body regulative food (KDPF)	52.8	43.2	47.2	47.6	60.7	56.3	51.8
Concept of seasonal food	52.8	48.6	50.4	64.3	50.0	54.8	52.6
Concept of cheap but healthy food	67.9	55.4	60.6	76.2	58.3	64.3	62.5
Knowledge on body building food	54.7	31.1	40.9	35.7	47.6	43.7	42.3
Concept on food wastage (COWE)	56.6	50.0	52.8	66.7	51.2	56.3	54.5
Knowledge on source of food	64.2	39.2	49.6	54.8	44.0	47.6	48.6
Concept of food	49.1	31.1	38.6	31.0	28.6	29.4	34.0
Concept on cooked and raw food	66.0	60.8	63.0	69.0	54.8	59.5	61.3

Main findings

1. On average learners got right 10.51 out of 19. That is on average they scored 55.3%. The average score (55.3%) for total sample is acceptable.
2. In overall term there is no significant difference between the performance of learners of two teams. However, team 2 scored significantly higher than team 1 on the 'House' questions.
3. Overall, boys performed significantly better than girls on this test in the sample.
4. Out of 19 items learners did excellent in four items as 70% of the learners got these items right. On the other hand, in six other items learners did not perform so well as only less than 50% of the learners got these items right.

Recommendations for further research;

Design:

1. The test should be constructed using the national competencies for whatever grade is being tested not particular text books.
2. The test was multiple choice and it may be that the learners found it easier to get the right answer. If further research would be done in this area it may be appropriate to consider different types of questions in the achievement test. For example, part of the test could still be MCQ and part could be answering written questions or writing answers to oral questions.
3. The data generated by this study was grade 2, it may be appropriate to see another grade to observe if the boys perform better than the girls.

Administration: The achievement test is needed to be administered right after the teacher has taught the chapter.

Timing: As the focus of the achievement test is to explore whether the learners have achieved the outcome or not duration of test can be flexible.

Summary of learners interview results:

Objectives:

Rationale for developing this interview schedule was to find out whether learners have logical understanding in each of the concepts. Another purpose was to investigate the reason behind learners' misconception. (list of questions).

Detailed description:

Written questions were chosen for the interview schedule. These were chosen because they tested the children's logical understanding in the chapters under study. To supplement and extend knowledge of the children's methods of thinking 'why' was missing from the text, so it may be assumed that the learners would not know the logic.

Procedure:

After the assessment test the interview was conducted. 7 learners' from each class were selected randomly from each class (4:3) for the interview. The schedule was used to write down children's' responses just underneath the each question. Researchers took the interviews and also note it down.

Each interview took approximately 15-20 minutes. They were conducted in a quite place within or outside the classroom. Children were put in ease before the questions were asked.

Analysis:

Data collected concerned 9 out of 19 in the achievement test. The data is presented in the same sequence as the questions were asked. Data shows that learners performed good in question number 2, 4, 7 (appendix). Question 2 was about cleanliness and students have a chapter on cleanliness, which was taught a few days ago, where they got the concept through an activity. It may be also because in radio and TV these things are well covered. Question 4 was on importance of a window in a kitchen and respective chapter was all about importance of a window in a kitchen and it was well discussed as well. Question 7 was on location of a stove in a kitchen and learners got a clear idea in class one about this concept.

Learners did not perform well in question 3, 5 and 9. Question 3 was on the logic behind specific side for a latrine which is also absent in the book, so learners' failed to answer. Question 6 was on 'Location of a kitchen' and since no concept is given on it in the chapter though it is one of the learning outcomes, and this may be a reason of failure to answer. Question 9 was on balanced diet and since only a line was written on 'balanced diet' in the book, nothing in detail. So may be some concepts of balanced diet is not clear to the learners though they have learnt something in the previous class. Data shows that the rest three questions are pretty close to incorrect answer. It should be mentioned here that most of the answers given by the learners were from their common sense and was vague as well. So, clear logical understanding needed to be provided through text.

Table: Performance of learners on logical understanding

Questions	Correct	Partially	Incorrect
House 1	32	6	18
House 2	49	2	5
House 3	26	1	29
House 4	51	-	5
House 5	17	-	39
House 6	35	-	22
House 7	46	-	10
Food 8	30	-	26
Food 9	10	11	35
Food 10	25	7	24

Interview with the teachers:

Objectives:

To explore teachers' perceptions of the learning outcomes of the specific chapters on which achievement test is based; Secondly, to explore teachers' perception of learners' performance on those specific chapters; to investigate teachers' perception of the appropriateness of the suggested content, context and methodology used in the two chapters.

Detailed descriptions instrument and method:

The interview schedule was designed to include several questions related to examine each of the three objectives (see appendix number). In designing the interview schedule both the research groups (Maths and Social studies) worked together. The schedule was finalized after piloting it with some teachers. During the phase it was decided to omit questions on context because of the lack of response form the teachers.

Sample :

Only six teachers were interviewed because of the schools had new teachers who had not taught those specific chapters.

Procedure

Out of three researchers, one controlled the class by giving tasks to the learners, one asked the questions while one took the notes on the schedule. The interview was taken on a separate day from the achievement test. The interview took 40-50 minutes for each teacher.

Analysis:

The results will be reported and commented on question by question. Books were there, so that teachers could use them to recall these more easily.

a. Teachers perception of expected learning outcome of the particular chapters the achievement test is based on:

Teachers were provided books while they were being interviewed, so that teachers could use it to recall the learning outcomes more easily.

For 'House' amongst all the responses, that the teacher made, number 2 perceived is exactly one of the expected learning outcomes and 4 teachers (respondent no: 1,3,5 and 7) out of six could answer this correctly. Perceived learning outcome number 1 (respondent no: 1,3,4,5,7) and 5 (respondent no: 1,2,3,4,5,7), are somehow related to the expected learning outcome. Perceived learning outcome number 3 (respondent no: 1), 4 (respondent no: 1,4,5,7), 6 (respondent no: 2,3), 7 (respondent no: 3) 8 (respondent no: 4), and 9 (respondent no:) mentioned by teachers, are not even closer to the learning outcome that is written on the top of the chapter. Yet these perceived outcome mentioned by the teachers are somewhere in the chapter. Here one of the major outcomes that is Location of a kitchen is missing from the response and the reason may be though location of a kitchen is one of the learning outcomes, yet nothing is written about it in the chapter.

For 'Food' 1 (respondent no: 7,5,3,2,1), 2 (respondent no: 7,4,3,1), 3 (7 respondent no: 4,3,2,1) and 4 (respondent no: 5,2) responses are exactly the four objectives of the chapter. But one of the expected learning outcomes that is 'importance of different types of food is missing from the data. This may be due to the lack of clear discussion on this concept in the chapter. Other two perceived out-

comes of 5 (respondent no:) and 6 (respondent no:) mentioned by the teachers are not even closer to the learning outcome.

Table: Teachers perception of expected learning outcomes of the respective chapters:

Expected	Perceived	Team 1	Team 2
House:	House:		
1. Location of kitchen and latrine.	1. Learn about house	2	3
2. Location of katch and pakka latrine.	2. Location of a latrine	2	2
	3. Vegetable garden	1	
	4. Cheap latrine	2	2
	5. Disadvantage of unhealthy latrine	3	2
	6. Importance of window in a kitchen	4	
	7. Cleanliness	2	
	8. Location of cowshed	1	
	9. Know about learners household	1	
Food:	Food:		
1. Balanced diet.	1. Cheap but nutritious food	4	2
2. Seasonal food	2. Three types of food	3	1
3. Importance of different types of food	3. Seasonal food	3	2
4. Cheap but healthy food	4. Balanced diet	2	1
5. Three types of food	5. Food by age	1	1
	6. Concept of diarrhea		1

b. Teachers' perception of the learners' performance

All the six teachers interviewed found to be very optimistic about their learners achievement as all of them expected that at least 75% of their learners achieved 100% learning outcome. Al thought this is not reflected in the achievement test result.

Table : Teachers perception on learners' achievement

<i>Perceived by the teachers</i>			
<i>Team 1</i>		<i>Team 2</i>	
<i>S-1</i>	85%	<i>S-5</i>	91%
<i>S-2</i>	79%	<i>S-6</i>	-
<i>S-3</i>	91%	<i>S-7</i>	79%
<i>S-4</i>	76%	<i>S-8</i>	-
<i>Total</i>	83%		85%

Evaluation register mark and teachers perception of number of learners achieved the learning outcomes of that chapters' show that all the teachers are very optimistic about their learners' ability to learn. Yet the achievement test data shows that learners got 52% and on average, whereas teachers' evaluation register shows that they got 80% on average in both the chapters.

The discrepancy between the teachers' assessment and the achievement test result may be partially explained by the different length of time between the teaching of the chapters and assessment. The teachers did the evaluation immediately; whereas the achievement test was given several months later. Also the achievement test was developed using the national competencies as well as the chapters, so some questions had not been covered in the learners workbook.

Table : Teacher's perception on learners achievement level VS achievement test result

<i>Team 1</i>		<i>Team 2</i>	
Register marks (in average all the students got)	Achievement test result	Register Marks (in average all the students got)	Achievement test result
80%	48%	92%	58%
80%	45%	-	-
80%	51%	70%	62%
90%	68%	-	-

c.. Teachers perception of the reason behind some of the learners' failure to achieve:

Data shows that the teachers did not take any responsibility for their part in learners learning. Rather they tried to put all the blame on the learners. So teachers do not have reflective attitude, towards

their teaching. It is important to develop this attitude, as the teacher is extremely significant in children's learning, which is very essential for curriculum development.

Table 11: *Teachers perception of the reason learners' failure:*

	Team 1	Team 2
1. Students forget easily	2	
2. Some are stupid		1
3. Students can't find answer from the text		1
4. Students do not practice at home	1	
5. Some are in attentive	1	

d. Teachers perception on methods and processes of teaching these chapters:

There are 26 methods and 3 major process for teaching social studies in general. Only one teacher could mention the exact number of process, whereas 3 didn't answer and other 2 said 23 and 17/18. But all the teachers were able to name some of the methods at least (cholo pori, esho kori, golpo bola, esho aki, abhinoi ect). Teachers are also not too sure about the steps of different methods (cholo kori, esho pori, golpo bola etc). Since each method has different steps and it is not written in the guide, differences in teaching occur here as well.

On the other hand, there are three processes (taking information, giving information and Evaluation) and only 1 out of 6 teachers could mention all the number and name three methods. Even the one who could answer correctly, was not able to match method with the process when asked to do so. So there is a clear misconception regarding method and process which needs to be explored in more detail so that help can be given in this area to teachers. The reason behind this may be that the processes are not written anywhere (guide/ book), though they are discussed in monthly training sessions. However these do not seem to be effective in helping the teachers to name those techniques. In fact, when the teachers were asked to match the techniques with the methods teachers became confused.

Table 11: Teachers perception on methods and processes of teaching these chapters:

Prescribed method	Mentioned by the teachers	Frequency
1. Let's do (esho kori)	1. True/ False	1
2. Writing question/ answer	2. Game	1
3. Story	3. Lets do	5
4. Field trip	4. Lets read	5
5. Fill up the blanks	5. Lets think	4
6. Let's do (cholo kori)	6. Lets write	3
7. Quiz	7. Exercise	2
8. Parents meeting	8. Story	4
9. Question/answer	9. Question /Answer	3
10. Let's think and say	10. Field trip	4
11. Game	11. Practical	4
12. Let's write	12. Lets do	5
13. Let's do	13. Acting	2
14. Let's speak	14. Quiz	5
15. Let's see		
16. let's read		
17. Rhyme		
18. Practical		
19. Wall magazine		
20. Home-work		
21. Today's discussion		
22. Let's test		
23. Acting		
24. Pair discussion		
25. Puppet show		
26. Let's write a letter.		

e. Additional method used by the teachers:

Data shows that most of the teachers are satisfied with the 26 suggested methods but few had their own ideas. Only three teachers mentioned that they sometimes use their own way. For example teacher 1 said, 'While teaching 'Food' I draw a picture of different types of food and then try to give them the concept of balanced diet. (1e). Teacher 5 said, 'I ask them to read with me and follow me and I do the thing repeatedly until they get the concept'. On the other hand teacher 7 said, 'When learners fail to understand I read it again, 'I try to relate the previous relevant concept that was taught in the previous class to teach a specific issue'

Table : Additional method used by the teachers:

Additional method	Team 1	Team 2
1. Repeat the whole thing until they understand the concept	1	1
2. Ask them to follow me	-	1
3. Relate previous relevant concept with the recent concept	-	1

f. Teachers' perception on the problems usually faced by them while teaching Social Studies:

Teachers all responded to the questions but in somewhat different ways. Four of the problems identified concerned the quality of the materials. The revision of the text could resolve this problem. Two of the problems identified concerned learners (response: 2,5,8). One of the problems concerned the time that the prescribed activities in Social Studies took, for example; field trips or filling in questionnaires. Data shows that teacher 1 and 2 gave most of the answers, while rest gave the other answers.

Teacher 1 said that '*I find it difficult to make questions from the activities*', '*Students can't write question answer since less opportunity for writing*', '*Why*' is not clear to us, so to the students. Teacher 2 mentioned '*Students face problem in reading*', '*Due to the little scope for reading (once in chain system) students find difficulties while writing, Social studies takes time since there are some additional activities for this class.*' Teacher 5 and 7 mentioned '*Problem in picture discussion and identifying learning outcome from picture (ex: latrine)*' According to teacher 1 and 3 '*It is difficult to make questions from the activity section*'.

Table : Teachers' perception on the problems they usually face

	Team 1	Team 2
1. Difficulty in making questions	2	-
2. Students can't write answers	1	-
3. 'Why' is not clear to the students.	1	-
4. Learners face problems in reading.	1	-
5. Learners have problem in reading as well as writing	1	-
6. Time consuming subject	1	-
7. Picture discussion is a bit problematic.	1	2

g. Assessment Process:

Some of the teachers said they ask questions (teacher: 1,3,4), many said they use the prescribed evaluation method (respondent no: 1,3,4,7), some other mentioned they ask to write answers to the given questions (respondent no:2,4,5), another few said ' ask question while teaching or reading (respondent no: 2,7), one said (respondent no: 7) by asking question form the previous lesson or examining previous knowledge.

Table: Assessment process used by the teachers

Assessment Process	Team 1	Team 2
1. Asking questions	3	2
2. Evaluation session	3	1
3. Question/ answer session (oral and written)	3	1
4. Asking quiz type question while teaching	1	-
5. Exercise	-	-
6. Evaluating previous knowledge	-	1

h. Teachers' perception of what can be done to the content to get a better performance from the learners:

Most of the teachers were satisfied yet some of them produced several comments though they were initially hesitant to answer. This might be because they are not used to be critical on their curriculum. The following are all responses to the teachers, so should be considered. In fact some of the valuable comments show that some teachers can be also used as part of a research project.

Findings show that some of the teachers thought carefully about the content. Some suggestions could sefully be explored further to impact on the content of the chapters. Findings show that teacher focused on questions, lesson arrangements, story size (respondent 5: '*House is a long chapter which distract the learners' from the main points whereas in 'Food' more detail information is needed*), example type and frequent practice.

Table 15: *Teachers' perception regarding effective content:*

Teachers' perception	Team 1	Team 2
Content:		
1. Questions can be incorporated in learners' books, so that they will be able to practice or read at home.		1
2. Lessons can be arranged in a 'spiral' manner (spiral curriculum)		1
3. More concentration on story Examples from learners' own life becomes useful for better understanding.	1	1
4. Need more practice	1	

Main findings:

1. Teachers were reluctant to talk because of the working environment and the culture of the society
2. They are not fully aware of the learning outcomes and this may be overcome by revising the teachers' guide
3. Teachers showed that they were aware of most of the methods though except one none could mention the exact number of methods used for teaching social studies. On the other hand, none were aware of the process except one.
4. All the teachers were very optimistic about their learners' achievement though this was not supported by the result of the assessment test. This indicates that teachers may need further development in assessing their learners' achievement.
5. Teachers did not take any responsibility of learners' failure. Although they are the important partners in learner's learning.
6. Teachers were able to make critical comment on the material they use.

Recommendation for further research:

Design:

1. It is necessary to have the individual interview and group discussion with the teachers because nature of data needed to be collected

2. The problem of the teachers identified should be taken seriously and should be included in any search for solutions.
3. In selecting schools as sample it is important to consider the status of teachers since some teachers might be new or substitute.

Administration:

MTs and QMs might be involved for teachers interview in future. It would be useful to use reorder while interviewing the teachers to get their words. Interviewing the teachers about the learning outcome, methods and content as soon as the achievement test is finished.

Timing:

Duration of teachers interview should be flexible enough to have better and well thought data regarding content, context and methodology.

Analysis:

Findings should be shared with the MTs as well as the teachers to improve the curriculum as a whole.

Interview with the staff:

Objectives:

Firstly, to explore staff's perceptions of the learning outcomes of the specific chapters on which achievement test is based; Secondly, to explore staff's perception of learners' performance on those specific chapters; thirdly, to investigate staff's perception of the appropriateness of the suggested content, context and methodology used in the two chapters. Last but not least, was to know staff's perceptions about teachers.

Descriptions of the instrument:

The interview schedule was designed to include several questions related to examine each of the three objectives (see appendix number). In designing the interview schedule both the research groups (Maths and Social studies) worked together. The schedule was finalized after piloting it with some staffs. During the phase it was decided to omit questions on context because of the lack of response from the staff.

Sample :

8 staff from team1 and 4 from team 2 were interviewed for staff interview.

Table: Number of staff by team and designation:

Team 1		Team2	
Designation	Number	Designation	Number
PO	4	PO	3
BT	1	-	-
RT	1	-	-
MT	1	-	-
Team in charge	1	Team in charge	1

Procedure:

It was a focus group discussion with the staff. The researchers facilitated discussion. This session was done on the same day the teachers' interview though in a separate time and place (office). One of the researchers took notes on the schedule. The discussion took 2 hours for each team.

Analysis

a. Expected Learning outcomes and staff perception:

Data shows that staff mentioned about 6 learning outcomes for 'House' whereas there were two specific outcomes for that chapter which are written on the top of the chapter. But it should be mentioned here that out of these six they have covered those two (response: 1,5), though team 1 didn't mention about the second learning outcome directly. The rest of the outcomes (response 2,3,4,6) mentioned by the staff were to some extent covered by the book though was not mentioned as the

outcomes on the top of the book. In 'Food' there were 4 specific outcomes and the staff mentioned 5, so one (response:1) of the outcomes mentioned by the staff was not at all relevant or absent from the chapter. Here also team 1 has missed one (response :5) of the outcomes and added the irrelevant one (1). Data indicates that staff is more or less aware of the outcomes though not very specifically. But the expectation was that they would be able to tell the outcomes very specifically since they are written on the top of each chapter. It might be because they are not used to practice the specific outcomes rather they focus on the chapter. This might be useful if all the outcomes related to a particular concept are covered and learnt but it can be harmful at the same time in doing so, since there might be a chance of focus being shifted from major outcomes to something else. This may be overcome if specific outcomes are written as objective in the book and side by side the learning outcomes of those specific objectives. Also, these should be highlighted in the training sessions. So that it will be clear what should be taught for what purpose.

Table: Expected Learning outcomes and staff perception

Expected outcome:	Perceived outcome	Team-1	Team-2
House	House		
1. Location of a kitchen and latrine	1. Location of a latrine and kitchen	✓	✓
2. Location of <i>katcha</i> and <i>pakka</i> latrine	2. Cheap latrine	✓	
	3. Importance of window in a kitchen	✓	
	4. What are the elements that a house comprised with.		✓
	5. Location of <i>katcha</i> and <i>pakka</i> latrine		✓
	6. How to make <i>katch</i> and <i>pakka</i> paikhana		✓
Food	Food		
1. Balanced diet	1. Food for three meals	✓	
2. Seasonal food	2. Balance diet	✓	✓
3. Cheap but nutritional food	3. Cost effective nutritional food	✓	✓
4. Importance of different types of food.	4. Seasonal food	✓	✓
	5. Importance of different types of food		✓

b.. Staffs' perception on methods and processes of teaching these chapters:

Staffs of both the teams could mention the number and name of both methods and process that are suggested for the chapters. Since data was collected in a group, so it could be judged whether each of the staff is aware of both the methods and processes.

Table: Staffs' perception on methods and processes of teaching these chapters:

Methods and process	Team 1	Team 2
23 methods	✓	✓
Three processes	✓	✓

c. Appropriateness of methods and processes:

Staffs were satisfied with the methods and processes used for teaching social studies yet they have commented on certain aspects. They made comments on training pattern, discussion style and issues like practical works.

Table: Appropriateness of methods and processes:

Comments	Team 1	Team 2
1. Methods are al right in order to achieve the out-comes, if can be applied properly.	✓	✓
2. Since there is no guide for trainers different trainers get training in different way and trains up the teachers in different way. No standardized method.		✓
3. Message should come up in discussion with more emphasis rather story.		✓
4. More practical works are needed to be included		✓

d. Staff's perception of the number of the learners' performance:

Data indicates that staff of team 1 are less (75%) optimistic in comparison to the teachers (83%) of that specific area whereas staff of team are more optimistic (92%) than the teachers (85%). It should be mentioned here that the perception of both the staff and the teachers are nor consistent with the achievement result.

Table: Comparison between the perception of staff and teachers on learners' achievements by team:

Team1		Team2	
Staff	Teacher	Staff	Teacher
75%	83%	92%	85%

d. Staff's perception of the reason behind some of the learners' failure to achieve:

Out of seven reasons mentioned by the staffs' three were on content (response:2, 4, 6). Like teachers said, 'Why' is not explained against an information so teachers do not or can not teach the logical understanding behind any concept'. 'No attempt has been made to relate the achieved knowledge with present one though it has a lot of relevance and link', 'Major concepts like, what is food or 'concept of house as a whole are absent in the book'. Yet it is very essential for retention of knowledge. Two comments (response: 3, 5) were on methodology ' Teachers usually ask questions from the story straight away and do not focus on the information or do not ask information based question'. Basically it was observed that most of the questions that are written on the guide are story based which makes the teacher tempted to ask story-based question. Two of the comments (response:1,7) were about the learners. The third issue that the staffs raised were about learners, 'Every one doesn't have same capacity'. 'Learners can not pick up messages, to them story becomes the main focus specially when the stories are long', 'Learners do not practice at home'

Table: Reason behind some of the learners' failure to achieve:

<i>Reason</i>	<i>Team 1</i>	<i>Team 2</i>
1. Difference in individual ability	✓	
2. Logic is absent in the book	✓	
3. Emphasis is given on story,	✓	
4. Missing concept	✓	
5. Lack of practice at home	✓	
6. Content problem (unclear picture, lack of spiral relevance)	✓	✓
7. Students are not able to pick up the main points from the text.	✓	✓

e. Staffs' perception for better performance:

Staff comments for better performance indicates that they have given a somewhat good effort to think critically at least when they were asked to. According to them frequent revision is needed, messages can be delivered through a comparatively smaller story with more focus on information, questions with proper reflection of the main message are needed to be in the exercise section of learners' books, logical background of each concept needed to be incorporated. Three suggestions out of four were the same for both the team.

Table: Staffs' perception for better performance:

Better Performance	Team 1	Team 2
1. Frequent revise is needed.	✓	
2. Smaller story with more focus on information.	✓	✓
3. Questions should be carefully chosen	✓	✓
4. Logical background is needed to be incorporated	✓	✓

f. *Suggestions for developing the content in order to fulfill 100% learning outcome:*

Staffs made an effort to give some suggestion for improving the text which might be taken into consideration. Data shows that team 1 has emphasized more on questions. Both the team has emphasized on information based questions, comparatively smaller stories, consistency between learning outcomes and the information given in the text. Some additional suggestions have come from team 2 like, conceptual clearance, story type.

Table: Suggestions for developing the content in order to fulfill 100% learning outcome:

Suggestions	Team 1	Team 2
1.If questions could be incorporated with the activities or picture then teacher could ask relevant questions and also would be helpful for discussion	✓	
1. More emphasis is needed to be given on information based question		✓
2. Stories needed to be comparatively smaller for the students to pick up as well as to retain the main information.	✓	✓
3. Main concepts are needed to be clearly defined before going to further elaboration. Like, what do we mean by food or house.	✓	✓
4. More fairy tale and flowery stories		✓
5. Consistency is needed between the specific learning outcomes mentioned and information given in the context.	✓	✓

g. *Staffs' perception of problems of the teachers:*

Staffs mentioned about some of the problems that the teachers usually face. But if the points can be analyzed carefully then it can be realized that teachers alone are not responsible for all the problems mentioned by the staff. For example, they have mentioned that teachers are not able to make focused information based questions, they are not able to maintain a standardized way of teaching, and different teachers are found to focus on different issues of a same thing. But all these are might be be-

cause the guide is not that detail written which causes lack of standardized way of teaching or may be because of the differences in training as well.

Table: Staffs' perception of problems of the teachers

Problems of the teachers	Team 1	Team 2
1. Unable to make useful questions		✓
2. Lack of standardized way of teaching.		✓
3. Lack of consistency in focusing major issues		✓
4. Reluctant to do field trips	✓	✓

Major Findings:

Although staff have cooperated to provide various information regarding curriculum yet it was felt that they are thinking on those issues for the first time since it took long time to make them talk about it.

Data indicates that staff are more or less aware of the outcomes though not very specifically. But the expectation was that they would be able to tell the outcomes very specifically since they are written on the top of each chapter. It might be because they are not used to practice the specific outcomes rather they focus on the chapter.

It was found that staffs are aware of the methods as well as processes though teachers were not. It indicates that training do not go in the same way or in a standardized manner every where. Staff find those method of teaching social studies good enough as well, though they have given some additional suggestion regarding standardization, practical activities etc.

Staff were found to be optimistic about their learners achievement. Though data indicates that it is not the same in comparison to the teachers perception in both the teams. For team 1 staff's perception is lower than the teachers whereas in team 2 it is higher than the teachers'. Here it should be also mentioned that staff optimistic perceptions about learners' achievement have not been reflected in the achievement test.

Like the teachers' staff also found not to be critical about themselves or were reluctant to take responsibility about learners' learning though they are also the crucial part of the learning environment. They were found to be critical about the teachers more.

Recommendation for further research:

Design: It is important to have discussion with staff (supervisors) on issues related to learners' learning because they are the part of educational environment i.e. curriculum in which learning take place. Given this, checklist for discussion with staff may need some refinement with sufficient prompts. The problems and gap staff as well as teachers mentioned should be considered with due importance and should be included in any research for solution.

Administration: QMs might be used in collecting data from staff, but in area they are not working. Staff, words should be elaborately collected and written. Discussion with staff should be taken place after having achievement test.

Timing: Time for discussion with staff should be appropriate enough to give them think and talk, and recording their words elaborately.

Analysis: A number of problems and gaps have been come up from the discussion with staff. These findings should be shared with QMs in order to develop staff.

Looking at learners' work and teachers' documents

Rationale/ objective

The objective of looking at learners' work (workbook, exercise books etc) and teachers' documents (evaluation register etc) was to examine the extent of reflection of learning outcomes which the achievement test based on, in these documents. This will help in understanding learners' achievements in a particular issue.

Description of the instrument

Evaluation register of the respective teachers was used to analyze this part since all other documents were not available. The reflection was qualified in qualitative terms of not reflected, satisfactorily reflected, and well reflected. These three categories of reflection were defined as; well reflected, Satisfactorily reflected, not reflected

Sample size and type

All the teachers (8) of sample schools were selected for looking at their documents.

Procedure

Few days after the achievement test, the researchers went to different sample schools individually teachers' documents . Researchers copied the evaluation question from the evaluation register in order to analyze it later on in the light of reflection of the given learning outcomes.

Analysis

a. Teachers document:

Teachers' evaluation question were copied to get the picture whether learning outcomes are being exercised or followed in the class. So the level of reflection of the combination of problems was determined on the basis of combining information from both teachers' documents. Since exercise books are not used in all the areas, learners works were judged according to their or book. Although learners use workbook yet all the exercises were done in the same way. So nothing was felt to be documented as the data to be analyzed.

More than 60% of the items were found not to be not reflected in both the teams. On the other hand, only around 25% of the items were well reflected and a very negligible proportion was satisfactorily reflected in the documents. Data indicates that the learning outcomes which the achievement test was based on , have been poorly reflected in the evaluation document, this might be the reason for lower score in the achievement test. Poor reflection of the learning outcomes might be because of some of the learning outcomes especially of 'Food' were based on the national competencies which are absent from BRAC text. Another possible reason might be learning outcomes of ' House' were based on the

learning outcomes of Grade I and Grade II which might cause the absence of some learning outcomes in the evaluation document since the evaluation document was on Grade II.

Four items from 'House' and two from 'Food' were comparatively better reflected in the evaluation document. On the other hand, four from 'House' and ' six from 'Food' were not reflected at all.

Table: Reflection in teachers' documents

Item	Well reflected		Semi reflected		Not reflected	
	Team 1	Team 2	Team 1	Team 2	Team 1	Team 2
Concept of healthy latrine	1			4	3	
Concept of cleanliness	1				3	4
Location of a latrine	1	3		1	2	
Concept of cheap latrine	1			4	3	
Concept of healthy kitchen	4	4				
Location of a kitchen		4			4	
Concept of garbage disposal					4	4
Location of stove in a kitchen					4	4
Concept of house					4	4
Concept of healthy house					4	4
Concept of balanced diet	3	4			1	
Knowledge on body regulative food (KDPF)					4	4
Concept of seasonal food	1				3	4
Concept of cheap but healthy food	3	4	1			
Knowledge on body building food					4	4
Concept on food wastage(COWF)					4	4
Knowledge on source of food					4	4
Concept of food					4	4
Concept on cooked and raw food					4	4
Total	15 (20%)	20 (26%)	2 (3%)	9(11%)	59(78%)	48 (63%)

h. Learners document:

Learners document was observed in order to see the reflection of the outcomes in the type of exercise they do. It was found that in one team learners use exercise book while in team 2 they do not.

But both the team use work book. So on the basis of workbook and exercise book analysis of the document is done. Team 1 has covered 9 items whereas team 2 has covered 8 items out of 19 items of the achievement test.

Table: Reflection in learners' document:

Item	Team 1	Team 2
Concept of healthy latrine	✓	✓
Concept of cleanliness	✓	-
Location of a latrine	✓	✓
Concept of cheap latrine	✓	✓
Concept of healthy kitchen	✓	✓
Location of a kitchen	-	-
Concept of garbage disposal	-	-
Location of stove in a kitchen	-	-
Concept of house	✓	✓
Concept of healthy house	-	-
Concept of balanced diet	✓	✓
Knowledge on body regulative food	-	-
Concept of seasonal food	✓	✓
Concept of cheap but healthy food	✓	✓
Knowledge on body building food	-	-
Concept on food wastage	-	-
Knowledge on source of food	-	-
Concept of food	-	-
Concept on cooked and raw food	-	-

Main findings

It is important to look at learners' work and teachers' documents. It can provide valuable information on their activities related to a particular chapter, which can further be an indication of learners' achievements.

One of the main findings is that the area where a prescribed evaluation question was given, learning outcomes were more or less well reflected and it was also found in the achievement test. On the other hand, where teachers developed their own evaluation questions, story based questions were given more emphasis rather focusing the learning outcomes which also caused lower score in the achievement test. Of course, it is not fair to develop evaluation questions for the teachers since it gives better

performance initially but in the long run it resists teachers to think about the lessons and so effects the learners. So teachers need training on how to develop objective based useful questions.

It was found that teachers used to assign same activity and assignment for each learners in a school. This may create a scope for copying and prohibit individual learner's creativity. Also resist solving individual problems.

In most of the cases, documents showed that learning outcomes are not reflected or focus has been shifted to something else. This has been reflected in the low achievements of learners in the achievement test. This needed a further orientation of teachers on activity and assignment they give learners so that these exams help exercising the major learning outcomes rather being distract.

Recommendation for future research

Design: A checklist with specific focus can be developed in order to get more information from different sources like, students work , teachers' lesson plan etc. A special attention is needed to be given to analyze the workbook that is how these works are being done or whether these exercise are being done the way they are supposed to. While looking at work and documents, activities those are in learners' work but not in teacher's documents should also be looked at. Otherwise information may therefore be misleading. This will give whole range of information on learners' work which provides very important contribution in producing their achievements in a particular issue/ subject.

Administration: Some work and documents should be collected through photo copying as sample of learners' work and teachers' documents in order to get the exact picture or find out the gaps more specifically.

Timing: Time for looking at learners' work and teachers' documents should be according to the volume of issues whose reflection one is going to examine.

Analysis: The problem of not being able to make question on the basis of the major outcomes rather making story based questions should be shared with QMs and MTs to address these in the training sessions for teachers.

Conclusion and recommendations

The study attempted to develop a methodology for assessing learners' achievements, and appropriateness of content, context and methodology for teaching a particular concept, in order to evaluate the curriculum towards a research-led curriculum development. This section highlights the potentials of the methods examined and provides recommendations for future research in the light the pilot study.

The mean score of 52.3% on the achievement test should be discussed with the teachers involved and the MTs in teams 1 and 2. The item analysis and spread of marks should form the basis for an action plan to remedy the areas of weakness highlighted by the research.

Future research using an achievement test should widen the scope of the test to include other aspects of social studies, like writing skills, life skills etc.

The learner interview was found to be a useful method of exploring learners' logical understandings. In the light of the pilot study findings it needs to become refined so that there is a proper procedure followed by all researchers carrying out the interviews. This will generate useful data on learners' errors and misconceptions which will help developing learners' knowledge retention power.

Teacher interviews generated data which gave insights into their perceptions of their learners' abilities (very optimistic) and the clarity of the learning outcomes in the chapters they taught (some confusions). In addition, some views were given on the content, context and methodologies of the particular research focus. The interviews should be a feature of any future research but should be carried out at both the individual teacher and group of teachers level. These, allied to carefully devised and trailed interview schedules, will provide more detailed data.

The teacher interview data indicated that some teachers could review content, context and methodology in a constructively critical way. However, the fear that to try anything that was not prescribed was also evident and this needs to be addressed in training days and through the work of MTs and QMs.

The data concerning why teachers think some learners fail to learn indicates that the teachers do not consider themselves as part of the problem. This needs to be discussed and addressed on training days.

Each of the research methods and instruments used need refining in the light of the pilot study to increase their effectiveness in providing relevant data suited to the specific objectives of the study.

The use of classroom observation techniques should be considered in any future research study since it would validate the teacher planning documents and the teacher interviews.

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