

Challenges and Coping Mechanisms of improving Instructional Materials: The Cases of Secondary Schools in Addis Ababa, Ethiopia

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KEY WORDS

*Coping mechanism,
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ABSTRACT

The present paper aims to look into challenges and coping mechanisms of improving instructional materials in the secondary schools in Addis Ababa, Ethiopia. The researcher applied descriptive survey research design. The study also employed quantitative and qualitative approach. For this purpose, out of ten sub cities six sub cities were selected randomly. The sample of this study comprised of six principals, selected by purposive sampling method, 125 secondary schools teachers and 300 students selected by using simple random sampling method. A closed ended and an open ended questionnaire was adopted to collect data from the teachers and students. There were six teachers and students FGDs from six sample secondary schools, each group comprised five members. The time taken was one hour for each FGD at a different time span. The study was carried out from September to December, 2018. The findings show that some teachers lack knowledge and skills on how to use some of the instructional materials. Thus it is concluded that the management support on teaching aids production and utilization in their respective secondary schools found to be one of the important things.

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Introduction

In this dynamic world a good number of radical changes in instructional technology are observed. Education places importance on the nurturing of logical spirit, knowledge of scientific research and value formation among the secondary school student population. In this regard, as to the meaning of

instructional materials Ibenem (2000) defined teaching aids as those instructional materials applied for practical demonstration of different concepts in class sessions as between student and the teacher. Applying varied forms of teaching aids help teachers to make their instructional approaches flexible and modifiable such that fitting the diverse needs of their learners (Maduna, 2002). Nowadays, technological advancement has resulted in the production of teaching aid materials and devices that could be used to minimize the teachers' talking time. At the same time the use of such devices and equipments helped the teachers' message clearer, more interesting and easier for the learner to assimilate (Onasanya, et al., 2008). On the other hand, Emma and Ajayi (2004) indicated that the changes in the forms and purpose of teaching equipment and materials over the years have resulted in making learning more effective.

Instructional material makes the abstract ideas concrete and thus help in making learning more effective. Okendu (2012) indicated that regular instructional supervision backed by appropriate instructional materials entail an important effect on students' academic performance. Accordingly, he asserted adequate supply of instructional resources for teachers is quite essential for realizing the student' optimum academic performance. Bassy (2002), observed instructional materials as a system component that may be employed as part and parcel of instructional process. Instructional processes are in turn used to impart informative message and ideas which are instructional for effective communication in the teaching learning process at the classroom setting. On the other hand, Onasanya and Dmasewo (2011) noted that standard and improvised instructional materials deliver the same positive effects on students' academic performance.

The advancement in the global economy and the rise of information based society has hugely impacted education systems around the world. This impact has been visible in the pressure upon teachers to use technology in teaching students the knowledge and skills they need (UNESCO, 2005). Confirming UNESCO's report Hung and Khine (2006) indicated that in the past decade the traditional role of the teacher as the sole provider of knowledge and skills at the classroom setting has changed. According to them new technologies for learning have become available many of which designed for individual use.

The above discussed literature clearly indicates that whole dependence on chalk and talk method is of little importance to impart comprehensive knowledge and skill for students. Using information communication technology (ICT) should be considered the main channel by which knowledge and skill are delivered. For example, computers in high schools cannot be considered as a luxury in an area where books are giving way to electronic print media. Not to mention, technological devices other than computers for science laboratories must be given particular attention. However, to fulfill financial constraints and all technology needs, the competent organ in the

education bureau should give it utmost attention to support basic technology teaching such as computer hard wares, plasma etc.

Besides, the management the respective secondary schools should give capacity building for teachers in regards to no cost and low-cost teaching aid. The support for producing low-cost teaching aid materials may be given through training and the teachers' exposure to industrial complexes producing the teaching aids. Apart from saving financial resources, the support to teachers for self-made low-cost teaching aid will have a pivotal role in providing creativity of teachers.

Statement of the Problem

Instructional materials are helpful in creating positive environment for subject-matter in secondary schools. There were common criticism about lack of teaching and learning materials and available resources were hardly used (Oirere, 2008). Further, inadequacy of instructional resources has been cited as one of the major causes of poor teaching techniques Wasiche, (2006). The challenges and coping mechanisms of improving instructional materials within schools environment were not investigated. The study, therefore attempts to examine challenges and coping mechanisms of instructional materials in the secondary schools in Addis Ababa, Ethiopia.

Objectives

1. Identify the challenges that the secondary schools face in using instructional materials in the secondary schools.
2. Identify coping mechanisms of improving instructional materials in the secondary schools

Research Questions

1. What challenges do the secondary schools face in using instructional materials in the secondary schools?
2. Establish the coping mechanisms of improving instructional materials in the secondary schools

Methodology

A descriptive survey method was used to study the challenges and coping mechanisms of improving instructional materials in the secondary schools in Addis Ababa. Quantitative and qualitative research approach were used to collect data from the respondents. This was done by means of questionnaires, interview and FGD.

The descriptive survey method helps the researcher to investigate and describe the way things are (for instance the principals, teachers and the students' experiences, beliefs, opinions or attitudes) (Gay & Airasian, 2002;

Koul, 2009). In this regard, six items and open ended questionnaire were devised to address the issues of challenges and coping mechanisms of improving instructional materials. Thus, suggested by principals, teachers and students participants.

Data Source

The data for the study were collected from primary and secondary sources. It is necessary to supplement primary data and to help in the formulation of research questions (Myers, 2009). In order to get first hand information, primary data were collected from principals, teachers and students from six sample secondary schools. While secondary sources from journals and books were consulted.

Study Areas

The majority of secondary schools in the whole ten sub cities share a more or less similar feature in management system and infrastructural facilities. Thus, a school based study was conducted in 2018/2019 in Addis Ababa on selected six sub cities drawn by simple random sampling method from the ten sub-cities of Addis Ababa, Ethiopia. In each grade level (9-10), there are fifty students in six sample secondary school. Therefore, 300 students were selected from six sample school by systematic random sampling using nth intervals (10th) at interval of students' list, according to their classroom name list arrangement by the classroom teachers.

This study was complemented by questionnaires, interviews, focus group discussion. Simple random sampling method was used to select the six secondary schools namely Amha Desta, Meskerem, Kokeb Tsebah, Hedasse, Abysenia and Asko secondary schools from government secondary schools in Addis Ababa city administration. The majority of secondary schools in the whole ten sub cities share a more or less similar feature in management system and infrastructural facilities.

Instrument of data collection

This study was conducted using three types of data collection tools which were considered relevant in eliciting the information required for the study. The major instruments used in this study were: questionnaire and focus group discussion for teachers and students and interview for principals in the secondary schools. The questionnaire was composed of items representing issues related to the basic questions to be addressed by the study. The focus group discussions and interview were meant to get reply on questions useful to strengthen and cross-check the responses made by the respondents for each items in the questionnaire.

Validity and reliability of instrument

A pilot study was conducted in one of the non-sampled secondary school. Content validation was done using three colleagues from Addis Ababa University. Amendment on wording and changing ambiguous questions were ensured. The reliability approximation for the total items using Cronbach alpha were found to be .712 for teachers and .773 for students' close ended questionnaire items. This contributed for the quality of the data and finally led the research to have the final outcome which was based on the questionnaires' quality.

Data Collection Procedure

The data were collected in three phases. The first phase was involved a thorough search of the literature relating to challenges and coping mechanisms of improving instructional materials. On the other hand, researcher got an introduction letter from Addis Ababa university department of curriculum and instruction and thereafter applied to city government of Addis Ababa education bureau to conduct a research within their schools premise.

Once the permit was issued, the researcher made appointments with the sampled school principals to visit and administer the questionnaire. The second phase was involved field research where interviews were conducted with six principals and FGD with teachers and students in the sample secondary schools. The third phase also involved collection of data relating to challenges and coping mechanisms of improving instructional materials from 125 teachers and 300 students in the selected sample secondary schools.

Data Analysis

The collected data by different tools were analyzed and interpreted qualitatively and quantitatively. The data were obtained from principals, teachers and students through questionnaires, interview and FGD. Data were tabulated and analyzed using mean and SD on a series of tables. The data collected through interview from principals and focus group discussions were analyzed qualitatively. This was done by the help of descriptive statements and through in depth explanation based on the response of the respondents.

The researcher tried the essential characteristics of data by arranging the data into more interpretable form, categorizing tables, as well as calculating numerical indexes such as mean and SD. The code name was not referred to any of the interviewee. The code was recorded on the interview sheet for principal interviewees _{a,b,c,d,e f} whereas for FGDs teachers _{.g,h,i,j,k,l} for FGDs, students _{m,n,o,p,q,r}

Principals’ Interview

The researcher got an introduction letter from Addis Ababa university department of curriculum and instruction, thereafter, applied for a research permit from the city government of Addis Ababa education bureau. After their approval the researcher presented the letter to the concerned sample secondary schools principals. Hence, the researcher arranged with the principals of the six secondary schools when to administer the interview schedules. Semi structured interview was used to elicit qualitative data from sample receptive secondary school principals. The time taken was 45 minutes for each principal interview at a different time span. After the interview was finalized, the researcher again discussed about the schedule with the teachers and students and agreed upon with the FGD schedule. FGDs with teachers and students were also conducted. Like the interview, Amharic language was used as a communication language to obtain data from FGDs. The data generated from FGDs were registered by taking hand written notes. There were six FGDs from six sample secondary schools each group comprised five members. The time taken was one hour for each FGD at a different time span.

Ethical consideration

In the first place, attempt was made by the researcher to urge participants to offer their consents to the study. Before administering the questioner all participants were informed that they were participating voluntarily and that they were at a position to withdraw at any time during the course of questionnaire administering. In addition, the participants were secured from the start that their responses would be kept confidential and used only for this research purpose The principle of anonymity throughout the study was certified.

Findings and discussion

Three teachers and seven students who volunteered in the six schools failed to complete their questionnaires properly and thus were dropped from the study. The final sample considered in the study consists of 122 teachers and 293 students yielded a 98%, response rate.

Table 1

Secondary Schools Managements and Teachers

		Students			Teachers		
Q	School Management	N	Mean	SD	N	Mean	SD
1	The school management assist the school teacher for proper use of available instructional materials	122	3.3852	1.13142	293	1.9795	1.23571

2	Managements are working for the adequacy of instructional materials in their respective schools	122	3.4426	1.06832	293 1.26167	2.2491
3	Managements are also developing creative communication and interaction among teachers and students community Secondary school teachers	122	2.9754	1.27573	293 1.04662	1.6075
4	Teachers have time to improvise and plan for suitable instructional materials	122		3.3115	293 1.16859	1.7065
5	Teachers are more creative and use low cost locally available instructional materials in teaching learning process	122		3.3770	293 .90895	1.4983
6	The school teachers are contributing to the development of different skills and the acquisition of values of students	122		3.9836	293 1.35469	2.0205

As can be seen in table 1 item 1, the teachers' response for this item shows that the mean and SD scores for teacher and student respondents are mean 3.3852 and SD 1.13142 and mean 1.9795 and SD 1.23571 respectively. In practical terms, this means both teacher and student respondents are in disagreement that the principals in their respective schools were not in a position that striving for the availability of instructional materials. In this regard, many of the available instructional technologies were inadequate in terms of quantity and quality. Not all the available instructional materials were easily accessible to both teachers and students for smooth teaching and learning process.

In this regards, student FGD_m participants score students complained that books in school library are so few that, some important books are only reserved for students within membership card. The rest of us rarely visit the library because we don't have opportunity to get the books. Here the teachers FGD_g have also similar concerns that, without the management make efforts in the proper and fair service of the books deposited in the library; the teaching- learning process will have little impact.

Teacher FGD_h participants voiced that the management do not assist them for proper use of available instructional materials. Illustrating their point teacher FGD_h raised the problems encountered in the use of plasma TVs and computers. Further, teachers' discussant said that plasma TVs are available in the classrooms but they are not operational and the same is true for computers. Further, teachers indicated that the school management is not carrying out its

responsibility in making these instructional materials responding to the teachers' complaints, principal interviewee have the following to say;

In relation to plasma TV there are plasma TVs in different classrooms, yet most of them does not work. These are problems for accessories such as remote control and jack. Even when these two accessories are made available, once fitted in the plasma TV, they do not last long. Some students unplug the jack and sell it to the market (by stealing). Hens, shortage of the needed accessories and theft on the part of students, most of the plasmas in the respective class rooms do not work. Explaining the adverse impacts arising there from, principal interviewee₂ noted that, teachers are unable to teach with audio-visual instructional approach. Instead, they teach by lecture method without the use of plasma TV. The net effect is that such lack of varied teaching learning process lessens the comprehensive understanding of the relevant subject matter, on the part of students. Reaffirming the principal's claim Kerionwir (2000) noted that instructional materials serve as objects or devices that help teacher to deliver particular lesson in a logical manner.

Echoing the claim of Kerionwir, teacher FGD₆ participants claimed that computers available in their respective schools don't work. Because of this, we are compelled to teach ICT only in theory. Unfortunately, given the nature of the subject through practice teaching, information technology without the use of computers will not result productive quality of education. Responding to the teacher's concern principal interviewee₆ said that computers are available in our ICT labs but do not operate smoothly as the costs of maintenance are huge. The maintenance fee asked by the computer technicians is often expensive to us. Since our budget is limited, we seldom afford to pay the maintenance cost every time the computers break down. This in turn resulted in the interruption of ICT classes time and again. Here it is worth noting that teaching students solely dependent on plain theory will not ensure quality of education. It is therefore, incumbent upon the management of the respective schools to call for the competent education bureau to allot the required budget on time.

Regarding item 2 in table 1, the mean scores of teachers were 3.4426 SD 1.06832 and students mean 2.2491 SD 1.26167 respectively. This shows that both teacher and student respondents were in disagreement that managements were not working for the adequacy of instructional materials in their respective schools.

Nonetheless, teacher FGD_i respondents remarked that, some principals locked instructional technologies in stores and made strict rules for anybody who wished to use them. On the other hand, teachers were not consulted in the procurement process thus they are overtaken by the management of the school. Further, management's effort in ensuring the adequacy of instructional materials in the respective schools' teacher FGD_j participants stated that the management makes very little effort to ensure that instructional materials are adequately provided. Because of this "We teachers often fail to give

instructions backed by the appropriate teaching aid." Teachers FGD_k stressed that, lack of teaching aid resources to be the overriding reason forcing them to confine the lesson into theoretical abstractions. Here they said that laboratories for science subjects are poorly equipped. For example, a more coloring agent such as potassium per manganese is not available in the laboratory. Because of this, students do not come to the laboratory for school management in collaboration with the education bureau need to solve the problem.

In connection to this, teacher FGD_l participants noted that the school management has neither the commitment nor the time to work for the adequacy of instructional materials. According to the teachers the whole focus of the management is on administrative issues unrelated to the actual teaching learning process. As a solution, the teachers FGD_g advised for the launching of pedagogical centers in their respective schools. According to them, pedagogical centers will have crucial importance in helping teacher's easy access to different instructional materials. In this regard Hung (2006) stated that poor support from the school administration proved challenging for the school teachers. Among the problems cited by the investigator are locking up instructional technologies in stores and blocking easy access to the instructional material by making strict rules for anybody wishing to use them. Yet a related problem was that some teachers were not consulted in the procurement of instructional materials.

In regards to item 3, the mean scores for teacher respondents is shown to be 2.9754 with SD 1.27573 and for students mean 1.6075 with SD 1.04662 respectively. This reveals that, both teacher and student respondents disagree with the claim that the managements are developing creative communication and interaction among teacher and student community. They may also serve as the motivation on the teaching-learning process. In this regard, teacher FGD_h participants complained that the management is not interested to communicate and interact among teacher and student community. Responding to this complaints by the teachers, principal interviewee₆ in the concerned secondary schools have the following to say (Infact, the teachers' complaints are acceptable. We convene teachers' and the school community for discussion in school affairs. Our discussion has often been focused on routine administrative issues and we haven't made discussions in the issues of teaching aid yet. It is therefore imperative to organize awareness workshop on the importance and utilization of teaching aid for the school community at large.

In this regard, Bassey (2002) observed instructional materials as a system component that is useful to disseminate informative message and interactions between the teacher and the student as well as the school community at large on teaching aid is an urgent need.

The principal interviewee₄ further stated that teaching aids are helpful in creating positive environment for discipline and makes the abstract ideas

concrete and thus help in making learning more effective. Nonetheless, most schools have not equipped teachers with the necessary instructional materials. On the other hand, teacher FGD_i reported that due to teaching over load, if they used the instructional technologies they may not cover the portion of their subject matter on time. There was limited time which some lacked know-how on the use of some instructional technologies. In order to teach properly teachers have to appropriately select the instructional materials.

Yet, access to instructional materials and the use of technologies as teaching aid remains elusive for teachers. Infact the often heard remarks like "The issue is not whether the use of instructional technologies enable students to learn and acquire knowledge with ease, but do school's equips teachers with the needed instructional technologies?"

In this contact, principals admitted that instructional technologies are not enough and in some cases unavailable primarily due to shortage of funds to purchase the same. Teachers on this part ascribed limited use of instructional technologies both to poor access to instructional technologies and time constructs low interest in regards to poor access. Teachers have pointed out that, low response or indifference to material requisition from the pertinent departments to be the major bottlenecks denying them the possibility of using instructional technologies. As to time constraints, teachers FGD_k reported that extended instructional duty with huge work load means that if they fully resort to the use of instructional technology they may not cover the syllabus on time.

Further, principal interview_f stated that teachers show lack of interest of the three reasons: lack of knowhow on the use of instructional technologies. Lack of motivation brought about by the actions some department heads doing affairs without the teachers consultation. The teachers own conviction that what matters is the way the teacher delivers the information in precise and comprehensive manner regardless of applying instructional technologies

As shown in Table 1, the figures for item 4 shows that teachers mean 3.3115 and SD 1.15051 while students mean 1.7065 and SD 1.16859 respectively. From this, one can conclude that both teachers and students were in disagreement that teachers have time to improvise and plan for suitable instructional materials for their respective subject matter.

As to teachers FGD own initiative to improvise and plan for suitable instructional materials; teacher FGD_j participants raised the issues of time as the biggest challenge. In relation to this, the teachers said that "We teachers (teacher FGD_j) have a very tight schedule such that the burden of the routine teaching duty precludes us from involving in preparation of instructional materials. With a weekly teaching load of 35 periods how can we be able to prepare instructional materials?" Infact, we should have been commended for our resilience to bear with such a work load. The school management has little interest to empathize for our concerns. We are not even able to meet our subsistence needs; the preparation of instructional materials is the responsibility of the school management. Principal interviewees_e laid some of

the blame on teachers own default. According to them, when teachers have no class sessions, teachers remain absent from the class. This free time may have been good opportunity to prepare instructional materials. Hence, instead of involving in such activities, teachers go on to work for part time jobs.

Howard and Major (2005) enumerated six key factors that teachers need to take into account when designing teaching materials. These are: learners, curriculum and context, resources and facilities, personal confidence and competence, copy right, compliance and time. Among this factors time to make teaching aids is a crucial one. Yet, Howard and Major (2005) indicated that having enough time to make teaching aids is the main challenge faced by school teachers. This shows that having sufficient time for planning and improvising teaching aid materials remains a series problem.

However, instructional materials are quite instructional for the effectiveness of classroom teaching learning process. Being useful demonstrative tools of learning, instructional materials represent some of the most crucial inputs in the promotion of teachers efficiently and improved student academic performance. Besides, an instructional material boosts possibility of vibrant teaching learning process, where both teacher and student engage in mutually responsive lessons through active participation. Kochhas (2012) affirmed that instructional materials are very valuable tools for classroom teaching learning process. On account of this, the suggested importance of teachers access to additional instructional materials remains vital, so as to supplement what the students get from textbooks. Such an approach, according to them, helps for more robust and elaborate conceptual grasp and a certain subject matter. Finally on the merits of using instructional materials Abolade (2009) notes that instructional materials are cheaper for providing, useful for effective time managements and are a triggering factor for attentive follow up and interest on the part of students.

As indicated in table 1 item 5, teachers and students were asked to respond to the item that teachers are more creative and use low cost locally available instructional materials in teaching learning process. The response thereof shown that teachers mean 3.3770 and SD 1.14508 where as students mean to be 1.4983 and SD .90895 respectively. From this item 5 one can deduct that both teacher and student respondents were in disagreement to the item.

In this regard, principal interviewees_f emphatically stated that all teachers are not in a position to prepare no cost or low cost locally available materials. Further, the principal interviewees indicated that, teachers have neither the ability nor the capacity to prepare teaching aids. Even if teachers overcome these problems, the schools have no centers to deposit the teaching aid materials.

In this issue, Maaduna, (2003) asserted that, low cost teaching aid prepared with simple materials costing very little by involving teacher and student. Low cost teaching aids are useful instruments for offering learning

by doing approach to the teaching learning process. However, the implementation of instructional materials was nurture by their accessibility. Hence, instructional technologies very often will enrich teaching learning process.

Instructional technology is indispensable for effective teaching-learning process. In this regard, teachers and students face myriad of challenges in their attempt to apply instructional material at the classroom setting. The major problems thus faced include, teachers having limited skills on use of instructional technologies and lack of support by the school administration to help teachers produce low-cost teaching aid. On the other hand, the bottlenecks on the part of students are characterized by lack of accessibility and overcrowded classrooms. Needless to say, these multi-faced challenges makes the path to effective classroom teaching and learning uneven one with adverse impact on the performance of teachers and students as well as the quality of education as a whole.

As it can be seen from table 1 item 6, that, teachers mean 3.9836 with SD 1.03639 whereas student mean 2.0205 with SD 1.35469 respectively. This reveals that, teacher respondents feel that positive views towards the acquisition of value. However, students respondents were in a position that the acquisition of values of students were not attained.

Research study has shown that where instructional materials are used the learning environments are highly stimulating and the students appear to take greater interest in learning.

Student FGD_o participants complained that teachers' delivery of the subject matter is wholly channeled through lecture method. In this regard, students remarked that teachers teach only theoretical abstractions, fetched directly from the relevant text books. Most of the time, teachers pass the classroom session writing notes on the blackboard. We, students simply jots down on the black board without getting elaboration on the concepts of the notes. Because of this, during exams we memorize our notes without understanding.

On the other hand, student FGD_p suggested that, some teachers in case we moved to raise questions, teachers insult us, abuse us, it is really crucial for us to note that such abuse by the teachers should be corrected by the school management. Most importantly pedagogical lessons on how to handle classroom management shall be given for our respective teachers. Relation to the preoccupation of most teachers towards chalk and talk methods fails to go apace with the potentiality of achieving technological know-how. Nonetheless, the objectives set to be met by an active learning classroom teaching should be multidimensional both in-depth and breadth. That is to mean for inculcating real-life oriented and problem-solving knowledge and skills, multiple methods of teaching skills be used. Such an approach may be realized, on the main, by applying instructional materials.

Results

Coping Mechanism of Improving Instructional Materials

Part I: Students' responses to open-ended questions on the coping mechanisms of improving instructional materials in their repetitive secondary schools

1. The management should support the secondary school teachers to enrich their understanding, in preparation and utilization of instructional materials in their respective subjects.
2. The school management should contribute to the development of teachers' knowledge, different skills and the acquisition of values of students, as well as the withholding of appropriate knowledge, skills and attitudes to their respective subjects.
3. Some of the subject teachers are not using instructional materials in their respective subjects. Thus, the school management and the local education bureau supervisors should enrich the teacher's skills by providing training so as to contribute to the development of different skills and the acquisition of knowledge and values of students...
4. Some teachers were fast enough when explaining their subject matter. Because of this, we do not understand their lecture. So, it would have been better if they support teaching and learning process with appropriate instructional materials to create a common understanding between the teachers and the students and to make the learning permanent.
5. Some teachers lack knowledge and skills on how to use some of the instructional materials properly. As a result of this, accessibility and individual practice for competence are limited.
6. In regards to overcrowded class room most teachers are not using instructional materials as expected. Thus, teachers should be encouraged by the management of the school to prepare and to utilize instructional materials in their respective subject matter.

Part 2: Teachers' responses to open-ended questions on the coping mechanisms of improving instructional materials in their repetitive secondary schools

1. Organize seminars and workshops to offer special training on use of teaching aids effectively in the secondary school subjects...
2. Making instructional materials that are long-lasting and apportion a proper place to store teaching aids something like pedagogical center.
3. The teacher training colleges should integrate the teacher training course and the subjects at the respective secondary schools with a view of improving the trainees' knowledge, skills and value on the preparation and utilization of instructional materials.
4. The teacher responded that the challenges of week-long class-duties limited their time to access to prepare and use instructional materials,

at an average we have as much as 60 students in a class room and we are expected to visit each of such a class 5 days a week. Thus, the school management should spare time for instructional material preparation in the school premises.

Conclusion

Instructional material encourages the healthy classroom interaction. Thus, involving instructional materials at secondary school motivates both teachers and students to use the no cost and low cost teaching aids with the help of locally available resources. The students should be given a very clear image of the resources available in their respective schools. Efforts can even be made to organize a pedagogical center at each sample secondary schools. Time should also be allocated for teachers and students for the preparation of the teaching aids. Teachers should as far as possible, make use of the imported teaching aids if not available they have to use no cost or low cost teaching aids. In short, it was evident that management, teachers and students faced challenges that hindered them from fully utilizing instructional resources.

Recommendations

1. The teachers should encourage active students' participation in class work by allowing instructional material interactive.
2. The secondary school management in collaboration with the local education bureau should organize workshops, seminars, conferences or induction courses on instructional materials. This will help to acquaint the teachers with the preparation and utilization of instructional materials from no cost or low cost materials up to the latest development in the field of instructional materials.
3. Well-equipped pedagogical center should be established in all secondary schools by the concerned stake holders. So that the respective secondary school teachers can borrow whenever they required to use teaching aids in their subject matter.
4. The ministry of education in collaboration with higher institution should make instructional material a compulsory discipline in teachers' preparation curriculum.
5. Parents should cooperate with secondary school teachers and students in the preparation, utilization of instructional materials at secondary schools.

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