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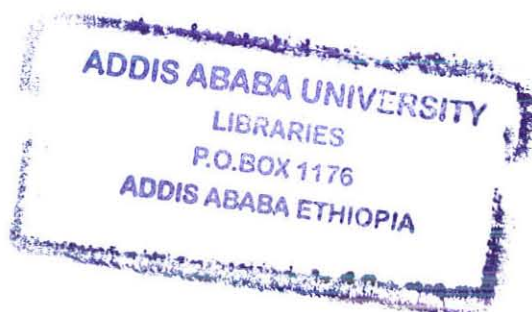
**Classroom Implementation of HIV/AIDS
Education in Selected Second Cycle Primary
Schools of SNNPRG: The Case of Hawassa
City Administration and Sidama Zone**

DEMEKASH ASREGID NIGATE



June, 2008

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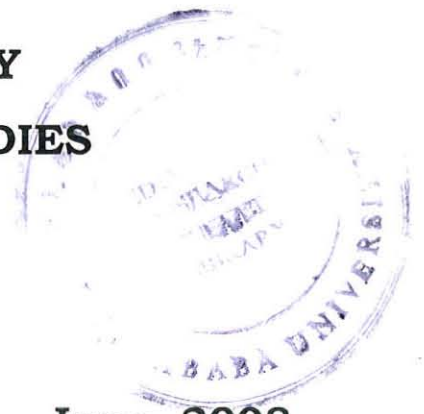


**Classroom Implementation of HIV/AIDS
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Primary Schools of SNNPRG:
The Case of Hawassa City
Administration and
Sidama Zone**

By DEMEKASH ASREGID NIGATE

**A Thesis Submitted to the School of Graduate Studies
in Partial Fulfillment of the Requirements for the
Degree of Master of Arts in Curriculum and Instruction**

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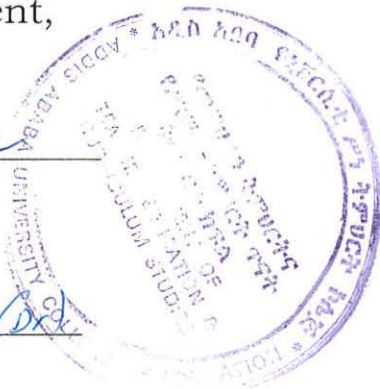
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Acronyms

- AACTE- American Association of Colleges for Teacher Education
- AIDS - Acquired Immune Deficiency Syndrome
- EFA - Education For All
- FDRE - Federal Democratic Republic of Ethiopia.
- HIV - Human Immuno Deficiency Virus
- ICDR - Institute for Curriculum Development and Research
- MDGs - Millennium Development Goals
- MFMC- My Future is My Choice
- MOH - Ministry Of Health
- NGO- Non governmental organization
- PLWHA – People Living With HIV/AIDS
- PMU- Project Monitoring Unit
- SADC- South African Development Countries
- SARPN- South Africa Regional Poverty Network
- SHEP- School Health Education Program
- SNNPR – South Nations, Nationalities and Peoples Region
- SNNPREB- South Nations, Nationalities and Peoples Region Education
Bureau
- STI- Sexually Transmitted Infections
- TEI- Teacher Education Institute
- TGE- Transitional Government of Ethiopia

UNAIDS – United Nations Program on HIV/AIDS

UNESCO- United Nations Educational, Scientific and Cultural
Organization

UNGASS – United Nations General Assembly Special Session

UNICEF – United Nations International Children’s Emergency Fund

WHO- World Health Organization

Abstract

The purpose of this study was to evaluate the classroom implementation of HIV/AIDS topics in selected primary schools of SNNPRG specifically in Sidama Zone and Hawassa City Administration. To serve the purpose of the study Teachers, School directors and Examination papers were uses as a source of data. From the total second cycle schools which are available in the study area, ten of them were selected randomly, and all the teachers of Basic integrated science, Biology, Health and Physical Education were taken as sample of the study, also all the school directors were taken as a source of data for the study. To collect data, Questionnaire, interview, content analysis, and observation check lists were used. The collected data were analyzed by using Mean, percentage, and Chi-square analysis techniques. From the analysis made, the following major findings were obtained: teachers didn't take training on HIV/AIDS topics, teachers were interested to teach the HIV/AIDS topics but they were not comfortable to teach the topics in the classrooms, teachers have knowledge on many of the active teaching methods which are appropriate to teach HIV/AIDS topics but their use of the methods was found to be low, there was lack of text books on Health and Physical Education subject, teachers were not getting support from their school directors, and the HIV/AIDS topics were not sufficiently included in the examination of the subjects in which HIV/AIDS topics were infused. Based on the findings, the following recommendations are given: teacher education institutes should give emphasis for provision of training on HIV/AIDS topics and the methods of teaching the topics, text books on Health and Physical Education should be prepared by the Regional Education Bureau, school directors should get adequate and appropriate training before they are assigned for the position.

Chapter One

Introduction

1.1. Background of the Study

Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) continues spreading with ferocious speed. Since its occurrence in 1981, the epidemic has infected 65 million people, of which nearly 25 millions had already died (UNAIDS/WHO, 2006:282). According to the UNAIDS/WHO report, 4.3 million people are being infected with HIV each year.

The UNAIDS/WHO (2006:282) report has also showed the worst side of the epidemic. The report disclosed that besides to killing 2.9 million people in 2006 only, the other 35 million people are living with HIV unaware of their status. This is what made HIV/AIDS one of the greatest development and security issues that the world is facing today.

Out of the world's new infections, close to two third (63%) of the victims are living in sub-Saharan Africa (Berry, 2007). That is, 2.8 million people infected with HIV/AIDS in 2006, and 2.1 millions have died (comprising 72% of the global AIDS deaths) in the year (UNAIDS, 2006).

The facts on HIV/AIDS in Ethiopia show that the HIV/AIDS epidemic continues to grow steadily claiming the lives of many Ethiopians. In 2006, 1.3 million people were found to be HIV positive and the number is projected to be 1.4 million by 2010 (MOH/HAPCO, 2006).

As any part of the world, the worst aspect of the epidemic in Ethiopia is, it is affecting the most productive segment of the Ethiopian society. The number of infection of young population by 2005 was 95,100, 194,500, and 225,800 for ages 15-19, 20-24, and 25-29 respectively (MOH/HAPCO, 2006). When we factor in the slow rate of progression

from HIV infection to AIDS, a period of about 5-10 year, it is highly likely that many of these adults were infected with HIV during their teens.

In response to the epidemic, different attempts have been made. But out of all the attempts, a common response that works to prevent the spread of HIV has been known to be education. According to World Bank (2002:xvii), education is said to be proven means to prevent HIV/AIDS for some reasons. The Bank wrote that education can equip children and youth to make healthy decisions concerning their own lives, bring about long-term healthy behaviors. It also offers a ready-made infrastructure for delivering HIV/AIDS prevention efforts to large number of the uninfected population-schoolchildren- as well as youth, who in many countries are the age group most at risk. Moreover, wrote World Bank, it is cost effective as a prevention mechanism. This is because, the school system brings together students, teachers, parents, and the community, and preventing AIDS through education, avoids the major AIDS – related costs of health care and additional education supply.

By providing chance of contact to large number of the uninfected children, and organizing children in specific age group, schools provide conducive environment to deliver HIV/AIDS education. Regarding access to children, AACTE (2007:1) wrote that schools are uniquely positioned to address HIV/AIDS prevention education. Approximately 95% of children and youth, wrote AACTE, attend school for a minimum of six hours a day for twelve years.

Even though it is good to provide HIV/AIDS education for all group of people, providing it to primary school – age children is more effective. Tiendrebe'ogo et al. (2003: xi) reported that as a group, primary school-age children have a very low prevalence of HIV infection. It is said that these children have not yet formed sexual behavior patterns, so they are

more amenable to change than older adolescents who may already be engaged in risky behavior.

There are two main reasons for why AIDS education for young people is important (Steven Berry, 2007:1). The first one is the education prevent them from becoming infected. Berry discussed that in many part of the world, young people in this age-group are at particular high risk of HIV infection from unprotected sex. So, the education provides them information on how to keep themselves from the infection. The second reason is to reduce stigma and discrimination. People who are infected with HIV around the world often suffer terribly from stigma, in that, people who are HIV positive, somehow thought to be “dirty” or to have “brought it on themselves” by immoral practices. AIDS education, wrote Berry, can help prevent this, by halting stigma and discrimination before they have an opportunity to grow.

A program on HIV/AIDS /STD should increase knowledge, develop skills, promote positive and responsible attitudes (WHO/UNAIDS/UNICEF, 1992:4). The knowledge on HIV/AIDS will help students decide what behaviors are healthy and responsible. It includes way in which HIV/STD are transmitted and not transmitted, the long asymptomatic period of HIV, means of protection from HIV/STD.

The skills relevant to HIV/AIDS preventive behaviors are self-awareness, decision making, and assertiveness to resist pressure to use drugs or to have sex, negotiation skills to ensure safer sex, and practical skills for effective condom use.

Attitudes derive from beliefs, feelings and values. HIV/AIDS/STD education, according to WHO/UNAIDS/UNICEF (1992:4), should promote positive attitudes towards delaying sex, personal responsibility, and condoms as a means of protection, confronting prejudice, being supportive, tolerant and compassionate towards people with HIV/AIDS.

The knowledge, skills and attitudes on HIV/AIDS will be achieved if and only if teachers are presenting the topics in their classrooms appropriately. So, equipping teachers with the knowledge, skills and positive attitude towards HIV/AIDS education is very essential. If teachers are not teaching the topics with appropriate teaching methods, the inclusion of the HIV/AIDS topics in to the curriculum will be for vain.

On top of this, teachers need to feel that the change under process has professional value to them and they should be motivated to implement the new program. It is said that the best educational practice is unlikely to fulfill its promise in the hands of an inadequately trained or unmotivated teachers (Derebssa Dufera, 2001:179).

Moreover, the availability of text books and other reading materials are also important for effective implementation of HIV/AIDS education in a classroom. Instructional materials provide information, organize the presentation of information, offer students opportunities to use what they have learned (Lockheed, 1990:17). Lockheed pointed out that instructional materials allow teachers to assess students learning.

Introducing HIV/AIDS is similar to the introduction of any innovation within the school (Schenker and Nyirenda, 2002:3). As any change in the curriculum, discussed Schenker and Nyirenda, the inclusion of HIV topics into the curriculum may cause teachers to feel threatened, tested, concerned and uncomfortable. So to minimize the threat, concern and feeling of discomfort, the teachers should get support and supervisory assistance.

Teaching HIV/AIDS topics for school children is not a matter of choice. It is a matter of survival. And its effectiveness is based on the fulfillment of the above mentioned factors. So, investigating the fulfillment of the factors to evaluate the implementation of HIV/AIDS education in primary schools seems a timely task.

1.2. Statement of the problem

Following the change of government, Ethiopia developed a new Education and Training Policy in 1994. The Education and Training policy indicated that in the basic education, health is one of the focus areas in addition to literacy, numeracy, environment, agriculture, crafts, home science and civics (TGE, 1994:16).

Also the international commitments that Ethiopia has signed, EFA and MDGS, draw attention to the urgent need to combat HIV/AIDS if the goals for education are to be achieved (The World Bank Group, 2007:4-8). Similarly, The United Nations General Assembly Special Session in its declaration of Commitment on HIV/AIDS, set the global target of reducing HIV infections amongst 15-24 years olds by 2010 (UNGASS, 2002).

The Federal Democratic Republic of Ethiopia launched Strategic Plan of fighting the epidemic in 2004. The plan stated that strengthening the capacity of the education sector and, integrating of HIV/AIDS into the system would result in shaping the future generation and ensure a sustained human resources development (FDRE, 2004:12).

The strategic plan for intensifying multi-sectoral HIV/AIDS responses (FDRE, 2004) dictates the integration of HIV/AIDS education in the curriculum of all levels of schools. Accordingly, attempts have been made to include the HIV/AIDS topics into the curriculum.

As regions are mandated to develop local curriculum for the primary schools based on the national syllabus, the SNNPRG has developed a revised curriculum for primary schools of the region in 2004. In this curriculum HIV/AIDS topics are integrated into environmental science for grade 4, Basic integrated science for grades 5 and 6, Biology for grades 7 and 8, and Physical education for grades 5-8 (ICDR,2004).

Except for Health and Physical Education, text books for the revised curriculum were prepared and distributed for schools in 2004 and being implemented since 2005. Source books, booklets and manuals prepared by ICDR are the resource materials to be used for implementation of the HIV/AIDS topics (ICDR, 2004). Moreover, active teaching methods such as role play, case studies, value clarification, discussion and guest speaker are the methods suggested by the syllabuses of the subjects to present the HIV/AIDS topics.

As the old saying goes “The proof of food is eating”, a success of a curriculum is the attainment of the intended objectives: acquisition of knowledge, development of skills and bringing the desired behavioral changes. This success is the function of proper implementation of the curriculum. Hawes (1992:131) explained that the curriculum is not so much what is found in the printed guide (syllabus or scheme of work) as what the teacher makes of it in the classroom. From this it is possible to conclude that the inclusion/integration of the topics, preparation of teaching aids and suggestions of the teaching methods don't guarantee the effective implementation and success of a curriculum. So, after dispatching the textbooks and resource materials, it is important to assess the actual implementation of the curriculum and the problems that the teachers are facing in the process of implementing the curriculum.

In this regard, there is no research conducted to assess the implementation of HIV/AIDS topics included in the revised curriculum in the second cycle primary schools of SNNPRG. So, this research work is designed to evaluate the classroom implementation of the topics in one of the zones of the region i.e. Sidama Zone, and Hawassa City administration.

Objective of the study

The main objective of this study was to evaluate the classroom implementation of HIV/AIDS topics in selected primary schools of Sidama Zone and Hawassa City Administration.

Specific Objectives

1. Assessing teachers' training on HIV/AIDS topics and teaching methods appropriate to teach the topics.
2. Examining the interest and comfort of teachers to teach HIV/AIDS topics.
3. Assessing teachers' knowledge on active teaching methods which are appropriate to teach HIV/AIDS topics.
4. Investigating whether teachers are using active teaching methods which are appropriate to teach HIV/AIDS topics in their classrooms.
5. Examining the supply of curricular materials important for classroom instruction of HIV/AIDS topics.
6. Evaluating the school directors' support on HIV/AIDS education
7. Assessing whether questions from HIV/AIDS topics are included in examination papers or not.

Taking the above objectives in to account, the research tried to answer the following basic questions:

1. Do teachers take training on HIV/AIDS topics and teaching methods appropriate to teach the topics?
2. Are teachers interested and comfortable to teach HIV/AIDS topics?
3. Do teachers have sufficient knowledge on the active teaching methods which are appropriate to teach HIV/AIDS topics?
4. Are teachers using active teaching methods which are appropriate to teach HIV/AIDS topics?

5. Is there sufficient supply of curricular materials important for classroom instruction of HIV/AIDS topics?
6. Is there support from the school directors on HIV/AIDS education?
7. Do teachers include questions from HIV/AIDS topics in examinations?

1.3. Significance of the study

The findings of this research would be useful for:

1. Policy makers on education showing how implementation should be emphasized equally with inclusion of topics in the curriculum.
2. TEI's informing them the need to equip their trainees with the knowledge, skills and positive attitude on HIV/AIDS and the methods to teach the topics.
3. School directors showing their role in the implementation of curriculum.
4. Researchers providing a base line information for further and similar research.

1.5 Delimitation of the study

This study was delimited to Awassa city administration and Sidama Zone. The study concentrated on the fulfillment of factors/conditions important for effective classroom implementation of HIV/AIDS topics integrated in Basic science, Biology and Physical education of second cycle primary school.

1.6. Limitation of the Study

Classroom implementation of curriculum is best evaluated by conducting classroom observation. But the HIV/AIDS topics are infused in to different subjects in different units. Speculating the problem of mismatch between the time of classroom instruction on the topics and data collection of this research work, the classroom observation is excluded from the tools of data collection.

1.7. Definition of Important Terms

HIV/AIDS Education – Teaching about HIV/AIDS topics which are included in carrier subjects (subjects dealing with health)

Implementation –putting a content of a curriculum into practice in a classroom by the teacher.

Second Cycle primary school- refers to grade 5-8.

Infusion Teachers – Teachers teaching the HIV/AIDS topics which are included (infused) in their subject areas.

Chapter Two

2. Review of Related Literature

2.1. Concept of Curriculum Implementation

Different people view curriculum implementation in different ways. But, most of them agree that it is putting into practice what is planned before hand.

According to Snyder and associates (1996:404) curriculum implementation is putting into practice the officially prescribed courses of study, syllabus, and subjects. Also Hersom (1976:1) explained curriculum implementation as what actually happen in practice as compared to what was supposed to happen. He wrote that curriculum implementation includes the provision of organized assistance to staff in order to ensure that the newly developed curriculum and the most powerful instructional strategies are actually delivered at the classroom level. Also Fullan (2001,69), explained that implementation consists of the process of putting into practice an idea, program, or set of activities and structures new to the people attempting or expected to change.

The University of Zimbabwe (1995, as cited in SADC, n.d.:8) suggested that the process of curriculum implementation involves helping the learner acquire knowledge or experience. According to the view of the University, the learner is the central figure in the curriculum implementation process because it can not take place with out the learner. Implementation, wrote the University, takes place as the learner acquires the planned or intended experiences, knowledge, skills, ideas and attitudes that are aimed at enabling the same learner to function effectively in a society.

To understand what curriculum implementation is, looking in to the different approaches of curriculum implementation is indispensable. There are three known approaches to curriculum implementation: they are Fidelity, Mutual adaptation, and curriculum enactment approaches (Snyder et al., 1996:404).

The main intent of fidelity approach is to determine the degree of implementation of an innovation in terms of the extent to which actual use of the innovation corresponds to intended or planned use and to determine factors which facilitate and inhibit such implementation (Fullan and Pomfret, 1977, as cited in Snyder et al., 1996:404).

The fidelity approach suggests that teachers perfectly implement what is on the original plan. They should demonstrate their faithfulness to follow and put into practice what is prescribed in the plan.

The second approach is mutual adaptation which is interested in studying how the innovation is adapted during the implementation process rather than in measuring the degree to which the innovation is implemented as planned (Berman and Pauley, 1975, McLaughlin, 1976, as cited in Snyder et al., 1996:404).

The mutual adaptation approach suggests the adjustment in curriculum by both the curriculum developers and those who implement it in actual classroom. Both parties negotiate on the content of the curriculum so as it will be implemented effectively.

In the third approach, curriculum enactment approach, the focus shifts from studying the implementation and adaptation of proposed curriculum to studying curriculum enactment (Snyder et al. 1996:405). In this approach the interest is in studying how the curriculum is shaped through the evolving constructs of teacher and students.

From curriculum enactment point of view, curriculum is the education experience jointly created by student and the teacher. The teacher and his students will construct the enacted experience of the classroom by using the externally created curricular materials and programmed instructional strategies (Marew, 2000:13).

2.2. Classroom: A place where students experience

Curriculum

Classrooms are places where teachers and students meet for teaching and learning purpose. In the classroom, students expect teachers to deliver the curriculum (knowledge, skills and attitudes). Also teachers expect students to act in a certain way so as they will catch up the knowledge, skills and attitude that he delivers in a classroom. That is, classroom instruction brings students and teachers together with subject matter.

Classrooms are places where students experience curriculum. That is, curriculum, at least the really implemented is what the teacher and students communicate in the classroom. So, they are busy places of interaction. Jackson (1968), as cited in Erikson and Shultz (1996:469), described classroom as sites in which students act upon new knowledge and skills, places in which much interaction occurs rapidly.

Total implementation of a curriculum is a result of curriculum implementation in each classroom. To judge a total implementation of any change in a curriculum, we should first investigate how each teacher is implementing the change in his/her classroom. In other words, the key building block for all curriculum implementation is what happens in each classroom. Strengthening this idea, Hall (1995:173), described that a school doesn't change until each individual teacher within the school successfully implements the innovation. He further contended that the

use of the innovation in each classroom is the only way that classroom effects can accumulate to be school effects. That is to look at the school as a whole, first one need to look at the use of the innovation in each teacher.

2.3. Factors influencing curriculum implementation in a Classroom

According to Marsh (2004), there are thousands of curriculum documents now gathering dusts on store room shelves because they were never implemented or because they were implemented unintelligently. If one investigates the reasons for why these curriculums were not implemented, he/she could come out with some factors hindering the implementation of the curriculum.

From the above explanations it is clear that the implementation of curriculum requires managing or dealing with different factors. The fulfillment of these factors facilitates the implementation, and lack of them hinders the process. In line with this, Fullan (2001:70) explained that if one or more factors are working against implementation, the process will be less effective. That is if the implementation is supported by many of the factors, more change will be accomplished. Based on this assumption, the following factors are discussed as they are having impact on implementation of HIV/AIDS Education in classrooms.

2.3.1. Teacher Education

Scholars have suggested that if education is to be successful, next to curriculum development, teacher training is of special significance, which needs consideration so as to maximize the development and changes in education.

Teachers are at the core of the provision of curriculum contents for students at classroom. Students learn what is presented and what they experience in the classroom. For appropriate content presentation with appropriate teaching methods, teachers need training on both the content and teaching methodologies. It is clear that teachers can not teach what they don't know. So, the subject knowledge of a teacher is decisive for the implementation of the subject. Bishop (1985:189), posits that a curriculum is as good as the quality of its teachers: positively, a curriculum is enriched by the creativity and imagination of the best teachers; negatively, it is vitiated by limitations of poor teachers and poor teacher training.

Accordingly, the training of teacher's on HIV/AIDS topics affects the implementation of the topics in the classrooms positively or negatively. Boler and Jellema as cite in SARP (2005:3) discussed that poorly trained teachers are often too shy to teach sex education and often teachers lack commitment to teach the topic.

After reviewing many African school based HIV/AIDS programs, Tiendrebe'ogo et al. (2003:1) concluded that in most African countries, teachers do not receive adequate training in suitable techniques and are reluctant to teach sex education: usually the focus is on knowledge rather than skill. This is because, generalized Tiendrebe'go, teachers are not familiar with role-play techniques.

2.3.1.1. Initial training of teachers

The knowledge, skills and attitudes fostered during initial training are important for the implementation of curriculum change and the continuation of the new approaches in schools (Hawes, 1982:131).

Most initial training of teachers' take place in college courses, usually of considerable duration. Teachers emerging from such courses might

reasonably be expected to have a solid ground in the new curricular approaches. Those involved in curriculum development might reasonably be expected to work in closest co-operation with the colleges, using them as source of expertise on primary schools curriculum planning, as agencies for locally based research and survey about the context for curriculum as institution through which contacts can be established with the realities in schools (Hawes, 1982:131)

Initial training should be planned in the way that they prepare the trainees for the real world. But contrary to this, Hawes (1982:131) discussed that in Africa colleges and their curricula are remote from the realities of schools. Information about real conditions and real problems appears incomplete. Students are prepared for what should be rather than what is.

Teacher's pedagogical skills can be improved by emphasizing courses that develop the teacher's ability to reason about the content of instruction. Teachers should have a sound knowledge of the curriculum and be able to transfer it to the student. They must be able to analyze critically the material to the interest and abilities of their students. To achieve this, teacher training programs should give attention for pedagogy and the pedagogical courses should emphasize on specific instructional strategies (Lockheed, 1990:24).

2.3.1.2. In-service Training

Pre service teacher training necessarily implies a lag between the decision to implement education on AID/STD and graduation of teacher (WHO, 1992:50). WHO wrote that it can not therefore, be the sole means of training, especially in the initial stage of implementation of education on AIDS /STD. It should never the less form a part of the overall training

designed to furnish the educational system with teachers able to provide education on AIDS/STD with years to come.

The tried and trusted way of introducing new curricula for teachers who are already in school is by offering a series of specially organized courses for teachers (Hawes, 1982:131). According to Hawes, the extent and length of such “in-service” vary enormously from one day, one evening, one weekend to longer residential courses.

Teachers should be kept up date with their subject and should be able to enrich their knowledge and skills of teaching. For securing the best kind of learning, and teaching the teacher should have mastery of the subject matter, skill of selecting and employing appropriate method of teaching, appropriate techniques of evaluation as well as instructional materials.

According to WHO (1992), in-service training can provide a means for the transfer of knowledge and skills, and provide an opportunity for the teacher to:

- discuss and consider his/her own attitude and values;
- develop and understand the theory and practice of education as it influences attitudes and behavior; and
- practice conducting a discussion of values and attitudes relevant to AIDS/STD.

As the main objective of in-service training is to make teachers clear with what they are doing and sharing experience with fellow teachers, open discussion on the new programs should be scheduled (Ornstein and Hunkins, 2004:303). Such discussion, according to Ornstein and Hunkins, allows implementers to avoid their objections and concerns and consequently reduce opposition.

2.3.2. Teachers' Attitude

Teachers' beliefs have been conceptualized as a set of assumptions that teachers hold on various educational processes such as curriculum, schooling, students, teaching and learning, and knowledge (Lovat and Smith, 1995, as cited in Boris Handal, nd). The term teachers' beliefs have been used to represent teachers' conceptions, practical knowledge, personal knowledge and experiential knowledge (Marland, 1994; Pajares, 1992, as cited in Boris Handal, n.d). These instructional beliefs seem to act as mediators between curriculum goals and their actual implementation since teachers are to make curricular decisions based on their own affective and cognitive schemes. It has been argued that those beliefs have a strong impact on teaching and learning (Handal, Bobis, & Grimison, 2001; Lovat & Smith, 1995, as cited in Boris Handal, n.d).

No matter how good written curriculum is and the extent of back up resource supplied, no matter how much incentive/through stick or carrot/ is supplied through the accountability of a national assessment scheme, no matter how much politicians exhort, unless teachers are with a good enthusiasm for the subject and methods with their students, teaching will never become better than adequate.

Educating teachers to teach in the world of HIV/AIDS also focus on changing their attitude towards teaching the topic boldly and discuss the issue with students comfortably (Schenker and Nyirenda (2002:5).

2.3.3. Instructional Materials

No meaningful teaching and learning take place without adequate resource materials. For the curriculum to be fully implemented as per plan, schools should be supplied with adequate resource materials such as textbooks, teacher guides, teaching aids etc. supporting this, David Pratt (1980:370), described that one of the major factors in successful

implementation of innovation is whether or not the curriculum is accompanied by useful and high quality instructional materials. David expressed the curricular materials such as books, films, and audiotapes as vehicles of communication. This expression shows the importance of the material for implementation of a given curriculum.

Textbooks are critical ingredients in learning, and the intended curriculum can not be implemented without them (Newman, 1980, as cited in Desta Abera, 2001:17). Newman explained that textbooks must have the appropriate content and reading level, be consistent in approach or method, and exposition, be properly sequenced, motivate the students, and finally be readily taught by less qualified teachers, yet allow good teachers to expand up on them. The text book availability for learners and teachers helps that instructional time is not wasted while teachers and students copying on and of the blackboard.

Teachers guide is a guide addressed specifically to teacher's describing the system and giving suggestion on how to use it. It has to help the teacher improving alternative method of teaching, mechanisms of evaluating the performance of the students, indication necessary supporting instructional materials to enhance teaching. It should be well integrated with textbook or other instructional materials (Lockheed, 1990, 17). Lockheed further explained that teacher's guide should give guide what to teach and how to teach it.

For effective classroom implementation of curriculum, distribution of curriculum materials for schools and for students is obligatory. Ornstein and Hunking (2004,209) said that because of lack of plan for dispersal through school system, much of what is planned and developed often does not get implemented. They contended that, because of this, new and innovative programs are blunted at classroom doors.

2.3.4. Achievement Tests as Means of Curriculum Implementation

The ultimate goal of any classroom instruction is the achievement of instructional objectives stated before hand. So, during instruction the primary focus of a teacher lies on how to bring about effective student learning. Also students target on how to be successful achievers of a given course. Finally, the teachers as well as the students confirm whether they have achieved their purpose of the instruction or not through the achievement test scores.

Morrison (1996:187) explained that assessments contribute for the implementation of contents. Morrison discussed that assessment exert permanent pressure on students and teachers. It caused them to accord little significance to tasks which are not assessed.

Morrison clearly pointed out that, contents that are included in the examinations or tests have more chance of being implemented that contents usually never appear in the achievement tests. The later contents are usually overlooked by teachers and by students as well.

2.3.5. Supervisory Support of School Directors

Supervision is the process of overseeing the ability of people to meet the goals of the organization in which they work (Daresh and Playko,cited in Markos (1996). So, the main role of supervision is not controlling teachers but trying to identify the problems they are facing and working towards their solution. In this line Lovells and Wiles, cited in Markos (1996), explained that supervision is essential to provide support and service directly to teachers to help them improve their performance in working with a certain group of students.

Curriculum implementation can not be achieved unless it has been made possible through the supervisory function of the school head. As stated by University of Zimbabwe (1995, as cited in SADC (n.d)), the head monitors and guides curriculum implementation through ensuring that the schemes of work, lesson plans and records of marks are prepared regularly. The head teacher maintains a school tone and culture that create the climate of social responsibility. Effective curriculum implementation does not take place in a school where the head is incapable of executing supervisory function.

As instructional leader, the role of the school principal would be creating a conducive environment to facilitate supervision activities in the school by organizing all necessary resource (i.e. classroom, materials and teachers) for instruction (Markos, 1996, 108). On top of this, the school principal gives professional assistance and guidance to teachers to enable them realize instructional objectives and supervise classes when it is necessary. Also Marsh (1992:58) discussed that the school principal is a key agent for change in any improvement ventures. He wrote that school principals influence specific teaching methods and monitor tests and examinations in specific subjects.

2.4. HIV/AIDS Education for Primary School Children

Be it in school or out of school, the provision of HIV/AIDS education for school age population is very important. The following reasons are identified for the importance of HIV/AIDS education for school age children:

1. They are numerous- it is reported that 30% of the World's Population is between 10 and 24 years of age (WHO, 1992).
2. They are very vulnerable to HIV/AIDS- Altogether, 50% of HIV transmission takes place among those aged 15-24, and 5000-6000 young people became infected every day (UNAIDS, WHO,2002).

3. They are crying out for help as they suffer from the experience of HIV/AIDS, some in their own, many in their families and among their friends, many as orphans (Kelly, 2000).
4. They are young, idealistic, optimistic, and hopeful. They want to make a world for themselves and they want that world to be a better place than that which they have inherited from us (Kelly, 2000).
5. They are at a period of sexual awakening, learning and experimentation, and need extensive help and support in making constructive use of their new-found powers (Kelly, 2000).
6. Most importantly, they are the window of hope for the future-even though some may already be HIV-infected; the overwhelming majority is not (The World Bank, 2002). According to the Bank, the general picture is that in heavily infected countries, the individuals most likely to be HIV – free are those in the 5-14 years age group, that is, those who should normally be in primary school. This is where hope for the future really lies.

2.5. Views towards HIV/AIDS Education for Children

Good quality sexual health and HIV/AIDS education is needed in order to equip young people with the information which they rarely get from their parents or senior family members. This education, wrote Kelly, (2002), should go beyond the biological facts to include many aspects of behavior and ultimately of attitude and values.

Despite the importance of HIV/AIDS education for school-age children, its provision is controversial. Many adults, parents and teachers want to guard the children from the epidemic but they view the education as a threat, feeling that it will encourage promiscuity, promote early sexual practice, or encourage deterioration in moral values. They fear that

informing young adolescents about sex and teaching them how to protect themselves will make them sexually active (Gachuhi, 1999)

Contrary to these common fears or stereotypes, extensive research has detected little evidence that sex education leads to an increasing in sexual activity (Kirby et al. 2005, Cowan, 2002, as cited in USAIDS/WHO, 2006:138).Gachuhi (1999), also explained that research shows that the HIV/AIDS program doesn't lead to more frequent sex or to an earlier onset of sexual activities.

After reviewing many research works on the impact of sex and HIV programs on sex, Kirby et al. (2006:6) explained that the programs in general do not hasten the initiation of sex and some delay the initiation of sex. According to their explanation, of 52 studies 22 (42%) of them significantly delayed the initiation of sex for at least six month, 29(55%) of the studies found to have no significant impact.

Also the reviews of many of school-based HIV prevention programs in Africa demonstrated that 10 of 11 studies found to bring significant improvement in young people's HIV-related knowledge and positive behavioral changes (Gallant and Maticka (2006:138), as cited in Global AIDS Epidemic Report, 2006). The review also uncovered that school based programs can contribute to delayed sexual initiation.

More over, contrary to common beliefs, research results depicted that many adults are positive with HIV/AIDS education programs for children. In surveys of UNICEF/UNIADS and WHO (2002) from Cambodia, Haiti, Malawi, and Zimbabwe, at least 40% of adults felt that children aged 12-14 should be taught about using condom. Also A Demographic and health survey in Ethiopia (2005:204) revealed that many women (54%) and men (77%) agreed that children aged 12-14 should be taught about using condom to avoid AIDS.

2.6. Life Skills programs in Africa

Learning for life in the 21st century requires equipping children with a basic education in literacy and numeracy as well as the more advanced, complex skills for living that can serve as a foundation for life, enabling children to adapt and change as do life circumstances (Gachuhi, 1999:13). Gachuhi discussed that young people aged 5-14 years, offer a window of hope in stopping the spread of HIV/AIDS if they have been reached by life skills programs.

Young people, as they mature and become sexually active, face serious health risks with too little factual information, too little guidance about sexual responsibilities and few skills about how to protect themselves from adult coercion (Gachuhi, 1999:13).

The goal of AIDS/STI education is to promote behavior that prevents transmission of HIV/STIs and not merely to increase knowledge about AIDS (Joint UN program on HIV/AIDS, as cited in Tendrebe'ogo (2003:12). It is discussed in the joint program that HIV/AIDS/STI prevention program should increase knowledge, develop skills, promote positive and responsible attitudes, and provide motivational support. So, "Life Skills are abilities to use adaptive and positive behavior that enables individuals to deal effectively with the demands and challenges of every day life" (Joint UN program on HIV/AIDS, as cited in Tendrebe'ogo (2003:12).

There are five key psycho-social aspects that are included in life skills programs:

- ⇒ Self-awareness (self-esteem) and empathy
- ⇒ Private communication and interpersonal relationships
- ⇒ Decision making and problem solving
- ⇒ Creative thinking and critical thinking

⇒ Coping with emotions and coping with stress

(Gachuhi, 1999:11)

Life skills programs promote positive health choices, taking informed decisions, practicing healthy behavior and recognizing and avoiding risky situations and behavior (Gachuhi, 1999:11). Therefore life skills help young people to deal effectively with the demands and challenges of everyday life. Gachuhi concluded that life skills programs help children become socially and psychologically competent and to function confidently and competently with themselves, with other people and with the community.

2.6.1. Zimbabwe Life Skills Program

The Zimbabwe Ministry of Education and Culture took a bold step and began to offer a school-based HIV/AIDS and Life Skills education program for schools in 1991 (Cecilia Moya, 2002:2). The program is known as “The Aids Action Program for Schools”. “The AIDS Action Program for Schools” is a separate subject on the time table and/or integrated into other subjects. The education is compulsory in all primary and secondary schools, and tertiary institutions.

Gachuhi (1999:14) discussed that the goal of Zimbabwe’s AIDS Action program for Schools is to effect attitudinal and behavioral change amongst pupils in order to reduce the risk of HIV infection. The program aims at developing pupil’s life skills such as problem solving, informed decision making, and avoiding risky behavior.

2.6.2. Uganda Life Skills Program

A comprehensive School Health Education Program (SHEP) provided health information to pupils was started in early 1990’s (Gachuhi (1999:16). According to the explanation of Gachuhi, the program

evaluation of 1994 revealed that the curriculum had indeed been successful in raising knowledge about health issues, but it reportedly had little impact on attitudes and value and no discernible impact on health practices.

Gachuhi pointed out that behavior and practice needed to be targeted more effectively. The study therefore led to the development of a life skills program and recommended using experiential and participatory methods. So, in 1994 the program was launched with a national sensitization seminar for senior policy makers, opinion leaders and NGO representatives.

2.6.3. Namibia Life Skills Program

“My Future is My Choice” (MFMC) is an intervention aimed at reducing HIV risk in Namibia (Stanton et al., 1998, as cited in Tiendrebe’ogo et al., 2003:16). Stanton discussed that the program used a systematic planning process, directed attention on outputs of health education programs rather than inputs right at the beginning, and gathered appropriate information about dominants of risk behaviors among adolescents and environmental conditions.

The curriculum focused on basic facts about reproductive biology and HIV/AIDS, other risky behaviors, including alcohol consumption and violence within relationships, communication skills, and a framework for decision- making (Stanton et al., 1998, as cited in Tiendrebe’og et al., 2003:16).

“My Future is My Choice” (MFMC) aimed at:

- providing young people with the skills to delay sexual intercourse
- providing young people with facts about health, pregnancy, STIs, and HIV/AIDS

- improving communication between girls and boys, between friends and between young people, their parents, and their community
 - improving the decision -making skills of young people
 - providing young people with the skills they need to make informed decisions about their sexual health and
 - providing young people with the information and skills
- (Stanton et al., 1998, as cited in Tiendrebe'ogo et al. 2003, 16)

2.6.4. South Africa life Skills program

The HIV/AIDS education program known as “First AIDS Kit” was established by the National Coordination Committee for life skills and HIV/AIDS in 1995 (Coombs (2000), as cited in Tiendrebe'ogo et al., 2003:18).

The First AIDS Kit is about AIDS and life style education program for teenagers. The program was based on the theory of reasoned action, the health belief model, and the self-efficacy approach. The Kit consists of five modules covering adolescence, AIDS and STIs, relationships, life skills, and safe sex skills. The kit includes a video, a quiz to teach facts, and exercises in assertiveness, decision-making, negotiation, and choosing low-risk behaviors. Teachers were encouraged to select parts of the kit they considered appropriate to students' needs.

2.7-Teaching Methods Appropriate for HIV/AIDS Education

It is not enough to simply give students information about HIV and AIDS for them to learn. The learning – by- rote approach common in traditional academic settings provides students with information but does not allow

them to absorb the social and practical aspects of how this information might be put to use.

Active learning approaches are now seen as the most effective way that young people can learn health-related and social-skill (Berry, 2006:4). Steve discussed that group work and role play are particularly important methods in which students might discover the practical aspect of the information they are given. He said that these methods also allow pupils an opportunity to practice and build skills saying “No” to sex, for example.

The search for strategies that would have a significant impact on reducing HIV/AIDS infection among young people in sub-Saharan Africa stresses the need to develop an approach that goes beyond prevention (Tiendrebe’go et al., 2003:3).Tiendrebe’go argued that in addition to basic facts about the means of HIV or STI transmission, the risks of infection, and how to protect oneself, young people need to develop self esteem, self-confidence, and self efficacy. They need practical skills to cope with peer pressure, solve problems, be assertive, negotiate safer sex practices, and develop life plans.

The didactic style of teaching involves the presentation of accurate information in a clear, concise, and systematic way (WHO, 1992:43). The instruction is usually teacher-centered rather than participant-centered. Although didactic methods can occasionally be used to provide instruction on the skills and attitudes associated with a particular issue, they usually focus primarily on transfer of knowledge.

On the contrary, discussed WHO (1992:43), the participatory style, often involves a learner – centered group process. In this approach, communication and interaction are encouraged and the orientation may be towards problem-solving. Students and teachers together employ their

knowledge, skills and attitudes to examine problems related to AIDS/STD.

But the use of participatory methods alone may not provide sufficient factual knowledge for students. So, recommended WHO, the most appropriate approach to teach about AIDS/STD is a combination of the didactic and the participatory styles.

To provide effective HIV/AIDS education in schools, the teaching methods employed in educating about HIV/AIDS prevention should differ from more traditional subject areas. In this regard, Schemker and Nyirenda (2002:5) wrote that teachers need to learn additional skills, instructional methods and models, and perhaps change some of their old ways of teaching in order to effectively deliver school-based AIDS education using many different channels.

The following are some of the teaching methods suggested by Ministry of Education and Culture of Zimbabwe (1994:6-11, and WHO, 1992:76)) to teach about HIV/AIDS topics in schools.

Brainstorming: it involves inviting spontaneous responses from participants on a certain subject. The method helps ideas to flow and so generates ideas quickly. The ideas are put down in writing and can be used as a basis for discussion later. The technique allows students freedom to express ideas they might normally withhold because they fear judgment from the teacher or any one else.

Discussion: is a technique which allows members of a group to openly express their opinions on a subject and listen to the opinion of others. Group discussion stimulates free exchange of ideas. Group members have the freedom to discuss their feelings among

a small group. The intimacy created when a small group of peers discuss an issue, helps remove inhibition.

Devil's Advocate: A 'devil's advocate' is a person in a discussion who puts forward an undesirable or dangerous point of view. The technique involves a 'devil' who advocates risky behavior or undesirable attitudes. The other students question and argue to try to defeat the argument.

Devil's advocate is most often used when dealing with areas of temptation for participants. In this respect, it helps them to judge some of the choices they have to make related to modes or behavior and think up alternatives where necessary.

Role Play: Role play involves presenting small spontaneous plays which describe possible real life situations. It allows us to practice situations before we meet them in real life.

Moral Dilemma: this is a strategy where an unfinished scenario is provided for discussion. Students are encouraged to finish the story

a/ for the character involved

b/ as if they themselves were the central character

Discussion follows on the various decision, consequence, and possible course of action.

Debate A topic is discussed, one student taking a position for and another position against.

2.8. “Infusion Teachers” and HIV/AIDS Education

While objectives vary from country to country and from program to program, the main goal of youth-oriented HIV/AIDS interventions is to inform youth about HIV/AIDS and help them to develop skills such as the ability to analyze situations and behavior and their possible consequence before making decisions, as well as skills to refuse or avoid risky behavior (Tiendrebe'go et al., 2003).

According to Casey and Thorn, 1999, as cited in Tiendrebe'go et al., 2003, HIV/AIDS interventions targeting youth in sub-Saharan Africa are organized in various ways in different countries. He wrote that in most countries, HIV/AIDS education is part of the regular school curriculum. In these countries, the topics are integrated with another subject areas.

A study by the Centers for Disease Control, USA (Kann, et al., 1995 as cited in UNICEF, nd: 2), showed that compared to "health educators", "infusion teachers" teaching about HIV/AIDS prevention were:

- less likely to be trained, and were trained on fewer of the relevant topics;
- less likely to cover the necessary topics, especially the more sensitive and relevant topics regarding prevention;
- more likely to cover the science and biology of HIV/AIDS than prevention elements;
- less likely to include family and community elements in their programs;
- spent less time on the subject;
- were less likely to utilize recommended resources (including the formal curriculum);
- Used fewer interactive methodologies, and covered fewer of the skills and offered less practice of skills than "health educators".

Chapter Three

3. Research Design and Methodology

3.1. Research Method

To realize the objectives of this study, descriptive survey research method was used. To check the inclusion of questions from HIV/AIDS topics content analysis method was employed.

3.2- The Model Used

The Provus's discrepancy curriculum evaluation model was used with some adaptation to carry out the research. According to Provus, as cited in Orenstein (2004:340), the model has five main stages namely, Design, Installation, process, product, and cost.

In the model, design deals with a comparison of the program's design with prescribed standards or criteria, the adequacy of space, personnel, resources, and materials.

Installation compares the actual operation of the program with the installation standards or fidelity criteria. The evaluation at this point includes facilities, media, method, student abilities, and staff qualification.

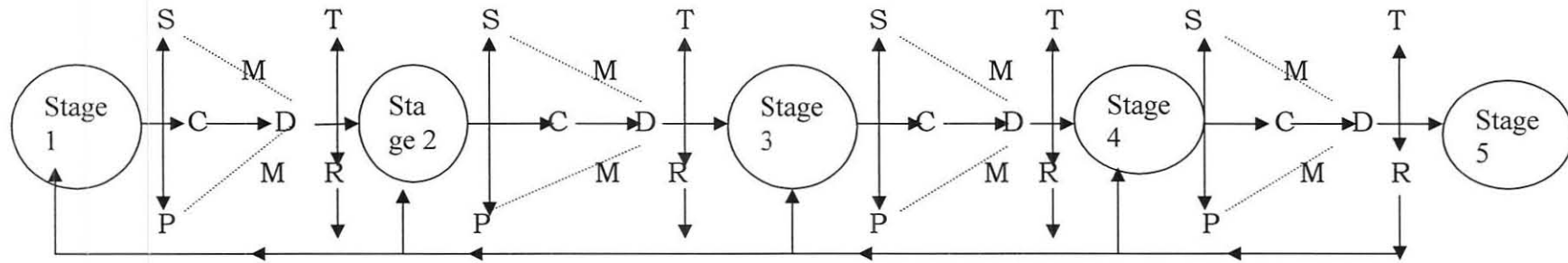
In process stage of the model, specific program process such as student and staff activities, functions and communication are assessed. In the product stage, the effect of the whole program is evaluated in terms of the original goal. And the cost is compared in terms of cost-benefit in the fifth stage.

Because of the time available for the research, the researcher focused on the first three stages of the model i.e. design, installation, and process.

The model is selected because it enables the evaluator to examine any discrepancy between the standards and the actual performance, and gives a room to recommend modification either on the standards or performances. So, the model allows the consideration of the existing situation of particular area.

Furthermore, Provus (2004:341) claimed that his evaluation plan could be used to make evaluations of ongoing programs, in any stage from the planning stage to the implementation stage. It could be, wrote Provus, used at the school level, school district level, and regional or state level.

Fig. 1- The Provus Discrepancy Evaluation Model



S= Standard
P= Performance

C= Comparison
D= Discrepancy
/ Between standard
and performance/

T= Terminate program
R= Recycle program

M= Modify or change
/standard or
performance

3.3. Source of Data

The main sources of data (the subjects of the study) were teachers of grades 5-8 teaching basic integrated science, Biology, and Health and Physical education. Also school directors were source of data that provided information on the supervisory assistance rendered in their schools.

Examination papers of the above mentioned subjects from each school were also used as a source of data.

The grades and subjects mentioned above were selected because the topics are included in these grades. The study areas were selected for mere reason of the researcher's acquaintance to the area.

3.4. Sampling Techniques

In Sidama Zone, there are 19 woredas and 2 city administrations namely, Aleta Wondo, Arbegona, Aroresa, Awassa Zuria, Bensa, Bona, Boricha, Bursa, Chere, Chuko, Dale, Dara, Gorche, Hula, Loka Abaya, Malga, Shebedino, Wondo genet, Aleta wondo town administration and Yergalem town administration. From these Woredas, two of them were selected randomly. Accordingly, Aleta wondo and Chuko woredas were selected for the study in addition to Hawassa city administration.

There were 248 second cycle primary schools in the study areas. In these schools, there are 237 Biology teachers (teaching Basic Integrated Science and Biology and 90 Health and Physical education teachers. So the total population (universe) for this study was 327 teachers.

From the total second cycle primary schools which are available in the study areas, 10 second cycle primary schools were selected randomly (from the selected two woredas of Sidama zone and Hawassa city administratin). As the teachers serving the purpose of this study are

teachers of Biology, Basic Integrated Science, and Health and Physical education, purposive sampling was employed to select the respondent teachers, i.e. all the Biology, Basic Integrated Science and Health and Physical Education teachers of the sample schools were included in the study. In the selected ten schools there were twenty five Biology teachers (teaching Biology or Basic Integrated Science) and seven Health and Physical Education teachers.

Also all the school directors of the selected schools were included in the study. In the analysis, only the responses of eight directors were used. This is because two school Directors didn't return the questionnaire.

3.5. Data Gathering Instruments

3.5.1. Questionnaire

Questionnaire focusing on fulfillment of conditions for implementation of HIV/AIDS topics was prepared for teachers. The questionnaire has four parts. The first part was dealing with background information of the respondent teachers. The second part focused on the fulfillment of the basic preconditions for implementation of HIV/AIDS topics in the classrooms. The questions in this part are answered by "yes" or "no". In this part 13 questions were included. The third part of the questionnaire dealt with the knowledge of the teachers on HIV/AIDS topics. The questions have rating scale of "True", "Don't know", and "False". These questions are adapted from the "Handbook for curriculum planners" prepared by UNESCO/WHO/UNICEF (1992). As the questions have correct and incorrect responses, 1 point was given for correct responses (for either true or false) and 0 was given for incorrect responses (for either true or false and don't know responses). Nine questions were included in this part of the questionnaire.

The fourth and fifth parts of the questionnaire were prepared to gather information on teachers' knowledge on teaching methods and their use in the classrooms. Seven teaching methods were included in these part and the questions were prepared with rating scale of 5 levels. For the knowledge part, teachers are required to rate their knowledge on the methods as "very high", "high", "low", "very low", and "I don't know it at all". The "very high" has the value of 5, "high" was given the value of 4, "low" has the value of 3, 2 was given for "very low", and "I don't know it at all" has the value of 1. Regarding the use of the teaching methods in their classrooms, teachers rate their use of the methods as "very often", "often", "sometimes", "rarely", and "never". The rating scales have the value 5-1, 5 to "very often", 4 to "often", 3 to "sometimes", 2 to "rarely", and 1 to "never"

Also questionnaire was prepared for school directors. The questionnaire comprises the first four parts of the questionnaire for teachers.

3.5.2. Document Analysis

The inclusion of HIV/AIDS items in test/final exams was evaluated by analyzing the test/exam papers from each school. Many of the HIV/AIDS topics were placed in the units to be treated in second semester (grade 5 Basic integrated Science-in units 6, grade 6 basic integrated sciences- in unit 6, and grade 7 Biology – in unit 7). This fact obliged the researcher to use examination papers of second semester final examinations of 2007 academic year. But many schools are not keeping examination papers of 2007 academic year. So, the papers were obtained only from 4 schools. For Biology grade 8 and Health and Physical education for grades 7 and 8, first semester final examination papers of 2008 academic year were collected from all sample schools. Because of these facts, only 42 examination papers were collected and analyzed.

Each question was taken as a unit of measurement for the content analysis of the examination papers, that is each question was evaluated whether it was related to HIV/AIDS topics or not. And the topics included in the textbooks of the grade 5-8 basic integrated science and Biology as well as Teachers guides of grade 5-8 Health and Physical education.

3.5.3. Interview

Directors of the selected schools were interviewed on the supervisory assistance they provide for teachers in the process of implementing HIV/AIDS topics.

3.6. Data gathering procedure

The questionnaire was distributed personally by the researcher. The researcher provided orientation for target teachers how to fill the questionnaire. Then, the questionnaire was distributed to each subject teacher.

The examination or test papers were collected from each school per subject and the inclusion HIV/AIDS items was examined.

Interviews were conducted with the directors of each school. Before starting the main questions of the interview, an assurance on confidentiality of the responses were given to each director.

3.7. Data Analysis Techniques

Percentage and mean value were used to analyze the responses of teachers and school directors. Percentages of the respondents were calculated to judge the fulfillment of the precondition for implementation of HIV/AIDS topics in classrooms. To judge the knowledge of teachers on HIV/AIDS topics the total score of the respondents was compared with the expected score on the knowledge questions. The comparison was shown by using percentage of the obtained score against the expected

score. As these questions are given with alternatives which have correct and incorrect values, there is a probability of getting correct responses by chance. To check whether the correct responses are obtained by chance or not, Chi-square was used. The questions on teaching methods knowledge and the use of the methods in classrooms were analyzed by using both percentage of respondents and the mean value for each question

Interview responses were described in relation to the expected supervisory services from the directors and in relation to the responses of the teachers on the similar questions.

3.8. Pilot Test

To validate the questionnaire and avoid practical problems in advance, pilot test was conducted in Awassa Tabor and Betekhinnet primary schools. Accordingly modifications were made on the questionnaire.

Chapter Four

4. Presentation, Analysis and Discussion of Results

This part deals with the background information of the respondents, the presentation of the data, analysis of the data, and discussion made on the result of the study.

4.1. Background of Respondents

In this part, sex, qualification, work experience, weekly load, and subjects taught by teachers and training of school directors for the position are discussed.

Table 1 A - Background of Teacher Respondents

Characteristics	Category	No.	%	Total	
				No.	%
Sex	Male	23	72	32	100
	female	9	28		
Qualification	12+2	25	78	32	100
	10+3	7	22		
	Other				
Teaching experience	1-5	10	31	32	100
	6-10	1	3		
	11-15	-	-		
	16-20	5	16		
	21-25	4	12		
	>25	12	38		
Weekly Load	15-20	11	34	32	100
	21-25	16	50		
	26-30	5	16		
Subject	Basic integrated sc.	10	31.25	32	100
	Biology	10	31.25		
	Biology & Chemistry	4	12.5		
	Biology ,Chemistry & Physics	1	3		
	Health and Physical Education	7	22		

Table 1A presents the background information of teachers. The table shows that 23 (72%) of the respondents were male and 9 (28%) of them were female. Regarding their qualification, 25 (78%) of the respondents were 12+2 and 7(22%) of them were the recent graduates of 10+3 Diploma program.

As to the teaching experience, 10(31%) of the respondents were having experience of 1-5 years and 1(3%) has 6-10 years of work experience. 5(16%) and 4(12%) of them reported that they had 16-20 and 21-25 years of teaching experience respectively. The majority of the respondents (12 (38%)) had work experience in teaching for more than 25 years.

Moreover, 11(34%) of the teachers indicated that they had teaching load of 15-20 periods per week, while 5(16%) of them reported to teach 26-30 periods in a week. The majority of the respondent teachers (16(50%)) were teaching 21-25 periods per week.

Regarding the subjects, 10(31.25%) of the teachers were teaching basic integrated science and the same number of teachers were teaching Biology only. Four (12.5%) of the teachers were teaching Biology and Chemistry while 1(3%) teacher was teaching Biology, Chemistry and Physics. Seven (22%) of them were teachers of Health and Physical Education.

As it can be observed from the table, only 7 teachers of Health and Physical Education filled the questionnaire. This is because except in one school in Awassa town, no teacher who is trained in the field is found in the sample schools for grades 5-6. In most rural schools, no Health and Physical Education teachers were found at all for grades 5-8.

Table 1B - Background of School Director Respondents

Characteristics	Category	No.	%	Total	
Sex	Male	8	100	8	100
	female	-	-		
Qualification	12+2	7	88	8	100
	10+3	1	12		
	Other	-	-		
Experience as a Director	1-5	5	62	8	100
	6-10	3	38		
	11-15	-	-		
	>15	-	-		
Trained for Director	Yes	-	-	8	100
	No	8	100		

The school Directors background information displayed in table 1B reveals that all the school directors (100%) were male. Seven (88%) of the directors possessed 12+2 diploma, and 1(12%) director graduated from 10+3 diploma program.

Finally, the data show that 5(62%) of the school directors have worked as director for 1-5 years, and 3(38%) of them reported to have worked in the position 6-10 years. And all the directors reported that they were not trained as school director.

4.2. Teachers' Training

The classroom implementation of any content in a curriculum in general and HIV/AIDS topics in particular is highly relied on the classroom teachers' knowledge of the contents and the appropriate methods to teach the contents. This required knowledge of content and teaching method is acquired either in initial training or in in-service training. Initial training (pre-service training) is given for prospective teachers who are on training (in colleges) and in-service training is given for teachers who are already assigned and teaching in schools. Having this in mind,

the training of teachers (initial and in-service) is examined and the data is presented in the following table.

Table 2 – Teachers’ Training (Initial and In-service) on HIV/AIDS and Teaching Methods Appropriate to Teach the Topics

No	Item	Responses		Total	
		Yes	No		
1	When you were in Teacher Education Institute (TEI), have you learnt about HIV/AIDS in any course?	No.	7	25	32
		%	22	78	100
2	When you were in Teacher Education Institute (TEI), have you learnt about teaching methods which are appropriate to teach topics about HIV/AIDS?	No.	3	29	32
		%	9.4	90.6	100
3	Have you ever taken any in-service training (summer course, workshop, seminar etc.) on HIV/AIDS topics?	No.	16	16	32
		%	50	50	100
4	Have you ever taken any in-service training (summer course, workshop, seminar etc.) on teaching methods which are appropriate to teach topics about HIV/AIDS?	No.	-	32	32
		%	-	100	100
5	If you have taken any in-service training, do you think that the in-service training was adequate to help your classroom teaching on the topic?	No.	5	27	32
		%	15.6	84.4	100

As it is shown in table 2, 7(22%) of the respondents of the study reported that they have learnt about HIV/AIDS when they were in TEI, and 25(78%) of them depicted that they have taken no training on HIV/AIDS in their initial training.

Also only 3(9.4%) of the respondents reported their learning about teaching methods which are appropriate to teach topics about HIV/AIDS, and 29(90.6%) of them disclosed that they took no training on the methods in their initial training.

Regarding in-service training, 16 (50%) of the respondent teachers pointed out that they have taken in-service training on HIV/AIDS topics, and the same proportion of them reported that they have taken no in-service training. Out of the 16 (50%) teachers reported to have taken the in-service training, 5 of them agreed that the in-service training was adequate to help them in their classroom teaching of the topic, while the remaining 11(34%) expressed the inadequacy of the in-service training. All the teachers responded that they have never taken in-service training on teaching methods which are appropriate to teach HIV/AIDS topics.

The majority of the teachers are claiming that they did not take training on HIV/AIDS topics when they were in TEI. This is because the majority of the respondents are graduates of pre-TESO teacher education system (Table 1A). The HIV/AIDS topics as well as appropriate teaching methods of teaching the topics were not included in that teacher training curriculum. But the remaining 7 (25%) respondents have passed through the 10+3 program. In this program, the students have taken a course known as “Life skills and Gender Issues”. So the curriculum gave them a room to deal with HIV/AIDS topics.

Even though HIV/AIDS issues are included in the new curriculum of teacher’s training, the appropriate methods of teaching the topics are not included in the curriculum. So, out of the 7 (25%) teachers who have taken course on HIV/AIDS topics, only 3(29%) of them agreed that they have taken training on teaching methods appropriate to teach HIV/AIDS topics.

Teachers acquainted with new innovations which are included in to a curriculum either through initial training (for those who are on training) or through in-service training (for those who are already in school). The background information of teachers shows that the majority of the teachers were already in schools when HIV/AIDS topics were included in

to the curriculum. So, the only way to acquaint these teachers with the topics is the provision of in-service training on the topics and the teaching methods appropriate to teach them.

But the in-service training data in table 2 disclosed that teachers did not get sufficient in-service training that could help them for their classroom teaching of HIV/AIDS topics. What is more discouraging about HIV/AIDS education is, all the teachers reported that they didn't take in-service training on teaching methods which are appropriate to teach the topics. That is, the 16 (50%) teachers who have taken in-service training disclosed that they didn't take training on the teaching methods. From these it is clear that the content of in-service training prepared for teachers didn't include teaching methods on the issue.

In-service trainings should be prepared to solve practical problem that teachers are facing in the classroom teaching. So the contents selected for in-service training should help teachers to improve their teaching. But the result of this study depicted that the in-service training given for teachers was not sufficient to help teachers improve their classroom instruction. This shows the discrepancy between the need of teachers and the content of the in-service trainings provided.

The result of this study is in line with findings of Kann et al, cited in UNICEF (1995:2). Kann and colleagues found out that many teachers in Eastern and Southern Africa are not sufficiently trained. The result also substantiates the findings of Getachew et al. (1995:23). Getachew and colleagues result showed that the majority of the teachers did not participate in seminars, workshops or any AIDS/STD education program. More over, the result is similar to the findings of Tiendrebe'ogo (2003:18). Tiendrebe'ogo's evaluation of Zimbabwe's life skills programs conducted in 1995 found out that only one-third of the teachers had received in-service training on the topic.

4.3. Teachers' Comfort and Interest in Teaching HIV/AIDS Topics

AIDS education necessarily involves some detailed discussion of sexual matters. This discussion could take place only if teachers are comfortable to handle the discussion in their classrooms. If the teachers are uncomfortable with HIV/AIDS issues, they will convey the discomfort to the class. Bearing this idea in mind, the feeling of teachers on the inclusion of the HIV/AIDS topics in the curriculum, their interest to teach the topics, and their comfort to talk about HIV/AIDS issues in front of their students are investigated and the results are summarized in the following table.

Table 3- Teachers' Response on Comfort and Interest in Teaching HIV/AIDS Topics

No.	Item	Response		Total	
		Yes	No		
1	Do you feel that it is good to teach HIV/AIDS topics to your students?	no.	31	1	32
		%	97	3	100
2	Are you interested to teach the topics of HIV/AIDS included in your subject area?	no.	31	1	32
		%	97	3	100
3	Do you feel shy (discomfort) to talk about HIV/AIDS topics to your students?	no.	18	14	32
		%	56	44	100

As can be seen from table 3, almost all the teachers had positive attitude towards the teaching of HIV/AIDS topics for their students. Only 1(3%) respondent felt that it is not good to teach the topics to his students. Also 31(97%) of the respondents expressed their interest to teach the HIV/AIDS topics which are included in their subject area while 1(3%) respondent was not interested to teach the topics. But, paradoxically, the majority 18(56%) of the teachers were not comfortable to talk about HIV/AIDS topics to their students. Fourteen (44%) of the teachers indicated that they are comfortable to talk about HIV/AIDS topics to their students.

Understanding the effect of HIV/AIDS on the children and the role of education to halt the epidemic, teachers expressed their good outlook towards the inclusion of the topics into the curriculum. Recognizing their responsibility to teach the HIV/AIDS topics for their students, the teachers showed their interest to teach the topics which are included in their subject areas. But the majority of the teachers are not bold enough to teach HIV/AIDS issues for their students.

From the previous discussion on the teachers' training (table 2), it is remembered that the majority of the teachers didn't take training on HIV/AIDS issues and the teaching methods appropriate to teach the topics in either their initial or in-service training. This lack of training makes the teachers to feel that they are not entirely clear on the information they are presenting for students; they fear that they might not answer some of the questions raised by students. Thus, they hesitate to present the topic for students.

Moreover, as untrained teachers, these teachers had no chance to practice discussion on values and attitudes relevant to AIDS/STD. It is through in-service training that teachers made themselves clear with what they are doing and sharing experience with fellow teachers.

The result of this study substantiates the survey result of UNICEF/UNIADS and WHO (2002) and A Central Statistical Agency of Ethiopia (2005). The findings of the above studies depicted that many adults had positive view about teaching children aged 12-14 about HIV/AIDS topics. The result is also in agreement with the findings of Getachew et al (1995:22-23) where 85% of the respondents have showed their willingness to teach AIDS/STD education in the primary schools, but on the contrary 51% of the respondents have never mentioned about HIV/AIDS directly or indirectly to their students in the classroom.

4.4. Teachers' Knowledge about HIV/AIDS

Teachers can not teach what they don't know. The level of teachers' knowledge on the content they are teaching dictates the teachers' classroom presentation of the content and the depth of the discussion they let on the content. Especially, the success of the provision of HIV/AIDS education programs depends largely on the knowledge of implementers-classroom teachers (UNESCO, n.d). Bearing this in mind, the basic knowledge of teachers on HIV/AIDS topics is examined and the summary of their responses is displayed in table 4 below.

Table 4 - Teachers' Knowledge about HIV/AIDS

No	Item	Responses		Total	
		Correct	Incorrect		
1	Many people who are infected with HIV can look and feel healthy.	No.	14	18	32
		%	44	56	100
2*	AIDS can be cured.	No.	24	8	32
		%	75	25	100
3	Males who are infected with HIV can give it to another person through their semen.	No.	24	8	32
		%	75	25	100
4	People who are infected with HIV can give it to another person through their blood.	No.	27	5	32
		%	84	16	100
5	A mother can pass HIV to her unborn child.	No.	18	14	32
		%	56	44	100
6	People can reduce their chances of becoming infected with HIV by using a latex condom during sexual intercourse.	No.	30	2	32
		%	94	6	100
7	A person can become infected with HIV by being bitten by an insect such as a mosquito.	No.	31	1	32
		%	97	3	100
8	People who are careful to have sexual intercourse only with healthy-looking partners won't become infected with HIV.	No.	21	11	32
		%	66	34	100
9	People can be infected with HIV and not know they have it.	No.	22	10	32
		%	69	31	100
Total			211	77	288
			X ² =206.7 P< 0.05**		

From the nine knowledge questions provided for teachers, the expected score of correct responses was 288. The data in table 4 showed that the correct response score of the respondent teachers was 211, which constitute 73% of the expected correct response score.

As the responses are given in alternatives, there is probability of getting correct responses by chance. To check that whether the score was obtained by chance or not, chi-square test was computed and the computed value (206.7) of the responses is much higher than the table value (3.841) at 0.05 level of significance. So there is significant difference between the responses expected by chance and actually obtained by teachers: that is the values obtained are not obtained by mere chance.

Even though teachers were not trained on HIV/AIDS topics, their knowledge on the topics is high. This could be explained in terms of their exposure to different sources of information about HIV/AIDS. The survey conducted on HIV/AIDS related knowledge by Central Statistical Agency (2005:179) indicated that in Ethiopia, the knowledge of AIDS is widespread. Besides, the survey showed that there is positive correlation between knowledge on HIV/AIDS and education level of people: the level of knowledge increases with increasing levels of schooling. So, the obtained knowledge level of teachers is expected.

This result coincides with the findings of Alemayehu (1991). Alemayehu in his study of teachers' Health knowledge, attitude and practice found that teachers appear to be knowledgeable in health matters related to child, communicable diseases, and harmful traditional practices.

4.5. Teaching methods

Teaching methods are the vehicles to present the contents in the classroom. The knowledge on teaching methods and their appropriate use is decisive for effective classroom teaching. Especially, teaching strategies which are significant to teach HIV/AIDS topics should go beyond providing information on the topics. Based on this assumption, the teachers' knowledge of the teaching methods and the classroom use of the teaching methods are investigated. The obtained information is displayed in table 5 and 6 below.

Table 5. Teachers' Response on Knowledge of Teaching Methods

n o.	Item		Very high	High	Low	Very low	I don't know it at all	Total	Mean
1	1	no.	10	19	1	2	-	32	4.2
		%	31.2	59.4	3.1	6.2	-	100	
2	2	no.	12	11	4	5	-	32	4.0
		%	37.5	34.4	12.5	15.6	-	100	
3	3	no.	17	8	7	-	-	32	4.3
		%	53.1	25	21.9	-	-	100	
4	4	no.	9	14	6	3	-	32	3.9
		%	28.12	43.75	18.7	9.4	-	100	
5	5	no.	10	12	5	5	-	32	3.8
		%	31.12	37.5	15.6	15.6	-	100	
6	6	no.	-	1	5	18	8	32	2.0
		%	-	3.1	15.6	56.3	25	100	
7	7	no.	-	-	3	25	4	32	2.0
		%	-	-	9.4	78.1	12.5	100	

The response of teachers on knowledge of teaching methods summarized in table 5 showed that, Lecture was known very highly by 10 (31.2%), and highly by 19(59.4%) of the respondent teachers. But 1(3.1%) and 2(6.2%) respondents expressed the low and very low knowledge levels on lecture method respectively. The mean of the teachers' knowledge on the method is 4.2.

The knowledge of brainstorming was very high for 12 (37.5%) and high for 11(34.4%) respondent teachers. Also 4(12.5%) of the teachers indicated their low knowledge level while 5(15.6%) of the teachers responded that their knowledge on the method was very low. The mean of the ratings on knowledge of the teaching method is 4.0.

Seventeen (53.1%) teachers indicated their very high knowledge on Discussion method and eight (25%) of them expressed their high knowledge on the method. The remaining 7(21.9%) teachers rated that their knowledge of discussion method was low. Nine (28.12%) and fourteen (43.75%) of the teachers reported their very high and high knowledge on Role play method respectively. Six (18.7%) of the teachers declared their low knowledge while 3(9.4%) of the teachers reported their very low level of knowledge on the method. The mean value of the rating for the method is 4.3.

Very high and high level of knowledge on Debate as a teaching method are rated by 10(31.2%) and 12(37.5%) respondents respectively. Five (15.6%) of the respondents reported to have low and five (15.6%) of them reported very low level of knowledge on the method. The mean value of the method is 3.8.

Out of the respondent teachers, 18 (56.3%) of them agreed to have very low knowledge on Devil's advocate and 5(15.6%) of them expressed low level of knowledge. One (3.1%) of the teachers rated high knowledge while the remaining 8(25%) reported that they didn't know the method at all. The rating scales mean for the method is 2.0.

Twenty five (78.1%) of the respondent teachers rated their knowledge on Moral dilemma to be very low and 3(9.4%) of them rated as low, and four (12.5%) of the teachers reported their lack of knowledge at all on the method. The mean value the method is 2.0.

As it is shown in table 5, the teachers' knowledge on teaching methods which are commonly used for all topics is high. Brainstorming, Lecture, Discussion and Role play as well as Debate could be used for all topics including HIV/AIDS. But, Devil's advocate and Moral Dilemma which are very important to teach HIV/AIDS topics were not well known by the teachers.

Table 6. Teachers' Response on Use of Teaching Methods

no.	Item		very often	often	some times	rarely	never	Total	Mean
1	1	no.	11	17	3	1	-	32	4.2
		%	34.4	53.1	9.4	3.1	-	100	
2	2	no.	3	7	13	7	2	32	2.8
		%	9.4	21.9	40.6	21.9	6.2	100	
3	3	no.	4	8	10	10	-	32	3.2
		%	12.5	25	31.25	31.25	-	100	
4	4	no.	-	3	3	12	14	32	1.8
		%	-	9.4	9.4	37.5	43.8	100	
5	5	no.	-	3	3	12	14	32	1.8
		%	-	9.4	9.4	37.5	43.7	100	
6	6	no.	-	-	-	-	32	32	1.0
		%	-	-	-	-	100	100	
7	7	no.	-	-	4	3	25	32	1.3
		%	-	-	12.5	9.4	78.1	100	

As it is shown in table 6, eleven (34.4%) of the respondents rated very often and seventeen (53.1%) of them rated often for the use of lecture method in their classroom. Also 3(9.4%) and 1(3.1%) of the respondents replied that they are using the method some times and rarely in their classes respectively. The mean value for the rating of using lecture method is 4.2.

Brainstorming is used very often by 3(9.4%) of the respondents and often by 7(21.9%) of the respondents. 13(40.6%) and 7(21.9%) of the respondents expressed the some times and rare use of the methods

respectively. But 2(6.2%) of the respondents disclosed that they are not using the method at all in their classrooms. The mean value for the use of the method in classroom is 2.8.

Discussion method is reported to be used very often by 4(12.5%) respondents and used often by 8(25%) of the respondents. Some times and rare use of the method are reported equally by 10(31.25%) respondents. And the mean value for the use of the method is 3.2.

Three (9.4%) respondents use Role play often in their classrooms, and the same number of teachers are using the method some times. Twelve (37.5%) of the teachers are using Role play rarely while fourteen (43.8%) of them are not using the method at all. The mean value of 1.8 is obtained from the rating of the method's use by the respondent teachers.

Debate is used often by 3(9.4%) of the teachers and 3(9.4%) of the respondents are using it some times in their classes. But 12 (37.5%) are using it rarely while 14(43.7%) of the teachers have never used the method in their classrooms. The mean of the use of the method is 1.8.

All the respondent teachers are not using Devil's advocate at all to teach the subjects at their hand. The mean value for the use of the method is 1.0.

Four (12.5%) of the teachers are using Moral Dilemma some times and three (9.4%) are using it rarely. The majority of the teachers, 25(78.1%) revealed that they have never used such a method in their classroom. The mean value of the rating scale on the use of the method is 1.3.

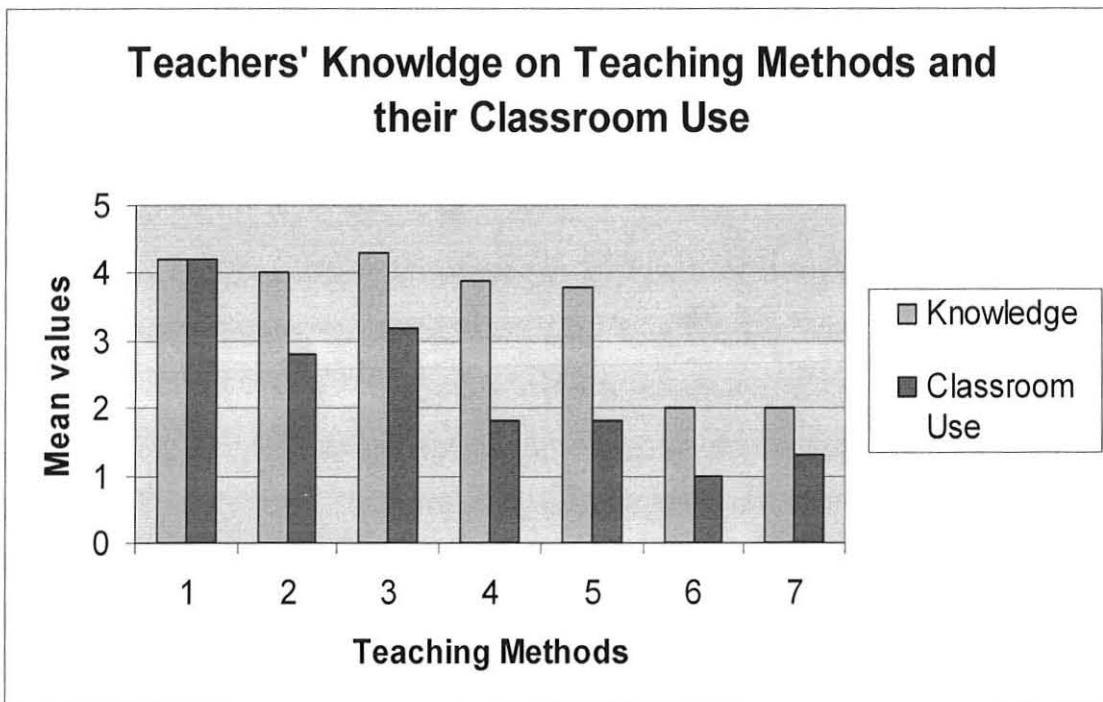
Contrary to their knowledge level, teachers were not using the teaching methods in their classrooms (table 6). For example 12 (37.5%) respondents reported very high knowledge level of Brainstorming while only 3 (9.4%) of the teachers are using the method very often in their

classroom. And 13 (40.6%) teachers are using the method only some times. That is the mean for knowledge of the method is 4.0 while its mean for classroom use is 2.8 only.

The same contradiction is apparent in Discussion, Role play, and Debate methods. The majority of the teachers were not using the Role play and Debate methods at all in their classes.

The knowledge as well as the classroom use of Devil’s advocate and Moral Dilemma teaching methods was low. The mean for the knowledge on the methods was 2, that is, very low level of knowledge, and the means for the classroom use of the methods were 1.0 and 1.3 respectively; teachers were not using the methods at all in their classrooms.

Fig. 2. Teachers’ Knowledge on Teaching Methods and their Classroom Use



As it can be visualized from Fig.2, except Lecture method, the teachers' mean for the classroom use of teaching methods was very low compared to mean of their knowledge on the teaching methods. Also it is evident from the figure that teacher centered teaching methods were being used in classrooms more than student-centered.

As teachers didn't take training on the methods (table 2), no one could blame them for their low level use of the methods in their classrooms. In the sample schools, the average number of students in a classroom is found to be 75. Use of participatory teaching methods with this number of students in a classroom will not be an easy task. That is why, even though they have knowledge on student-centered teaching methods, the majority of the teachers are using lecture method in their classrooms. The survey conducted by SNNPREB in 1997 supported the findings of this research. The finding of the survey has indicated that many teachers believe that they cannot do practical activities, problem-solving investigation or other learner centered approaches in over-crowded classroom with many students.

4.6. Curricular Materials

The availability of curricular materials, text-book, teacher's guide and other supplementary reading materials, is known to enhance students achievement and the teachers presentation of the contents. The following table provides highlight on the availability of curricular materials in sample schools of this study.

Table 7- Availability of Curricular Materials

No	Item		Responses		Total	
			Yes	No		
1	Are there sufficient textbooks on the hands of your students on the subjects you are teaching?	Science	No.	18	7	25
			%	72	28	100
		HPE	No.	-	7	7
			%	-	100	100
2	Are there sufficient supporting or supplementary reading materials (Manuals, books, bulletins, magazine etc.) in your school that could help your classroom teaching on HIV/AIDS topics?	No.	7	25	32	
		%	22	78	100	
3	Do you have teacher's guide on your subject?	No.	32	-	32	
		%	100	-	100	

As it is presented in table 7, 18(72%) of the science teachers indicated that there are sufficient text-books on the hands of students while 7(28%) of them reported the insufficiency of text-books on their subject area. Health and Physical Education teachers unanimously asserted the total absence of text-books on the subject.

Also the data from the observation checklist confirms the availability of text-books of Basic Integrated Science and Biology subjects sufficiently. The student-textbook ratios were 1:1 in urban areas, and 1:2 and 1:3 in rural areas. But the average of student-textbook ratio was 1:2 for the study area. Also from the observation made, the total absence of text-books on Health and Physical education was confirmed.

Only 7(22%) of the respondents reported the availability of supplementary reading materials in their schools and 25(78%) of them agreed on the absence of the materials.

From the observation made on the availability of the supplementary reading materials, no manuals and books were found in the sample schools. But some magazines and leaflets were found in 6 of the schools. But it is only in one school the magazines were reserved in libraries of the schools so as students will have access to the materials. In other schools the materials were dumped in store or in a corner of staff room.

Regarding the availability of teacher's guide, all the respondents reported the availability of teacher's guide on their subjects. And the observation check list data strengthened the responses of the teachers.

The data on availability of text-book showed that there was uneven distribution of text-books among the schools and subject areas. This result proves the finding of Derebssa (2001:81). In his study conducted in SNNPR, Derebssa found that the distribution of text books was not even in all schools and in all subjects.

Different organizations have prepared HIV/AIDS Manuals for grade 5-8 teachers (For example, ICDR, BESO). Also books on HIV/AIDS issues that could be used as a textbook by both the teacher and the students in grades 5-8 have prepared by different organizations. Some books could be used as a reference for HIV/AIDS contents and some of them are written on the active teaching methods appropriate to teach HIV/AIDS topics. But no manual or book was found in any school during the study time. This shows that there is lack of coordination between the organizations which have prepared the materials and the bureaus and offices of education that distribute the materials to the school.

The result of this research supports the idea of Project Monitoring Unit (PMU)(2005:21). The Project Monitoring Unit pronounced that the supplementary reading materials are hardly available in schools of Ethiopia. As Ornstein and Hunking (2004:209) pointed out that much of

what is planned and developed often doesn't get implemented in schools because of lack of plan for dispersal through school system.

Good attempt has been made on the preparation and distribution of teacher's guide. All the teachers are using the teachers guide in their classes.

4.7. School Directors' Support on HIV/AIDS Instruction

School directors are the immediate personnel to support teachers on the problems they face in their classroom teaching. The school directors are expected to tune the tone of school as a whole. Thus, their role in the process of curriculum implementation is immense. Having this in mind, the supervisory activities of the school directors were examined and the obtained information is displayed in the following table.

Table 8- School Directors support on HIV/AIDS Instruction

No.	Item	Response	Yes	No	Total
1	Does your school director observe your classroom teaching on regular bases?	no.	2	30	32
		%	6.25	93.75	100
2	Has your school director ever observed your class while you are teaching HIV/AIDS topics?	no.	5	27	32
		%	15.62	84.38	100
3	Does your school director provide you assistance on the problems you encounter in teaching HIV/AIDS topics/	no.	2	30	32
		%	6.25	93.75	100

The information displayed in table 8 reveals that 2(6.25%) of the teachers responded that their school directors are observing their classroom teaching on regular basis, while 30(93.75%) of them revealed that there is no classroom observation on regular basis.

As to the observation of class on HIV/AIDS topics, only 5(15.62%) of the respondents replied that their school directors have observed their

classrooms while they were teaching HIV/AIDS topics, and 27(84.38%) of them depicted their not being observed by the school directors while teaching HIV/AIDS topics.

Regarding Assistance from school directors, 2(6.25%) of the respondents teachers indicated that they have got Assistance from their school directors on the problems they encounter in teaching HIV/AIDS topics. But 30(93.75%) of the respondents disclosed that their school directors didn't provide them assistance on the problems they encounter in teaching HIV/AIDS topics.

Classroom observation is one of the tasks of school directors, and primarily it aims at supporting the classroom teacher. But as it is revealed by the majority of respondents, there is no classroom observation aiming at provision of support for teacher in the sample schools.

In agreement with report of teachers, many school directors explained that they are visiting classrooms, and they have no regular time for their observation. They are observing classes accidentally and randomly. Their observation focuses on checking the congruence of the lesson plan with the contents being delivered during observation.

From the data in table 1B, it is clear that the school directors are not trained for the position. So, they may not be clear with their roles and responsibilities to facilitate curriculum implementation in general and the importance of supervising classrooms in particular.

Because of lack of regular classroom observations, the majority of the respondents didn't observe by their school directors while they are teaching HIV/AIDS topics. And the report of 5 teachers to be observed by school directors while teaching HIV/AIDS topics is the accidental match of this random and accidental observation.

During the interview session, the school directors explained that accidental classroom observation is important to make teachers alert all the time. They said that if classroom visits are regular, teachers will make themselves ready in those times only and will be disorderly in other times. According to them, their primary purpose of classroom visits is controlling the match between the lesson plan and the content that the teachers are delivering in the classroom.

This is where the principal purpose of classroom observation contradicts with the actual practice of the school directors.

Almost all the respondents agreed that there is no assistance from school directors on their HIV/AIDS instruction. This could be explained from different angles. First, because of lack of regular classroom observation, there might be lack of awareness on the side of school directors about the problems that teachers are facing in teaching the topics. Second, as it is explained above, the school directors are focusing on controlling teachers rather than supporting them (this could also resulted from their lack of training for the position of school Director). Third explanation could be given from the angle of school director's initial and in-service training on HIV/AIDS issues. As it is displayed in table 9, most of the school directors never have taken training on the topics. Lack of the school director's knowledge on active teaching methods appropriate to teach HIV/AIDS topics (table 11) could be additional explanation for lack of assistance from school directors.

The result of this research substantiates the finding of Derebssa (2001:180). He discussed that the supervisory service in schools was not in accordance with the aims and objectives of the new curriculum, nor was it regular. Moreover, Derebssa contended that most head teachers came to their post up on their years of government service. He further explained that there is no academic qualification prescription to hold the

position. So, most head teachers coming into the position have made no conscious effort to obtain job-specific training. Derebssa concluded that this lack of academic training was found to be a factor that hindered the effective implementation of curriculum. The result also substantiates the idea of Fullan (2001:82) where he explained that all major researches on innovation and school effectiveness show that the principal strongly influence the likelihood of change. But, Fullan wrote that most principals do not play instructional leadership role.

4.8. School Directors' Training on HIV/AIDS Education

The school principal strongly influences the likelihood of change i.e. he/she plays a significant role in the implementation of the changes made in a curriculum. For this reason, the provision of training on the key points of the new curriculum for them is indispensable. Otherwise we can't expect them to help classroom teachers on the implementation of the changes in the curriculum. Based on this premise, the training of school directors is examined and the result is presented in table 9 below.

Table 9- School Directors' Training (Initial and In-service) on HIV/AIDS and Teaching Methods Appropriate to Teach the Topics

No	Item	Responses		Total	
		Yes	No		
1	When you were in Teacher Education Institute (TEI)/in your course for Director/), have you learnt about HIV/AIDS in any course?	No.	1	7	8
		%	12.5	87.5	100
2	When you were in Teacher Education Institute (TEI)/in your course for Director/), have you learnt about teaching methods which are appropriate to teach topics about HIV/AIDS?	No.	-	8	8
		%	-	100	100
3	Have you ever taken any in-service training (summer course, workshop, seminar etc.) on HIV/AIDS topics?	No.	2	6	8
		%	25	75	100
4	Have you ever taken any in-service training (summer course, workshop, seminar etc.) on teaching methods which are appropriate to teach HIV/AIDS topics?	No.	-	8	6
		%	-	100	100
5	If you have taken any in-service training, do you think that the in-service training was adequate to enable you help teachers on the problems they face while teaching HIV/AIDS topic?	No.	-	8	8
		%	-	100	100

The data displayed in table 9 makes clear that 7(87.5%) of the respondent school directors didn't learn about HIV/AIDS topics in their initial training while 1(12.5%) respondent reported that he has learned about the topics. All the school directors expressed that they did not learn about teaching methods appropriate to teach HIV/AIDS topics in their initial training.

Only 2(25%) of the respondents indicated their taking of in-service training on HIV/AIDS topics, and none of them reported the provision of

the teaching methods on HIV/AIDS topics. And all of the school directors agreed on the inadequacy of the in-service training to help classroom teachers.

As that of teacher respondents, a school director who has training in TESO (10+3) (table 1A) diploma program, reported his being training on HIV/AIDS topics and the absence of content on teaching methods in his training. The only means to acquaint the remaining school directors with HIV/AIDS topics and the teaching methods appropriate to teach the topics is in-service training.

But there was lack of sufficient in-service training for school directors. Even though there was an attempt of providing in-service training, the training lacked relevance for school directors: it didn't include the teaching methods for HIV/AIDS topics and it didn't enable the school directors to provide support for classroom teachers on the problems they may face in teaching HIV/AIDS topics.

This result substantiates the result of MOE/ICDR (1995:20). MOE/ICDR revealed that the majority of headmasters and coordinators reported that they didn't participate in in-service training and only 37 % of them reported that their participation has helped them to deal with HIV/AIDS topics.

4.9. Knowledge of School Directors about HIV/AIDS

To provide support for classroom teachers, school directors should have knowledge on the changes made in a curriculum. So, as any change in a curriculum, school directors should have knowledge on HIV/AIDS topics. Based on this idea, the knowledge of school directors on the topics is assessed and the obtained information is displayed in table 10 below.

Table 10- Knowledge of School Directors about HIV/AIDS

No	Item	Responses		Total	
		Correct	Incorrect		
1	Many people who are infected with HIV can look and feel healthy.	No.	4	4	8
		%	50	50	100
2	AIDS can be cured.	No.	8	-	8
		%	100	-	100
3	Males who are infected with HIV can give it to another person through their semen.	No.	8	-	8
		%	100	-	100
4	People who are infected with HIV can give it to another person through their blood.	No.	7	1	8
		%	87.5	12.5	100
5	A mother can pass HIV to her unborn child.	No.	6	2	8
		%	75	25	100
6	People can reduce their chances of becoming infected with HIV by using a latex condom during sexual intercourse.	No.	8	-	8
		%	100	-	100
7	A person can become infected with HIV by being bitten by an insect such as a mosquito.	No.	7	1	8
		%	87.5	12.5	100
8	People who are careful to have sexual intercourse only with healthy-looking partners won't become infected with HIV.	No.	7	1	8
		%	87.5	12.5	100
9	People can be infected with HIV and not know they have it.	No.	7	1	8
		%	87.5	12.5	100
		Total	62	10	
			$X^2 = 90.3 < 0.05^{**}$		

The respondent school directors' score of knowledge about HIV/AIDS is 62, while the expected maximum score is 72. The obtained score constitutes 86% of the total score.

The calculated Chi-square test value (90.3) is much higher than the table value (3.841) at 0.05 level of significance. There for the score of school directors for the questions is not obtained by chance.

Even though the school directors didn't get training on HIV/AIDS topics, either in their initial or in-service training, their knowledge on the topics is high. This could be explained, as that of teachers, in terms of their exposure to different sources of information about HIV/AIDS. The survey result of the central statistical Agency (2005:179) could be good explanation for the school director's high level knowledge on HIV/AIDS topics.

Table 11- School Directors' Response on Knowledge of Teaching Methods

no.	Item		Very high	High	Low	Very low	I don't know it at all	Total	Mean
1	1	no.	4	2	2	-	-	8	4.2
		%	50	25	25	-	-	100	
2	2	no.	4	3	-	-	1	8	4.2
		%	50	37.5	-	-	12.5	100	
3	3	no.	5	1	1	-	1	8	4.2
		%	62.5	12.5	12.5	-	12.5	100	
4	4	no.	1	4	2	-	1	8	3.6
		%	12.5	50	25	-	12.5	100	
5	5	no.	4	1	1	-	2	8	13.9
		%	50	12.5	12.5	-	25	100	
6	6	no.	-	-	2	2	4	8	1.8
		%	-	-	25	25	50	100	
7	7	no.	-	-	1	2		8	1.9
		%	-	-	12.5	25		100	

The response of school directors on knowledge of teaching methods showed that Lecture is known very highly by 4 (50%), highly by 2(25%) of the respondent school directors. But 2(25%) of the school directors reported the low knowledge levels on lecture method. The mean of the director's knowledge on the method is 4.2.

The school directors' knowledge of brainstorming was very high for 4(50%) and high for 3 (37.5%) respondents. Very low knowledge is

reported by 1(12.5%) respondent. The mean for the knowledge of the method is 4.2.

Discussion is reported to be known very highly by 5 (62.5%) school directors and highly by 1(12.5%) of the respondent school directors. Low and very low knowledge levels were reported by 1(12.5%) of the school directors equally. The mean for their knowledge on the method is 4.2.

One (12.5%) and four (50%) of the school directors reported their very high and high knowledge on Role play method respectively. And 2(25%) of the school directors expressed their low knowledge while 1(12.5%) of the school directors agreed that his knowledge on the method was very low. The mean for the knowledge of the method is 3.6.

Very high and high level of knowledge are reported by 4(50%) and 1(12.5%) respondent respectively on debate as a teaching method. One (12.5%) respondent indicated his low knowledge level, and 2(25%) respondents expressed that their knowledge is very low on the method. The rating scale average for the method is 3.8.

Out of the respondent school directors 4 (50%) of them agreed to have very low knowledge on Devil's advocate and 2(25%) of them reported low level of knowledge while the remaining 2(25%) indicated that they have no knowledge on the methods at all. The mean of their rating scale on the method is 1.8.

Five (62.5%) of the respondent school directors rated their knowledge on Moral dilemma to be very low and one (12.5%) of them rated as low, and 2(25%) of the school directors didn't know what moral dilemma is as a teaching method. The mean value of their rating on the method is 1.9.

Many school directors didn't learn about teaching methods appropriate to teach HIV/AIDS topics (table 9). Their knowledge on the teaching methods which are common for all subjects is high as that of teachers.

But they lack knowledge on Devil's advocate and Moral dilemma teaching methods, which are specific for HIV/AIDS topics: mean rating values are 1.8 and 1.9 respectively. From this it is apparent that the school directors are not in a position to provide assistance for classroom teachers on the problems of teaching methods.

Furthermore, classroom teachers as well as the school directors have good level of knowledge on teaching methods listed (except Devil's advocate and Moral dilemma). But the classroom teachers were not implementing the teaching methods in their classes and the school directors were not observing the classrooms to support classroom teachers on the problems they may face.

From this it is possible to conclude that school directors were not discharging their responsibility of providing support on problems which under their capacity and making effort towards staff development on the problems beyond their capacity.

4.10. Inclusion of HIV/AIDS Topics in Examination

Examinations play their own role on the implementation of contents in a curriculum. Contents which are appearing frequently on examination deserve due attention by both the teacher and the students. Morrison (1996:187) discussed that assessment caused teachers and students to accord little significance to tasks which are not assessed.

Moreover, one of the problems of integrating innovations in carrier subjects is, teachers may focus on only their subject areas and neglect the topics infused into the subject (Kann, et al., 1995 as cited in UNICEF, nd: 2). So, the contents may not appear on examinations of the subjects. Based on this assumption, contents of the examination papers of the subjects under study are analyzed and the data is displayed in table 12 below.

Table 12- Availability of question on HIV/AIDS in Examinations

R.no	Categories (Questions expected in exam papers)	Availability of questions			
		5 th	6 th	7 th	8 th
1	difference between HIV and AIDS	x			xx
2	Mode of transmission of HIV	xx	xx	x	xxxx
3	Method of preventing HIV	xx			
4	Symptoms of HIV				
5	Caring for and showing affection for PLWHA				
6	HIV/AIDS vulnerable children				
7	Status of HIV/AIDS in Ethiopia				
8	Stigma and Discrimination		xx		
9	Impact of HIV/AIDS				
	Health	x			
	Education				
	Economy				
10	Responsible behavior towards sex				
11	Life skills activities				
	Decision making				
	Assertiveness				
	Problem solving				
12	Harmful traditional practices				x
13	Safe sexual intercourse				
14	Unsafe sexual intercourse	x		xxx	
15	Consequences of unsafe sex				
16	Method of HIV/AIDS transmission during physical activities				
17	Method of preventing HIV/AIDS transmission during Physical activities.				
18	Use of healthy life styles for HIV/AIDS positives				xx

Note- category 1-12 are taken from basic integrated science and Biology subjects while category 13-18 are taken from Health and Physical Education subject.

The content analysis data of examination papers in table 12 shows that the inclusion of HIV/AIDS topics in the examination papers was insufficient. From the analyzed 42 examination papers only 24 questions were found in all grades and subjects.

Besides to its insufficiency, there was no even distribution of questions on HIV/AIDS topics among subjects and categories. Many questions were included in examination papers of grade 5-6 Basic integrated science and Biology. On the contrary, there is no question in grades 5-6 on Health and Physical Education; the questions are available only in grades 7-8.

Even though the knowledge of teachers on HIV/AIDS is high (table 10), it is not expected that they have detailed information on the topic which are included in their subject areas. The majority of the categories included in the examination papers deal with difference between HIV and AIDS, Mode of transmission of HIV, Method of preventing HIV, Stigma and Discrimination. These are topics which are discussed through different media frequently (Central Statistical Agency, 2005). So teachers and students will be at ease to discuss the issues in the classroom and as a result many of the examination questions focus on these topics.

But many of the categories including life skills are not touched by the teachers. These are topics which are not discussed through different mass media. Knowledge on the topics could be obtained through training (initial or in-service). And we found that our teachers lack training on the topics. So, they may not dare to deal with the topics: they may escape the topics or they may not discuss them in detail. For this reason they may not include the topics in the examination.

As it is explained under table 1, there are no teachers for Health and Physical education for grades 5-6 (the assigned teachers are not qualified in the field). These teachers have no knowledge to teach the theoretical aspect of the course. So, they are not teaching them in the classroom,

and as a result they are not examining their students. They are focusing on practical aspect of the course.

The distribution of questions on examination papers shows the extent to which HIV/AIDS education is being provided in different subjects, and the areas in which teachers are focusing. This idea is substantiated by Morrison (1996:187). Morrison pointed out that contents which are included in the examinations or test have more chance of being implemented. He contended that contents which never appear in the achievement tests are usually overlooked by teachers and by students as well.

Chapter Five

5. Summary, Conclusions and Recommendations

5.1 Summary

The main objective of this study was to evaluate the classroom implementation practices of HIV/AIDS topics in selected primary schools of Sidama zone and Hawassa city administration.

To this end, the following basic questions were formulated:

1. Do teachers take training on HIV/AIDS topics and teaching methods appropriate to teach the topics?
2. Are teachers interested and comfortable to teach HIV/AIDS topics?
3. Do teachers have sufficient knowledge on the active teaching methods which are appropriate to teach HIV/AIDS topics?
4. Are teachers using active teaching methods which are appropriate to teach HIV/AIDS topics?
5. Is there sufficient supply of curricular materials important for classroom instruction on HIV/AIDS topics?
6. Is there support from the school directors on HIV/AIDS education?
7. Do teachers include questions from HIV/AIDS topics in their examinations?

The study was conducted in selected schools of Sidama Zone and Awassa City Administration. From the study areas 10 schools were selected randomly. All teachers teaching Basic Integrated Science, Biology, and Health and Physical Education were included in the study.

To collect the required information for the research, questionnaire and interview were used. Thirty two teachers and eight school directors filled the questionnaire. Besides to the questionnaire, interview was conducted

with school directors. To cross check some responses of the teachers on the availability of teaching materials, observation check list was employed.

The collected data was analyzed using percentage and mean values (for questionnaire) and qualitative description for interview and observation. From the analysis the following findings are obtained:

1. Twenty five (78%) of the teachers didn't take training on HIV/AIDS topics, and 29 (90.6%) teachers didn't take training on teaching methods, Which are appropriate to teach the topics in their initial training. Only 50% of the respondents took in-service training on HIV/AIDS issues, and all of the respondents didn't take in-service training on teaching methods which are appropriate to teach HIV/AIDS topics.
2. Thirty one (97%) of the teachers showed their positive feeling towards the inclusion of the HIV/AIDS topics into their subject area and they are interested to teach the topics. But 18 (56%) of them were not comfortable to talk about HIV/AIDS topics in front of their students.
3. Except "Devil's advocate" and "Moral dilemma", teachers' knowledge on teaching methods which are appropriate to teach HIV/AIDS topics was high. The mean value of their knowledge is 4.01. But their knowledge on "Devil's advocate" and "Moral dilemma" is very low. The mean value of the methods is 2.0.
4. Teachers are not using active teaching methods which are appropriate to teach HIV/AIDS topics in their classrooms. Lecture method was used by teachers at high level. Discussion method and brainstorming methods were reported to be used at low level. Role play and Debate were being used at very low level. And "Devil's advocate" and "Moral dilemma" were never being used by teachers in their classrooms.

5. Eighteen (72%) of science teachers (Basic Integrated Science and Biology) reported the sufficient availability of text books for students. But all the teachers of Health and Physical Education teachers disclosed the lack of text book on the subject. Also, 25(78%) of the teachers agreed on absence of supporting or supplementary reading materials. Further more, all the teachers reported the availability of teacher's guide on their subject area.
6. Teachers obtained no support from their school directors on the instruction of HIV/AIDS topics. Thirty (93.75%) of the respondent teachers reported that their school directors never provided them assistance on the problems they encounter while teaching the topics.
7. From the analyzed 42 examination papers of Science (Grades 5-8) and Health and Physical Education (grades 7-8), only 24 questions were found. And out of these questions, 17(70.8%) of them were found in science examination papers. So, questions from HIV/AIDS topics were not sufficiently included in examinations.

5.2- Conclusions

Based on the above major findings, the following conclusions are drawn.

1. There is lack of training of teachers on HIV/AIDS topics and the methods which are appropriate to teach the topics. Even though the HIV/AIDS topics are included in the current curriculum of Colleges of Teacher Education, there is no training on how to teach the topics.
2. Even though teachers expressed their positive view towards the inclusion of HIV/AIDS topics in their subject areas, and the interest to teach the topics, they are not presenting the topics in their classrooms boldly. They are not comfortable to talk about the topics in front of their students. Because of this the HIV/AIDS topics which

are included in their subject areas are not being discussed in the classrooms. So, lack of comfort to talk about HIV/AIDS issues is hampering the implementation of HIV/AIDS topics in classrooms of the study area.

3. The result of teachers' knowledge on active teaching methods and the use of the methods in their classrooms depicted that teachers' lack knowledge on some active teaching methods which are specific to HIV/AIDS topics, and they are not using active teaching methods in their classrooms. Contrary to these results, the in-service trainings provided for teachers focused on the knowledge of HIV/AIDS and no in-service training was given on teaching methods for the topics. So, lack of training on HIV/AIDS topics and the teaching methods which are appropriate to teach the topics is affecting the classroom implementation of HIV/AIDS education in Sidama zone and Awassa city administration.
4. Teachers are not using active teaching methods which are appropriate to teach HIV/AIDS topics. Even though teachers have knowledge on some active teaching methods, they are not using the methods in their classrooms.
5. There is lack of supporting or supplementary reading materials on the HIV/AIDS topics in the study area. And even the available materials were not well displayed for students. So, students have no chance of widening their knowledge on the topics, and even the teachers have no supporting materials to widen their presentation on the topics.

Though teachers didn't take training on HIV/AIDS issues, they may be guided by the supplementary materials (manuals) how to teach the topics. But the manuals were not distributed for the schools. So, teachers were striving to teach the topics with out any reference

material. The classroom implementation of HIV/AIDS topics is affected negatively by absence of these materials.

6. The school directors are not providing support for teachers on the problems they face while teaching HIV/AIDS topics. The directors are not supporting the teachers because their knowledge on the area of HIV/AIDS is not better than the teachers. From this, it is possible to conclude that there was no attempt made to build the capacity of school directors on HIV/AIDS topics and their teaching method so as the directors support the classroom teachers. As a result the classroom teachers are not getting the necessary support from their school directors. This is another factor which shows how HIV/AIDS topics are being implemented in classrooms of the study area.
7. Teachers are not including HIV/AIDS topics in their examinations sufficiently. Even the limited questions found in examination papers are focusing on knowledge aspect of the topics: difference between HIV and AIDS, Mode of transmission of HIV, and Method of preventing HIV. Especially, in grades 5-6 students are not taking paper and pencil examination of Health and Physical education. This is because the teachers are not trained on the area, and as a result they are focusing on practical aspect of the subject. Meanwhile, the contents of HIV/AIDS topics remain untouched. This again indicates the low level of classroom implementation of HIV/AIDS topics in Sidama zone and Awassa city administration.

Using the above points as a premise, it is possible to generalize that the HIV/AIDS education is not being implemented as it should be implemented in SNNPR, especially in Sidama Zone and Awassa City Administration second cycle primary schools.

5.3- Recommendations

Based on the above major findings and conclusions drawn from the findings the following recommendations are suggested.

1. Teacher Education Institutes should give due emphasis on providing training on HIV/AIDS topics and the teaching methods which are appropriate to teach them. Sufficient time should be given for the course dealing with HIV/AIDS so as teachers will have ample time to teach the topics by using active teaching methods and trainees will have ample time to practice the use of active teaching methods which are appropriate to teach the topics.

For teachers who are already in schools, in-service training on the HIV/AIDS topics and the teaching methods which are appropriate to teach the topics should be arranged by Regional Education Bureau in collaboration with woreda office of education, NGO's which are working on HIV/AIDS, and TEI's.

2. When designing in-service training, the in-service training should be designed in such a way that the participants get chance to express their ideas and views on the topics and discuss among each other about the topics. This could help the teachers to avoid their fear of talking about HIV/AIDS in front of others and develop confidence and be comfortable in talking about the topics in public.
3. The Zone education office should work in collaboration with the Regional Education Bureau and Governmental and Non-governmental organizations which are working on HIV/AIDS to acquaint teachers with the use of active teaching methods appropriately to teach HIV/AIDS topics.

4. The initial trainings in colleges as well as the in-service trainings organized at different levels should give emphasis on how to use the different active teaching methods in existing situations of the region, i.e. how to manage large size classes and use active teaching methods.
5. Text books on Health and Physical Education should be prepared by the Regional Education Bureau and should be distributed to schools. Schools should be provided with supplementary reading materials and manuals of HIV/AIDS topics. Strong link should be created between those who are preparing the materials and Regional Education Bureau as well as Woreda education offices to distribute the published materials to individual schools. Serious follow up and control should follow the distribution of the materials to assure that students have access to the reading materials.
6. Emphasis should be given to prepare school directors so as to provide support for classroom teachers. They should be trained for the position before they are assigned as directors. Their capacity should be built on how to conduct classroom observations and how to support classroom teachers.
7. Teachers as well as school directors should control the fair inclusion of contents in examinations. This will give chance to include HIV/AIDS topics of different category in the examination.
8. Finally, the researcher would like to recommend further study on the classroom implementation of HIV/AIDS education in primary schools by giving due emphasis for what is really going on in the classroom.

Reference

- Alemaheyu Minas (1991). Primary School Teachers' Health Knowledge, Attitude, and Practice, in Amare Asgedon et al (Editors) Data Base on Ethiopian Educational Research 1974-1998. IER, AA.
- AACTE (2007). HIV/AIDS Prevention Education: Knowledge, Skill and Abilities. Retrieved on Oct. 11th, 2007 from <http://www.aacte.org/statindx/default.aspx>
- Berry Steve (2006). Teaching About HIV/AIDS at School . Retrieved on Oct.15th, 2007 from http://www.avert.org/hiv-aids_education
- Berry Steve (2007). HIV/AIDS Education and Young People. Retrieved on Oct.10th, 2007 from http://www.avert.org/hiv-aids_education
- Bishop G. (1985). Curriculum Development: A text Book for Students. London. Macmillan Education LTD.
- Boris Handal (n.d.). Teachers' Instructional Beliefs About Integrating Educational Technology. Retrieved Nov. 30th, 2007 for <http://www.usq.edu.au/electpub/e-jist/docs/Vol7-No1/Commentary/Teachers-ins-beliefs.htm>
- Central Statistical Agency (2005). Ethiopian Demographic and Health Survey. AA.
- Pratt David (1980). Curriculum Design and Development. San Diego, Harcourt Brace Jovanovich Publishers.
- Desta Abera (2001). Factors Influencing the Implementation of Problem Solving Approach in the Second Cycle Primary Schools of Tigray. Masters' Thesis. AAU.
- Derebssa Dufera (2001). Factors Affecting the Implementation of the Current Curriculum in Ethiopian Primary Schools: Implication for Quality. Proceedings of National Conference Held in Adama Ras Hotel, Nov. 9-11,2001, IER, AA.
- Erickson F. and Shultz J. (1996). Students Experience of the Curriculum.: in Philip W. Jackson (Editor). Hand Book of Research on Curriculum: A project of the American Educational Research Association. New York; Mac Millan.

- ESDP Project Monitoring Unit (PMU) (2005). Italian Contribution to the Education Sector Development Program: Capacity Building and Primary Education. Self Evaluation Manual.
- FDRE (2004). Ethiopian Strategic Plan for Intensifying Multi-Sectoral HIV/AIDS Response (2004-2008). Addis Ababa.
- Fullan M. (2001). The New Meaning of Educational Change. 3rd edition, Teachers College Press. New York.
- Gachuhi Debbie (1999). The Impact of HIV/AIDS on Education System in the Eastern and Southern Africa Region. Retrieved 30th of Nov. ,2007 from <http://www.unicef.org/lifeskills/files/gachuhi.pdg>
- Getachew G/Tsadik (1995). Need Assessment on AIDS Education for Ethiopian Primary Schools. Addis Ababa, Ethiopia.
- Hall Gene E. (1995). "The Local Education Change Process and Policy Implementation", in Carter D.S and Marnie H. O'Neill (editors) International Perspectives on Educational Reform and Policy Implementation. The Falmer press, London
- Hersom N. (1976). Review of Research on Curriculum Implementation. Retrieved Dec. 1st ,2007 from <http://www.Jstor.org/view/03802361/ap050003/05000080/0>
- Hawes Hugh et al. (1982). Curriculum and Reality in Africa Primary Schools. Lagman groups, Singapor.
- ICDR (2004). Syllabuses of Basic Integrated Science for grades 5&6. Addis Ababa.
- ICDR (2004). Syllabuses of Biology for grades 7&8. Addis Ababa.
- ICDR (2004). Syllabuses of Physical Education for grades 5-8. Addis Ababa.
- Kelly M.J. (1999). What HIV/AIDS Can Do to Education, and What Education Can Do HIV/AIDS. University of Zambia, Lusaka.
- Kelly M.J. (2000). Planning for Education in the Context of HIV/AIDS. UNESCO. Paris.

- Kirby Douglas et al.(2006). Sex and HIV Education Programs for Youth: Their Impact and Importance Characteristics. Retrieved on Nov. 28, 2007 from <http://www.Etr.ort/recap/programs/sexHIVedprogs.pdf>
- Lockheed Marlaine (1990). Primary Education. Washington D.C.
- Marew Zewdie (2000). Curriculum Implementation and Evaluation. AAU.A.A.
- Markos Mekuria (1996). Effective Educational Supervision: unpublished teaching material. Awassa College of Teacher Education.
- Marsh Colin J. (1992). Key Concepts for Understanding Curriculum. 3rd edition. The Falmer Press, London.
- Ministry of Education and Culture Zimbabwe (1994). Think about it. An AIDS Action Program for Schools. Form 1. Teaching Book. Mazongororo. Harare.
- MOE/ICDR (1995). Impact of AIDS/STD Education in Ethiopian Senior Secondary Schools. A.A.
- MOH/HAPCO(2006). AIDS in Ethiopia: Six Report. Addis Ababa.
- Morrison K. (1996). International Development in Assessment: in Anna Craft (editor). Primary Education.
- Moya Cecilia (2002). Life Skills Approaches to Improving Youth's Sexual and Reproductive Health. Retrieved on Nov.20, 2007 from <http://www.advocatesfor youth.org./PUBLICATION/iag/lifeskills.htm>
- Ornstein Allan C. and Hunkins Francis P. (2004). Curriculum: Foundations, Principles and Issues. 4th edition, Boston.
- SADC (n.d). General Educadtion Modules for Upper Primary and Junior Secondary School Teachers of Science, Technology and Mathematics by Distance in SADC. Retrieved on Decm. 1st ,2007 from <http://www.Col.Org/stamp/Module13.pdf>
- SARPN (2005). Analysing the Response of a Teacher Training Instutution to HIV and AIDS: A Case Study from Zambia. Retrieved on Nov.12th ,2007 from <http://hivaidsclearinghouse.unesco.org/>

- Schemker Ion I and Nyirenda Jenny M. (2002). Preventing HIV/AIDS in School. Retrieved on Nov. 25th, 2007 from http://www.ibe.unesco.org/AIDS/doc/prac_orge.pdf.
- SNNPREB (1997). "Curriculum Development: Controversies and Prospects." Awassa, Unpublished.
- Snyder J. et al. (1996). Curriculum Implementation: in Philip W. Jackson (Editor). Hand Book of Research on Curriculum: A project of the American Educational Research Association. New York; Mac Millan.
- TGE (1994). Education and Training Policy. Addis Ababa.
- Tiendrebe'ogo G. et al (2003). Life Skills and HIV Education Curriculum in Africa. Methods and Evaluations. Retrieved on Oct. 5th, 2007 from <http://pdf.usaid.gov/pdf-docs/PNACT985.pdf>
- WHO/UNAIDS/UNESCO (1992). Resource Package for School Health Education to prevent AIDS and STD: Handbook for Curriculum Planners. Retrieved Oct 1st, 2007 from <http://library.unesco-iciba.org/English/HIV-AIDS/cdrom%20material/navigation%20pages/School%20Health%20Health%20Education.htm>
- UNESCO (n.d.) HIV/AIDS and Life Skills Education Manual for Teachers Education from the College of Education. Retrieved Oct. 10th, 2007, from <http://www/be.unesco.org/AIDS/doc/HIV-AIDS-366-EN.pdf>
- UNGASS (2002). United Nations Declaration on Commitment of HIV/AIDS. Geneva. Retrieved on Oct. 20, 2007 from [http://www.un.org/ga/aids/coverage/Final Declaration HIV/AIDS.html](http://www.un.org/ga/aids/coverage/Final%20Declaration%20HIV/AIDS.html).
- UNICEF (n.d.). The Case Against "Integration". Retrieved on Oct. 5th, 2007 from http://www.unicef.org/lifeskills/index_8761.html
- UNICEF/UNAIDS/WHO (2002). Opportunity in Crisis. New York.
- USAIDS/WHO (2006). Report on the Global AIDS Epidemic. Geneva.
- WHO (1992). School Health Education to Prevent AIDS and Sexually Transmitted Diseases. WHO AIDS series no. 10. Geneva.
- World Bank (2002). Education and HIV/AIDS: A Window of Hope. Washington DC.

Appendix A
Addis Ababa University
School of Graduates Studies
Department of Curriculum and
Teacher's Professional Development Studies

(Questionnaire to be filled by primary school teachers)

Introduction

The purpose of this study is to evaluate the classroom implementation of HIV/AIDS education in selected second cycle primary schools of Sidama Zone and Hawassa City Administration. The result of this research will be used to complete my thesis work on "Classroom Implementation of HIV/AIDS Education in Selected second Cycle Primary Schools of SNNPRS: The Case of Sidama Zone and Hawassa City Administration". Your genuine responses would help me a lot. Thus, I kindly request you to give your responses honestly.

Finally, I want to assure you that the responses you are giving will be kept confidential.

Note- There is no need to write your names.

Thank you in Advance.

The Researcher

1. Background Information

Zone _____ Woreda _____ Name of School _____

Sex- Male Female

Your qualification: 12+2 10+3 Any other (specify it) _____

The subject you are teaching _____

Year of graduation _____ Your service year _____

Grade/s/ you teach _____

Your weekly load _____

Number of sections you teach _____

4. Indicate the level of your knowledge on the following teaching methods by putting a tick on one of the given alternatives.

5- Very high 4- High 3- Low 2- Very low 1- I don't know it at all

No.	Teaching Methods	Ratings				
		5	4	3	2	1
1	Lecture					
2	Brainstorming					
3	Pair/Group discussion					
4	Role play					
5	Devil's advocate					
6	Debate					
7	Moral Dilemma					

5. Indicate with a tick how often you are using the following teaching methods in your classrooms.

5- Very often 4- Often 3- Some times 2- Rarely 1- Never

No.	Teaching Methods	Ratings				
		5	4	3	2	1
1	Lecture					
2	Brainstorming					
3	Pair/Group discussion					
4	Role play					
5	Devil's advocate					
6	Debate					
7	Moral Dilemma					

Appendix B

Addis Ababa University
School of Graduates Studies
Department of Curriculum and
Teacher's Professional Development Studies

(Questionnaire to be filled by primary school Directors)

Introduction

The purpose of this study is to evaluate the classroom implementation of HIV/AIDS education in selected second cycle primary schools of Sidama Zone and Hawassa City Administration. The result of this research will be used to complete my thesis work on "Classroom Implementation of HIV/AIDS Education in Selected second Cycle Primary Schools of SNNPRS: The Case of Sidama Zone and Hawassa City Administration". Your genuine responses would help me a lot. Thus, I kindly request you to give your responses honestly.

Finally, I want to assure you that the responses you are giving will be kept confidential.

Note- There is no need to write your names.

Thank you in Advance.

The Researcher

1. Background Information

Zone _____ Woreda _____ Name of School _____

Sex- Male Female

Your qualification: 12+2 10+3 Any other (specify it) _____

Work experience as a director _____

Trained for Director? Yes _____ NO _____

3. Read each question and make a tick on the answer that you think fits best.

“A”

R.no.	Items	True	Don't know	False
1.	Many people who are infected with HIV can look and feel healthy.			
2.	AIDS can be cured.			
3.	Males who are infected with HIV can give it to another person through their semen			
4.	People who are infected with HIV can give it to another person through their blood			
5.	A mother can pass HIV to her unborn child.			
6.	People can reduce their chance of becoming infected with HIV by using a latex condom during sexual intercourse.			
7.	A person can become infected with HIV by being bitten by an insect such as a mosquito.			
8.	People who are careful to have sexual intercourse only with healthy-looking partners will not become infected with HIV.			
9.	People can be infected with HIV and not know they have it.			

4. Indicate the level of your knowledge on the following teaching methods by putting a tick on one of the given alternatives.

5- Very high 4- High 3- Low 2- Very low 1- I don't know it at all

No.	Teaching Methods	Ratings				
		5	4	3	2	1
1	Lecture					
2	Brainstorming					
3	Pair/Group discussion					
4	Role play					
5	Devil's advocate					
6	Debate					
7	Moral Dilemma					

Appendix C

Addis Ababa University
School of Graduates Studies
Department of Curriculum and
Teacher's Professional Development Studies
(Interview guide for school Directors)

Zone _____ Woreda _____ Name School _____

1. How do you control the teachers instructional planning?
2. Do you have regular schedule for classroom observation?
3. How do you check whether the teachers are implementing what they have planned or not?
4. Have you ever visited/observed any classroom while teachers are teaching on HIV/AIDS topics?

Appendix D

Observation Checklist for Availability of Manuals, Magazines, Leaflets and Other Reading Materials

Reading Material	Availability		Access for Students	
	Available	Not available	Accessible	Not accessible
Text books				
Basic Integrated Science 5 th				
Basic Integrated Science 6 th				
Biology 7 th				
Biology 8 th				
Teacher's guide				
Basic Integrated Science 5 th				
Basic Integrated Science 5 th				
Biology 7 th				
Biology 8 th				
Health and Physical Education 5 th				
Health and Physical Education 6 th				
Health and Physical Education 7 th				
Health and Physical Education 8 th				
HIV/AIDS Education: Activities important for classroom instruction or for HIV/AIDS Clubs (grades 5-8).				
A supporting Book for Teachers to Teach HIV/AIDS Education				
Teachers' Manual for Teaching HIV/AIDS in Ethiopia				
Magazines				
Leaf lets				
Active teaching methods appropriate to teach HIV/AIDS topics				
Other				

Appendix E

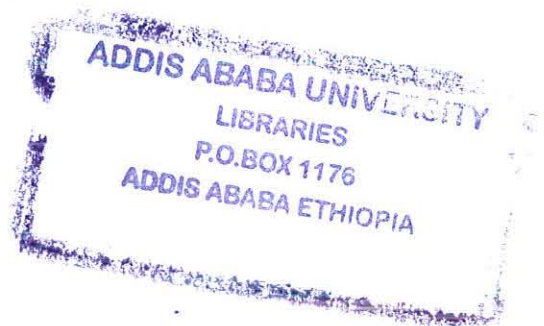
Chi-square Calculation for Knowledge of Teachers about HIV/AIDS

	f_o	f_e	$f_o - f_e$	$(f_o - f_e)^2$	$(f_o - f_e)^2 / f_e$
Right answer	211	96	115	13225	137.8
Wrong answer	77	192	-115	13225	69.9
Total	288	288			$X^2 = 206.7$

$$\begin{aligned} df &= (r-1)(c-1) \\ &= (2-1)(2-1) \\ &= 1 \end{aligned}$$

Critical value of χ^2 at 0.05 = 3.841

f_o = obtained frequency
 f_e = expected frequency
df = degree of freedom
r = number of row
c = number of column



Appendix F

Chi-square Calculation for Knowledge of School Directors about HIV/AIDS

	f_o	f_e	f_o-f_e	$(f_o-f_e)^2$	$(f_o-f_e)^2/f_e$
Right answer	62	24	38	1444	60.2
Wrong answer	10	48	-38	1444	30.1
Total	72	72			$X^2=90.3$

$$\begin{aligned}df &= (r-1)(c-1) \\ &= (2-1)(2-1) \\ &= 1\end{aligned}$$

Critical value of x^2 at 0.05= 3.841

f_o = obtained frequency
 f_e = expected frequency
df = degree of freedom
r = number of row
c = number of column

Declaration

This thesis is my original work and has not been presented for a degree in any other university, and that all sources of materials used for the thesis have been duly acknowledged.

Demekash Asregid

This thesis has been submitted for examination with my approval as a university advisor.

Lemma Setegn (Ato)

