

**Research paper**

## **Exploring the Preparation of Teachers to Teach about HIV/AIDS in Kenya**

by Moses Orwe Onyango ([orweonyango@gmail.com](mailto:orweonyango@gmail.com))

### **Contextualisation**

After completing initial teacher training in Kenya, teachers keep abreast of changes in education through in-service programmes, which aim to provide continuous professional development. However, most of the in-service programmes are one-off seminars intended to instruct teachers in the changes in the curriculum. When HIV/AIDS pandemic preventive education was integrated into the curriculum of all learning institutions in Kenya, the Ministry of Education adopted a cascade model to train teachers to teach about HIV education. However, recent studies have shown that teachers are finding it hard to communicate HIV/AIDS issues to the learners due to the sensitive nature of the subject and secrecy surrounding sexuality. Hence this study explores teacher preparation to teach about HIV/AIDS in a primary teacher training college in Kenya.

**Abstract:** *This paper reports preliminary findings on how a primary teacher-training college in Kenya is preparing teacher trainees to teach about HIV/AIDS. Included are features of the Kenya education system. The aim of the study was to understand the preparation of teachers to teach about HIV/AIDS by exploring both teacher-trainers' and trainees' preparedness. The study was conducted by carrying out document review, observation and semi-structured interviews with the college administration, two teacher-trainers, as well as a group interview with four trainees. Inductive analysis was carried out by identifying categories, codes and themes, and the literature review was used to summarise the findings. The study established that there were awareness programmes at the college; however, interviewees felt trainees' preparation to teach about HIV/AIDS was superficial. Hence there is a need to improve and intensify the cascade model employed by the Ministry of Education to prepare teacher trainers to teach about HIV/AIDS. The starting point at the college should be the completion of an HIV/AIDS policy, which is still in draft form, so that it can be used to provide guidance on HIV/AIDS education.*

### **Features of Kenya's education system**

Since independence, the Kenyan government has recognised education as a basic human right and a powerful tool for human and national development (MoE, 2008, p 1). The government enacted the Education Act 1968, which governs education and training to create sufficient human capital for national development (Ngigi and Macharia, 2006, p 1). Since then, other Acts of Parliament have shaped the education system; for example, the current system of education summarised in Table 1 below, was established as a result of the Mackay Report (1981) which recommended the replacement of the 7:4:2:3 system with an 8:4:4 system of education by eliminating 'A' level (Ngigi and Macharia, 2006; MoE, 2008).

**Table 1.** Features of Kenya's education (MoE, 2008, p 6).

Age	Level	Duration in years
0 - 3	Early-Childhood Development (ECD)	3
4 - 6	Pre-primary	2
6 - 14	Primary	8
14 - 18	Secondary	4
18 - 21	Tertiary	4

## Study site

The study was carried out in a pre-service primary teacher training college. In Kenya, primary teacher training colleges offer a two-year certificate course for pre-service trainee teachers who must have completed four years of secondary education and attained a minimum of grade C in the Kenya Certificate of Secondary Education (Kenya Institute of Education, 2004, p iii). Admission is centrally administered by the Ministry of Education, and then the trainees are posted to the public primary teacher training colleges (Teachers Service Commission, 2006, p 7). The college had a total of 888 students (with approximately equal gender representation), all residing in the college boarding facilities. There are a total of 20 classes at the college - ten for first years and ten for second years. Classes at the college have about 45 trainees with equal proportions of males and females. The age range among the trainees is from 20 to 26 years. There are 60 teacher trainers at the college with equal proportions of females and males.

## Kenya government response to HIV/AIDS

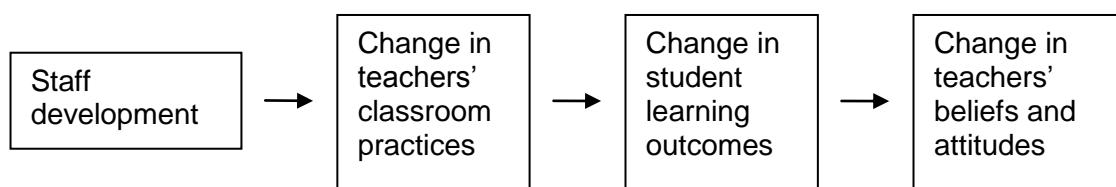
The Kenyan government declared HIV/AIDS a “national disaster” in 1999 and established an education sector policy on HIV/AIDS in 2004 (MoE, 2004). In order to implement the education sector policy on HIV/AIDS, the Ministry of Education adapted the Primary School Action for Better Health (PSABH) model of teacher preparation to teach about HIV/AIDS developed by the Centre for British Teachers (CfBT) Education Trust, Kenya (Maticka-Tyndale, Wildish and Gichuru, 2007, p 172). The PSABH training programme was based on social learning theory in which the role of modelling, practice of desired behaviour and activities for building self-efficacy were included, together with didactic instruction. During the pilot PSABH training programme, a two-week session was held in which teachers were trained to prepare colleagues in their home schools, to infuse and integrate HIV education throughout all classroom subjects and to provide guidance and counselling on HIV-related topics. Moreover, Ministry of Education officials were trained to monitor the PSABH activities in the schools along with the officials’ regular monitoring functions. The success of the PSABH pilot programme led to the Ministry of Education using the cascade method of preparing teachers to teach about HIV/AIDS. However, the particular cascade model adopted scaled down the training session to one week and provided fewer modelling and practice sessions. According to Christie, Harley and Penny, 2004, such ‘one-off short workshops’ do not lead to professional development of teachers (p 177). Indeed research studies carried out in Kenya show that teachers are not only finding it difficult to communicate with their students about HIV/AIDS and sexuality, but are also choosing the comfort of the transmission approach to teaching, avoiding engagement with the learners in ways that can draw on their life experiences and contexts (Boler, Ibrahim, Adoss and Shaw, 2003; Njue *et al*, 2009). In these studies the teachers interviewed cited inadequate teacher preparation to teach about HIV/AIDS and the sensitivity surrounding sexuality education as barriers to teaching (Boler *et al*, 2003; Farah, Kavuma, Mwingi and Onyango, 2009).

The weakness of the one-off seminars and workshops adopted by the Ministry of Education in Kenya to train teachers to teach about HIV/AIDS education is the belief that changes in teachers’ practice can be achieved through giving information and knowledge to teachers (Clarke and Hollingsworth, 2002; Guskey, 2002). Literature shows that such programmes often attempt to change teachers’ beliefs and attitudes, with the expectation that change in beliefs and attitudes will lead to change in classroom practices and behaviours (Clarke and Hollingsworth, 2002, p 949). However, Hamerness, Darling-Hammond and Bransford, (2005) claim that ‘telling teachers in general ways about strategies that might be used in the classroom, without, examples and models, does not typically lead to deep understanding’ and practice of the strategies (p 360). Moreover, Guskey (2002) argues that ‘change in teachers’ attitudes and belief occurs primarily after they gain evidence of improvements in

students learning' (p 383). This is consistent with Darling-Hammond *et al's* (2005) conviction that "a key element to successful learning is the opportunity to apply what is being learned..." (p 401). Therefore, in order to facilitate the professional development of teachers, one should 'understand the process by which teachers grow professionally and the conditions that support and promote that growth' (Clarke and Hollingsworth, 2002, p 947). Literature states that implementing HIV/AIDS education programmes is similar to the introduction of any innovation within the school and apart from "mastering new teaching techniques, teachers are expected to deal with and overcome their own social feelings of discomfort, as well their biases and prejudices" (Schenker and Nyirenda, 2002, p 8). It seems that teacher preparation to teach about HIV/AIDS effectively should take into account the process of teacher change (Guskey and Sparks, 1991; Guskey, 2002; Darling-Hammond *et al*, 2005).

## The process of teacher development

Teacher development programmes can be seen as having two components: an input of new theoretical ideas and new teaching suggestions; and trying out, evaluating and practising these new theoretical and teaching ideas over an extended period, and in a collaborative situation in which the teachers are able to receive support and feedback, critically reflect, and renegotiate and reconstruct what it means to a teacher (Bell and Gilbert, 1996, p 34). Hence, in order for teacher preparation programmes to be effective, there should be time to "include theory, demonstration, practice, feedback, and classroom application" (Joyce and Showers, 1980, p 379). However, given the short duration of most in-service programmes, many teachers do not have the opportunity to progress beyond learning about some new teaching suggestions and trialling them (Bell and Gilbert, 1996, p 33). According to Guskey and Sparks (1991), teacher development is a multidimensional process that encompasses all aspects of training, from readiness activities, practice and coaching, to follow-up and support activities (p 73). This project proposes to model this multidimensional teacher development process by engaging teacher trainers in an action research project to enable the participating teachers to experience the intervention by having time to trial them in their classrooms as they test which strategies work best in their context, as illustrated in Figure 1 (Guskey, 1985).



**Figure 1.** A model of teacher change (Guskey, 1985, p 58).

According to this model, "significant changes in teacher attitudes and beliefs come after they begin using a new practice successfully and see changes in student learning" (Guskey, 1985, p 58). However, according to Clarke and Hollingsworth (2002, p 961), the process of teacher change is not linear but rather cyclical, involving movements between the domains identified by Guskey (1985). They suggest that the model could more usefully be viewed as cyclical with multiple entry points. This accords with the use of the action research process in this project as the participants can trial suggested interventions over a period of time as they learn more about HIV/AIDS pedagogy through reflective practice embedded in the action research. Moreover the reflection on action and evaluation stages in the action research process will enable participants to discuss the challenges they are facing during implementation of identified participatory strategies (Elliott and Ebbutt, 1986; Ferrance, 2000). Teachers need time to understand the rationale of a new theory and its approach to classroom interaction before they are able to adapt it to their daily routine (Joyce and Showers, 1980).

These key components of understanding the rationale of a new approach to teaching were not incorporated in the cascade model employed in Kenya to prepare teachers to teach about HIV/AIDS (Maticka-Tyndale *et al*, 2007). During a one-week in-service session, ideas and principles were presented and application discussed with the participants for use back in their schools. This ignored what is known about adult learning. Research indicates that “adults learn best through concrete experiences where they apply what is being learned and in informal situations where social interaction takes place” (Wood and Thompson, 1980, p 374). Teachers learn new strategies through practice by carrying out activities and sharing the experiences with colleagues (Lieberman and Mace, 2008, p 227). Moreover, a conducive setting for learning to teach is created when “teachers share understanding about the nature of good teaching and work together to enact them” (Darling-Hammond *et al*, 2005, p 404). The feedback given by colleagues and facilitators during simulation sessions among peers and subsequent classroom trials provide opportunities for teachers to critique their practice through reflection.

It is through the collaborative efforts of teachers and researchers that the action research process results in the improvement of learning environments (Oliver, 1980). By embedding action research in Guskey’s (1985) model of teacher change, this project aims to provide participants with the opportunity to hypothesise, test their own suggestions and engage with colleagues and the researcher in a reflective dialogue about effective teaching about HIV/AIDS. However, the expertise “needed for optimal teaching is not something that can fully be developed” during the short time available for most teacher preparation programmes (Hamerness *et al*, 2005, p 358). There is a need for teacher education to prepare teachers to become lifelong learners who are able to learn from their own practice while maintaining reflective dialogue with other teachers, subject specialists and researchers (Freire, 1993; Hamerness *et al*, 2005). This project aims to catalyse the process of lifelong learning among the participants through reflective practice embedded in action research.

## Research questions

The justification for undertaking this pilot study was based in the gaps existing in the cascade method employed by the Ministry of Education to prepare teachers to teach about HIV/AIDS. Hence this study explored the teaching about HIV/AIDS at the college in order to discover whether a collaborative action research aimed at improving practice would be feasible.

Given the existing structure of training teachers in Kenya, a sustainable way to prepare teachers to teach about HIV/AIDS is to use the pre-service teacher preparation programme. The pre-service option provides a cost-effective alternative to the cascade model, given that there are only 19 public primary teacher training colleges (MoE, 2008, p 31). Therefore there is a need to understand the current situation at the college in order to recommend ways to improve current practice. Hence the issues looked at in this pilot study are:

- a) How are teacher-trainers prepared to teach about HIV/AIDS?
- b) Are the trainee teachers adequately prepared to teach about HIV/AIDS?

## Methodology

This pilot stage involved a qualitative case study in order to explore the participants’ experiences of the issues concerning teaching about HIV/AIDS at the college. According to Denzin and Lincoln (2003), the qualitative researcher relies as much as possible on the participants’ views of the situation being studied, and makes knowledge claims based on multiple meanings of individual experiences. The interpretations and descriptions offered by participants aid the researcher and others in understanding the phenomenon under study (Creswell, 1994; Manning, 2000). The choice of case study is because it is a methodology that

captures the unique and dynamic aspects of contexts by investigating the “unfolding interactions of events, human relationships and other factors in a unique instance” (Cohen, Manion and Morrison, 2007, p 251). A case study enables a researcher to gain a deep understanding of participants’ experiences and actions within their context (Stake, 1995, 2005; Mabry, 2008).

Purposive and snowball sampling techniques (Robson, 2002) were used to identify key respondents, such as the college principal and dean of curriculum, who then helped with the identification of teacher-trainers involved in teaching about HIV/AIDS education. The two teacher-trainers helped identify the four trainee teachers (one male and one female from each of the two years) who took part in the study. In terms of research ethics, all potential participants were told the purpose of the study, how their identity would be protected by using pseudonyms in all the reports and that their involvement was voluntary. They were then requested to sign a consent form (BERA, 2004).

The collection of data obtained through individual and focus group discussions from different participants engaged in HIV/AIDS education at the college was to facilitate triangulation of data. According to Fine, Weis, Weseen and Wong (2003), individual and focus group interviews generate very different kinds of narration, which can be used for triangulation (p 2000). Actual data collection took place over the course of one week at the college, gathering data from various participants and observing the physical, as well as the social, environment. According to Stake (2005), “qualitative case study is characterized by the researcher spending extended time on site, personally in contact with activities and operations of the case, reflecting, and revising descriptions and meanings of what is going on” (p 450). The process of gaining access to the college started in December 2008 and the permit was obtained in March 2009 from the Ministry of Education.

## **Data collection methods**

In this case study semi-structured interviews, participant observation and document review were used for in-depth data collection and for data triangulation. The uses of a variety of data collection techniques enable the study to gain “insight into various levels of meanings associated with the case” (Orum, Feagin and Sjoberg, 1991, p 11). According to Simons (2009), qualitative researchers use multiple means of data gathering in order to have “a ‘rich’ data base from which to tell the story of the case” (p 171). A semi-structured interview consisting of a sequence of themes to be covered, as well as suggested questions was used to explore participants’ experience with HIV/AIDS education (Table 2).

**Table 2.** Data collection process

Research themes	Data collection method
The college response to HIV and AIDS	
Teacher trainers and trainees preparedness to teach about HIV/AIDS	Interviews
Suggestions for improvement	
Teaching and classroom interactions	Interview and classroom observation
HIV/AIDS strategic plans	
Teaching materials used to teach about HIV/AIDS	Interview and document review
Awareness and advocacy	Observation of physical environment

The flexibility of the semi-structured interview allowed the study to change the sequence and forms of question in the interview guide in order to follow up the answers given and the stories told by respondents (Kvale, 1996). In a semi- structured interview, the interviewer asks certain pre-set questions but is open to what the interviewee feels is relevant and important to talk about (Alvesson, 2002; Elliott, 1991; Ortiz, 2003).

Observations and document analysis were used to cross-check and triangulate interview data. Moreover, documents provide information about things that cannot otherwise be observed or of which the researcher is unaware such as events and settings that took place before the research began (Lincoln and Guba, 1985; Merriam, 1998; Patton, 2002). On the other hand, observation can confirm what participants said during interviews (Mabry, 2008). Furthermore, observations afford the researcher the opportunity to gather live data from live situations and a chance to see and discover things that might otherwise be unconsciously missed or things about which participants might not freely talk in interview situations (Cohen *et al*, 2007).

This study used inductive data analysis to make sense to the data gathered through observation, document review and interviews. Interview data were transcribed, word-processed and collated with data obtained from observation and document analysis to form a pool of primary data. The primary data were then analysed inductively by identifying categories and codes, which were later combined to form themes. According to Denzin and Lincoln (2003) inductive data analysis is a process of teasing out categories, themes and patterns from the data (p 63).

## Findings

The study found that the college is in the process of drafting its HIV/AIDS policy in accordance with the Kenya education sector HIV/AIDS policy. The college's HIV/AIDS coordinator said that:

The college does have an HIV/AIDS policy, but we are working on it, actually it is in the strategic plan. We have done the groundwork by identifying the areas that we want to address.

The college's HIV/AIDS strategic plan is displayed on the wall in the coordinator's office. The college's HIV/AIDS strategic plan is an outline of themes that are planned and are being implemented. The coordinator described the HIV/AIDS programmes the college has implemented since 2004 to date.

At the beginning the purpose was to mitigate the problems of HIV and AIDS in the college in terms of mainstream through training of lecturers and sensitizing the trainees. We started looking into learning and teaching styles and activities which could involve the trainees, staff and community around. Then we later moved to prevention of HIV infection, care and support for those already infected and affected by HIV/AIDS.

A teacher trainer interviewed, who is a national trainer of trainers said that:

I was picked. Whoever was in-charge of guidance and counselling was away so I was told to go. This is how I became a member of the national trainers.

However, this teacher trainer does not appear to teach HIV/AIDS at the college since all the trainee teachers interviewed said they are only taught about HIV/AIDS in Home Science, a subject the trainer does not teach. The college needs to use all the trained personnel to give intensive training that can enable teacher trainees to be able to teach about HIV/AIDS in schools. The coordinator said that:

We are not able to give intensive training to the whole community because of the large number of trainee teachers and time limitation. However, we can train a few trainees intensively over a long period of time.

The college contacted I Choose Life Africa, a non-governmental organization which trains peer educators among the trainee teachers. This year, 30 trainees were trained as peer educators out of 450 first-year trainees. The intensive training has given peer educators the confidence to teach about HIV/AIDS to their peers and in their future classrooms in primary schools. A first peer educator said that:

We have started teaching our colleagues at the college more about HIV/AIDS but have not done much, but I feel there is awareness of HIV/AIDS among our peers.

All three peer educators interviewed said they were ready to teach about HIV/AIDS in their future classrooms as teachers. A second year peer educator said that:

As a peer counsellor, a peer educator and also the training that I am undergoing, I can say I am ready to teach about HIV/AIDS.

However, a second year trainee, who is not a peer educator, feels he is not ready to teach about HIV/AIDS in a school. The trainee said that:

I think I am not that well prepared to handle HIV and AIDS out in the field with the knowledge that I have received in my training. I don't think it is enough because I have not been exposed much about HIV/AIDS.

This shows that if the college can provide intensive training to all the trainees, then they are likely to be well prepared to teach about HIV/AIDS in schools.

## **Discussion**

The problem at the college seems to be that of the conceptualization of HIV/AIDS prevention education. The college's HIV/AIDS policy is still in a draft form, therefore there is no framework to guide sustained actions towards HIV/AIDS prevention education. The current response appears to be an ad hoc implementation of the Kenya education sector policy. A policy helps institutions to "respond to the epidemic in a systematic manner" by providing a consistent training programme (Rugalema and Khanye, 2004, p 96). The college's HIV/AIDS policy is essential in order to provide for a systematic implementation that is likely to have an impact on the trainee teachers' preparation to teach about HIV/AIDS. In order to develop acceptable policies which do not contradict social norms, the college will need to consider the factors that deter teachers from discussing controversial areas, such as teachers' personal beliefs and fears (Kelly, 2002, p 33). The college lecturers seem to feel that they are not the right people to address the matters related to sexuality that are necessary to provide comprehensive HIV/AIDS education. The trainees at the college are mostly in their teens, while the lecturers are mostly middle-aged or older. A lecturer observed that "there is a very wide gap and these young people here find it difficult to freely associate with their lecturers". The age difference between the trainees and the lecturers seems to be an issue when it comes to discussing HIV/AIDS issues. The HIV/AIDS coordinator observed that, "when it comes to handling HIV and AIDS issues, the lecturers are seeing these teenagers almost as their children to whom there should be somebody else in between to do that kind of work". In this respect the college is fortunate to have forged a partnership with an NGO who approached the college to train peer educators.

The Kenya education sector policy states that “while the education sector will be responsible and accountable for implementation of this policy, it will at all times seek to develop effective partnerships to enhance the success of its implementation” (MoE, 2004, p 13). The college has benefited from partnership with local non-governmental organisations (NGO), especially in providing awareness programmes for trainee teachers. It is through the partnership with I Choose Life Africa, an NGO, that the college has been able to train peer educators in the last two years.

The intensive training has given peer educators the confidence to teach their peers about HIV/AIDS. All three peer educators interviewed said they were ready to teach about HIV/AIDS as teachers in their future classrooms. However, given that peer education is based on informal modelling of desired behaviour, the current numbers of peer educators are unlikely to have a noticeable impact among the trainee teachers. Peer education is based on the theory of social learning which states that behavioural change can be achieved through modelling desired behaviour (Mellanby, Newcombe, Rees and Tripp, 2001). According to this concept, people observe credible role models, with whom they can identify, engaging in particular behaviours. Moreover, there is empirical evidence that education by peers is better than that provided by teachers in terms of modifying norms because peers can positively reinforce learning through ongoing social contact with those they are aiming to educate (Mellanby *et al*, 2001, p 488). Given the large classes at the college, peer education could be a way of ensuring that those who receive intensive HIV/AIDS education as peer educators are committed prospective HIV/AIDS teachers. Thus training more peer educators each year can result in the preparation of confident and committed trainee teachers who are “HIV/AIDS-competent” (Coombe, 2004, p 36). Training more peer educators, however, should not mean abandoning regular teacher-trainer-led integrated HIV/AIDS education sessions; all the trainee teachers still need to access HIV/AIDS education for their own personal growth.

This was a pilot study which was a small-scale version of the real thing, a try-out of a proposal so that its feasibility can be checked out (Robson, 2002). One-week of data collection generated diagnostic data indicating a need for a further study to provide a “thick description” (Cohen *et al*, 2007) from which to tell the story of the case.

The inability to provide comprehensive HIV/AIDS education to all students at college level means that trainee teachers are not adequately prepared to teach about the disease in primary schools where education has the potential to reach a large number of learners as a result of the Kenyan government implementation of free primary education. More effort needs to be put into introducing a whole-institution approach to HIV/AIDS education which takes into account the reality of the context, such as large classes, limited resources and the expertise available at the institution. Hence the next phases of the study will trial a collaborative action research to engage the college community in addressing the issues impeding the teaching about HIV/AIDS effectively.

## References

Alvesson, M. (2002) *Postmodernism and Social Research*. Buckingham: Open University.

Bell, B. and Gilbert, J. (1996) *Teacher Development: A Model From Science Education*. London: Falmer.

BERA (2004) *Revised Ethical Guidelines for Educational Research*. Available online from <http://www.bera.ac.uk/files/2008/09/ethica1.pdf> [accessed 10 February 2009].

Boler, T., Ibrahim, A., Adoss, R. and Shaw, M. (2003) *The Sound of Silence: Difficulties in Communicating on HIV/AIDS in Schools: Experience From India and Kenya*. London: ActionAid.

Christie, P., Harley, K. and Penny, A. (2004) Case studies from sub-Saharan Africa, in C. Day and J. Sachs (eds) *International Handbook on the Continuing professional Development of Teachers* (pp 167-190). London: Open University Press.

Clarke, D. and Hollingsworth, H. (2002) Elaborating a model of teacher professional growth. *Teaching and Teacher Education* 18, 8, 947-967.

Cohen, L., Manion, L. and Morrison, K. (2007) Observation, in L. Cohen, L. Manion and K. Morrison (eds) *Research Methods in Education* (6<sup>th</sup> edn.) (pp 396-413). London: Routledge.

Coombe, C. (2004) *HIV/AIDS and Teacher Education*. Bonn: Inwent.

Creswell, J. (1994) *Research Design: Qualitative and Quantitative Approaches*. London: Sage.

Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F. and Shulman, L. (2005) The design of teacher education programs, in L. Darling-Hammond and J. Bransford (eds) *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do* (pp 390-441). San Francisco: Jossey-Bass.

Denzin, N. K. and Lincoln, Y. S. (2003) Discipline and practice of qualitative research. In N. K. Denzin and Y. S. Lincoln (eds) *Strategies of Qualitative Inquiry* (2<sup>nd</sup> edn.) (pp 1-45). London: Sage.

Elliott, J. and Ebbutt, D. (eds) (1986) *Case Studies in Teaching for Understanding*. Cambridge: Cambridge Institute of Education.

Elliott, J. (1991) *Action Research for Educational Change*. Milton Keynes: Open University.

Farah, I., Kavuma, C., Mwingi, M. and Onyango, O. (2009) *Where Are the Gaps? HIV and Gender Pre-service Teacher Training Curriculum and Practices in East Africa*. London: Commonwealth Secretariat.

Ferrance, E. (2000) Action Research. Available online from [http://www.alliance.brown.edu/pubs/themes\\_ed/act\\_research.pdf](http://www.alliance.brown.edu/pubs/themes_ed/act_research.pdf) [accessed 5 February 2009]

Fine, M., Weis, L., Weseen, S. and Wong, L. (2003) For whom? Qualitative research, representations, and social responsibilities, in N. K. Denzin and Y. S. Lincoln (eds) *The Landscape of Qualitative Research Theories and Issues* (2<sup>nd</sup> edn.) (pp 167-207). London: Sage Publications.

Freire, P. (1993) *Pedagogy of The City*. New York: Continuum.

Guskey, T. (1985) Staff development and teacher change. *Educational Leadership* 42, 7, 57-61.

Guskey, T. (2002) Professional development and teacher change. *Teachers and Teacher Change: Theory and Practice*, 8, 3&4, 381-391.

Guskey, T. and Sparks, D. (1991) What to consider when evaluating staff development. *Educational Leadership* 49, 3, 73-76.

Hamerness, K., Darling-Hammond, L. and Bransford, J. (2005) How teachers learn and develop, in L. Darling-Hammond and J Bransford (eds) *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do* (pp 358-389). San Francisco: Jossey-Bass.

Joyce, B. and Showers, B. (1980) Improving inservice training: The messages of research. *Educational leadership* 37, 5, 379-385.

Kelly, M. J. (2002) Standing education on its heads: Aspects of schooling in a world with HIV/AIDS. *Current Issues in Comparative Education* 3, 1, 28-38.

Kenya Institute of Education (2004) *Primary Teacher Education Syllabus*. Nairobi: KIE.

Kvale, S. (1996) *InterViews: An Introduction to Qualitative Research Interviewing*. California: Thousand Oaks.

Lieberman, A. and Mace, D. H. P. (2008) Teacher learning: The key to educational reform. *Journal of Teacher Education* 59, 3, 226-234.

Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic Inquiry*. Beverly Hills, CA: Sage.

Mabry, L. (2008) Case study in social research, in P. Alsutari and J. Brannen (eds) *The Sage Handbook of Social Research Methods* (pp 214-227). London: Sage.

Mackay, C. B. (1981) *Republic of Kenya, Second University in Kenya*. Report of the Presidential Working Party. Nairobi: Government Printers.

Manning, K. (2000) *Rituals, Ceremonies, and Cultural Meaning in Higher Education*. Westport, CT: Greenwood Press.

Maticka-Tyndale, E., Wildish, J. and Gichuru, M. (2007) Quasi-experimental evaluation of a national primary school HIV intervention in Kenya. *Evaluation and Program Planning* 30, 172-186.

Mellanby, A. R., Newcombe, R. G., Rees, J. and Tripp, J. H. (2001) A comparative study of peer- led and adult-led school sex education. *Health Education Research* 16, 4, 481-492.

Merriam, S. B. (1998) *Qualitative Research and Case Study Application in Education*. San Francisco: Jossey-Bass.

Ministry of Education (2004) *Kenya HIV/AIDS Education Sector Policy*. Nairobi: Ministry of Education.

Ministry of Education (MoE) (2008) *The development of education. Inclusive education: The way of the future. National report of Kenya*. Paper presented at the international conference on education. Geneva, Switzerland.

Ngigi, A. and Macharia, D. (2006) *Education sector policy overview paper*. Available online from [http://www.enable.nu/publication/D\\_1\\_7\\_Kenya\\_Education\\_Policy\\_Overview.pdf](http://www.enable.nu/publication/D_1_7_Kenya_Education_Policy_Overview.pdf) [Accessed 25 April 2009].

Njue, C., Nzioka, C., Ahlberg, B. M., Perted, A. M. and Voeten, H. A. C. (2009) 'If you don't abstain, you will die of AIDS': AIDS education in Kenya public schools. *AIDS Education and Prevention* 21, 2, 169-179.

Oliver, B. (1980) Action research for inservice training. *Educational Leadership* 37, 5, 394-395.

Ortiz, A. M. (2003) The ethnographic interview, in F. K. Stage and K. Manning (eds) *Research in the College Context. Approach and Methods* (pp 35-48). London: Routledge.

Orum, A. M., Feagin, J. R. and Sjoberg, G. (1991) The nature of the case study, in J. R. Feagin, A. M. Orum and G. Sjoberg (eds) *A Case for the Case Study* (pp 2-26). Carolina: UNC Press.

Patton, M. Q. (2002) *Qualitative Evaluation and Research Methods* (3<sup>rd</sup> edn.). Thousand Oaks, CA: Sage.

Primary School Action for Better Health (PSABH) (n.d.) Available online from <http://www.psabh.info> [accessed 14 May 2009].

Robson, C. (2002) *Real world research* (2<sup>nd</sup> edn.). London: Blackwell.

Rugalema, G. and Khanye, V. (2004) Mainstreaming HIV/AIDS in the education system in sub-Saharan Africa: Some preliminary insights, in C. Coombe (ed.) *The HIV Challenge to Education: A Collection of Essays* (pp 81-103). Paris: IIEP.

Schenker, I. I. and Nyirenda, J. M. (2002) *Preventing HIV/AIDS in Schools*. IBE-UNESCO.

Simons, H. (2009) *Case Study Research in Practice*. Los Angeles: Sage.

Stake, R. E. (1995) *The Art of Case Study Research*. London: Sage.

Stake, R. E. (2005) Qualitative case studies, in N. K. Denzin and Y.S. Lincoln (eds) *The Sage Handbook of Qualitative Research* (3<sup>rd</sup> edn.) (pp 443-466). London: Sage.

Teachers Service Commission (2006) *Sub-Sector Workplace Policy on HIV and AIDS*. Nairobi: Teachers Service Commission.

Wood, F. H. and Thompson, S. R. (1980) Guidelines for better staff development. *Educational Leadership* 37, 5, 374-378.