Drawing AIDS: Tanzanian teachers picture the pandemic. Implications for re-curriculation of teacher education programmes

LESLEY WOOD
North-West University
NAYDENE DE LANGE
Nelson Mandela Metropolitan University
KITILA MKUMBO
University of Dar Es Salaam

In this article, we explain how we engaged teachers in creating their own representations of HIV and AIDS in Tanzania as a starting point for re-curriculation of the undergraduate teacher education programme. We employed a qualitative design, using visual methodologies, to encourage 29 in-service teachers to draw their perceptions about HIV and AIDS in Tanzania, and to explain their drawing in a short narrative. Thematic analysis of the drawings revealed that, while teachers are aware of the social injustices that fuel the pandemic, they do not envision themselves as having much influence for social change of learner attitudes and behaviour. The discussion of the findings, compared to and recontexualised by relevant literature, leads us to argue for the need to engage teachers in participatory research to find contextually appropriate ways to conceptualise and practise HIV and AIDS education. The recommendations we offer have relevance not only for Tanzania, but for the entire sub-Saharan African region.

Keywords: HIV and AIDS education, research for social change, participatory research, critical pedagogy, visual methodologies, teacher education, Tanzania

Introduction

Childhood in Tanzania and other sub-Saharan African countries is most often characterised by poverty, which increases vulnerability to a host of risks, including HIV and AIDS (Githinji, 2009). Estimates show that 17% of the child population in Tanzania aged between 0 and 14 years are vulnerable to HIV infection, poverty and associated threats to well-being, with 5% characterised as most vulnerable (Kaare, 2005; Lindeboom, Leach, Mamdani & Kilama, 2006). Research suggests that youth prefer to seek information on sexuality and HIV from teachers and turn to them for care and support (Zisser & Francis, 2006). Yet teachers in Tanzania are hampered in this respect by a lack of formal training in addressing HIV and AIDS issues, as well as by social and cultural constraints which tend to foster stigma and impede open discussion of the pandemic (Mkumbo, 2010; Wood, 2009). The need for effective teacher professional development in HIV and AIDS education is, therefore, a pressing matter at both pre- and in-service level.

In this article, we report on the first stage of a larger action research project undertaken to begin the process of re-curriculation at one university in Tanzania. In keeping with the participatory and collaborative nature of action research (Piggot-Irvine, 2012), it was necessary to begin by generating data to answer our initial research question: How do teachers perceive and interpret the pandemic in Tanzania and what do they think their role might be in mitigating its impact on the lives of learners? An important assumption of our research paradigm is that teachers can play an important role in influencing social change through their capacity to guide the development of learner cognitive, affective and behavioural responses to the pandemic.

Contextual background of the study

The behaviouristic, life skills-based, abstain/be faithful/condomise (ABC) approaches that have been the basis for most of the curriculum interventions in sub-Saharan Africa (HEAIDS, 2010a) have not been very successful in bringing about behavioural change (Baxen & Breidlid, 2009; James, Reddy, Ruiter, McCauley & Van den Borne, 2006; Nzioka & Ramos, 2008) and teachers, as a rule, have not been consulted in the design of these programmes (Clarke, 2008) or received training and support to enable them to comfortably and effectively teach HIV and AIDS content (Tiendrebeogo, Meijer & Engelberg, 2003). We believe that one of the reasons for this is that they tend to target individual behaviour, rather than focus on the social, cultural, economic and political factors that create a fertile terrain for the incubation and transmission of the virus as advocated by more recent approaches (see, for example, Baxen, Wood & Austin, 2011; Chege, 2006; De Lange, 2008; HEAIDS, 2010b).

One of the criticisms of teacher education in Tanzania (Mkumbo, 2009) is that it tends to emphasise theoretical orientation with limited opportunity to actually translate knowledge into practice. Teachers are thus required to learn how to teach "on the job". Furthermore, the teacher training approach in Tanzania tends to still be teacher-centred (Mkumbo, 2009). As such, the current approach of teacher training in Tanzania is arguably unsuited for sexuality and HIV and AIDS education, which calls for student-centredness and participatory teaching methodologies (HEAIDS, 2010).

The provision of HIV and AIDS education in schools in Tanzania is guided by the *Guidelines for implementing HIV/AIDS and life-skills education programmes in schools* (Ministry of Education and Culture, 2004). According to these, the content of HIV and AIDS education should reflect two major elements; provide basic information and facts about the transmission and prevention of HIV and STI, and promote responsible sexual behaviours, including delaying the age of sexual debut and practising protected sex.

The *Guidelines* stipulate that HIV/AIDS and STI preventive education should be integrated into the core curriculum through Science and Social Studies for primary schools, Biology and Civics for ordinary secondary school, and General Studies and Biology for advanced secondary school. A recent content analysis study (Mkumbo, 2009) indicated that only a small proportion of possible sexuality and HIV and AIDS education-related topics are covered in the Tanzanian national school curriculum. Besides being too few, the sexuality education-related topics in the national school curriculum appear to be disorganised and scattered across the four subjects to the extent that they can hardly be said to constitute a meaningful sexuality and HIV and AIDS education programme.

Studies have also shown that, although teachers in Tanzania support the provision of sexuality and HIV and AIDS education in schools, the majority of them express discomfort and feel incompetent to deliver such content (Mkumbo, 2010). We, therefore, conclude that the current approach to HIV and AIDS education in Tanzania needs to be revised.

Theoretical framing

There is no one "magic bullet" (Peabody & Cairns, 2008: 1) that will decrease HIV prevalence. However, the importance of social justice and human rights issues in addressing HIV and AIDS was highlighted at the 2008 AIDS conference in Mexico City. Although social change is a dynamic and unpredictable process, involving many different actors and usually not able to be transferred from one context to another (Ogden, 2008), teachers could have a significant contribution to make towards HIV prevention if they are able to contextualise HIV and AIDS education within the social challenges of their specific communities (Boler, 2003).

Many teachers choose their profession, because they want to make a difference (Stiegelbauer, 1992). Yet, in practice, teachers tend to believe they occupy relatively powerless positions, hampered by a lack of resources and decision-making power (Price & Valli, 2005: 58). They are inclined to forget that, to the learner, they are not only a source of (usually) unquestioned and unchallenged knowledge, but are also role models whose attitudes, values and behaviour have tremendous influence to shape the same in learners (Martino, 2008). Teachers' knowledge, attitudes and practices are critical in shaping both the formal and

informal curricula in schools (Hoadley & Jansen, 2009). Research has demonstrated that teachers have the ability to shape and influence learners' ways of thinking and responding to the pandemic (James-Traore, Finger, Ruland & Savariaud, 2004). Although the capability of the teacher as an agent of social change has been criticised (Lane, Lacefield-Parachini & Isken, 2003; Maylor, 2009), it is important to acknowledge the inherent power that teachers wield over the cognitive and value formations of learners (Bennell, 2004; Villegas & Lucas, 2002). We are not advocating that all teachers become radical social and political activists, but that they should at least become aware of how they can contribute to influencing how learners come to know, and hopefully embody, socially just ways of being. Given the role of social injustices in driving the pandemic in sub-Saharan Africa (Muthukrishna, 2009), we argue that a critical, emancipatory pedagogical approach (Freire, 2003) to HIV and AIDS education is, therefore, needed. Such an approach would enable teachers to shift from a view of HIV and AIDS education that is static, compartmentalised and predictable (Freire, 2003) towards one that acknowledges the dynamic, holistic and unpredictable nature of how the pandemic plays out in society.

However, it is vital that education concerning social justice issues and the possibility of addressing them is embedded in a local context. Rights that are recognised as universal, such as equality for women, are often difficult to implement in societies where local conditions and cultural biases hamper their acceptance (De Cock, Mbori-Ngacha & Marum, 2002). What is regarded as social justice in the eyes of the Western world leaders and global donors may, in fact, be experienced as a threat in local populations (Stewart 2006; Benator, 2001). Our point of departure was, therefore, to engage with participants to help them explore how they, as teachers, perceive HIV and AIDS within their communities, with the aim of raising their awareness about personal bias, attitudes and behaviour which might negatively impact on their ability to implement HIV and AIDS education and fulfil their role as potential agents of change.

Methodology

We employed availability sampling (Grinnell & Unrau, 2005) to work with a group of 29 teachers (16 women and 13 men) who were enrolled in a Master's in Education programme at the University of Dar es Salaam. Each teacher was requested to fill in a consent form, indicating his/her voluntary, informed consent to allow his/her data to be used for research purposes and assuring him/her of anonymity and confidentiality. We stressed that, should they become upset by any of the activities in the workshop, they could either speak to one of the researchers, who is a registered counsellor, or contact student counselling services.

Visual methodologies were chosen as a data collection tool to help the teachers reflect on their constructions of HIV and AIDS, since the creation of the visual representation of a topic and reflection on it is in itself an intervention that can bring about a shift in mindset and the beginning of a subsequent change in practice (Guillemin, 2004). Visual methodologies also encourage teacher engagement and deep thinking about social issues; promote dialogue and sharing; increase enjoyment and, therefore, participation and commitment to change, and provide a tool for taking action (Pithouse, De Lange, Mitchell, Moletsane, Olivier, Stuart, Van Laren & Wood, 2010). Drawing is one powerful strategy that can be used with all age groups to elicit opinions and beliefs and to generate discussion about the topic in question (Stuart, 2006). We asked the participating teachers to draw a picture in response to the following prompt, "Draw how you see HIV and AIDS in Tanzania", and to explain their drawing by means of a caption and a short narrative. The participants then presented their drawings to the larger group which allowed us to facilitate critical discussion on their interpretations. The drawings, narratives and the transcript of the critical discussion were thematically analysed by the three researchers independently, before they met for a consensus discussion (Bogdan & Biklen, 2006; Merriam, 2009). Trustworthiness of the research process was enhanced by this independent coding and re-coding, by triangulation of researcher, by recontextualising the findings within literature (Poggenpoel, 1998), and by explaining the process in detail (Leedy & Ormrod, 2001).

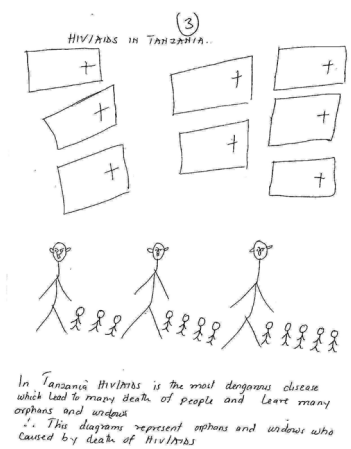
Discussion of findings

The data analysis of the drawings, accompanying written explanations and the discussion revealed that the participating teachers did recognise that the severity of the pandemic in Tanzania was closely linked to inherent social injustices, but that they did not consider themselves able to influence the situation. Three main themes emerged, which will be critically discussed in the following sections, with relation to relevant literature.

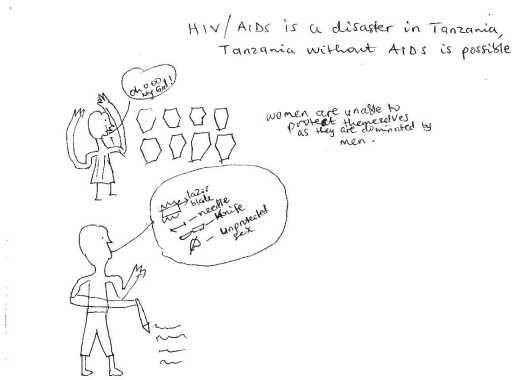
Theme 1: HIV and AIDS marginalises certain groups and renders them more vulnerable

Many of the drawings depicted women and children as being most affected by the pandemic. This is, of course, true for sub-Saharan contexts (United Republic of Tanzania, 2007) – 6.6% of women are infected, in comparison to 4.6% of men; 3.9% of young women aged between 15 and 24 are infected in comparison to 1.7% of males in the same age group. However, the manner in which women and children were represented was cause for some concern about the potential stigmatising discourses evident in the drawings. Women were depicted as "victims", unable to look after themselves. For example, the death of the economically active men in the community (drawing 3) resulted in women being widowed and, therefore, unable to support themselves or to contribute meaningfully to society. This notion of being "victims" was also depicted in drawing 10, where the caption read, "women are unable to protect themselves as they are dominated by men". Men, however, could protect themselves, because they had knowledge on how the disease was transmitted. The explanation given for drawing 10 and comments in the discussion implied that the majority of the participants believed that education about how to prevent transmission is sufficient to stop the spread of HIV, and that women have the choice to decide whether to educate themselves or not. According to research, both of these beliefs are false (Kauffman, 2004; O'Sullivan, Harrison, Morrell, Monroe-Wise & Kubeka, 2006). Unless there is intervention to raise critical awareness and understanding of the complexity of human behaviour, this situation will remain undisrupted.

Figure 1: Selection of drawings to illustrate Theme 1

3.	6
	
In Tanzania HIV/AIDS is the most dangerous disease which leads to many deaths of people and leaves many orphans and widows. Therefore the diagram represents orphans and widows caused by death of HIV/AIDS	In Tanzania, women and children are the most affected people with HIV --- Pregnant women/girls are affected mainly

10



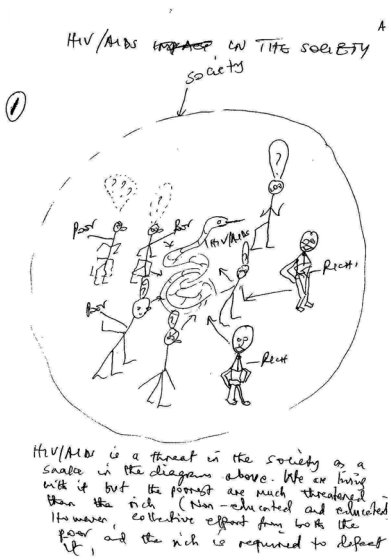
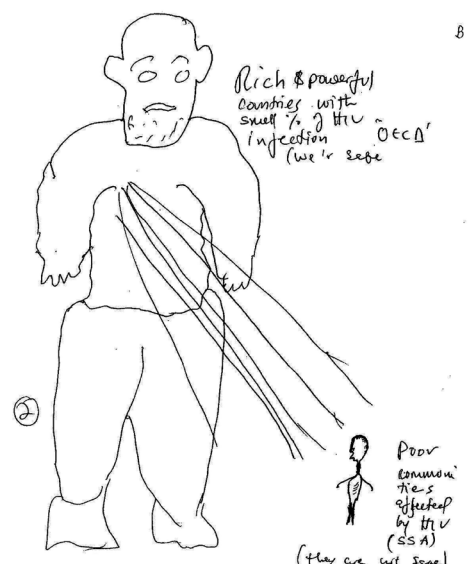
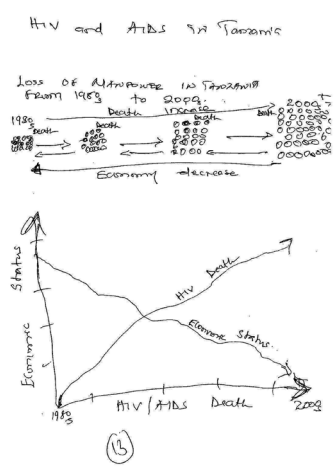
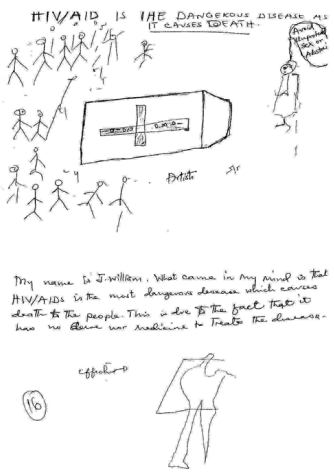
HIV/AIDS is a disaster in Tanzania. Tanzania without AIDS is possible.
Women are unable to protect themselves as they are dominated by men.

Theme 2: HIV and AIDS is closely linked to poverty

According to the drawings and the subsequent discussion, the teachers are aware that HIV and AIDS leads to loss of human resources which, in turn, ravages the economy, thereby increasing poverty and rendering people more vulnerable to HIV infection (Kimaryo, Okpaku, Githuku-Shongwe & Feeney, 2004; UNAIDS, 2006). The gap between the rich and the poor (e.g. drawing 1) is a reality (TACAIDS, 2008) in Tanzania, but the perceptions illustrated in the drawings could lead to reinforcing the notion that it is the poor who must bear the burden of HIV rather than believing that they have the potential to improve their circumstances. The "poor" are depicted as uneducated and confused (cf. question marks above their heads, drawing 1) victims of the pandemic. Their inability to help themselves is implicit in the way in which they have been depicted by the teachers, and a sense of othering is evident, since teachers portray themselves as part of the "educated" and "rich" communities. In drawing 2, the teacher has positioned herself (subconsciously perhaps) with the rich OECD countries by using the preposition "we" in this regard and "they" to refer to the poor sub-Saharan countries.

There is also evidence of an oversimplification of the pandemic, equating it only with poverty (e.g. drawing 2) and lack of education, negating the important social embeddedness of the pandemic (Baxen & Breidlid, 2009). Teachers' perceptions, as depicted in the drawings, could promote a stigmatising discourse, stemming from misperceptions and a feeling that HIV and AIDS is not associated with teachers, but only with the "poor and uneducated" (drawing 1); that women are to blame for their own victimisation, because they do not take charge of their situation (drawing 10), and that AIDS originated with the youth (drawing 12), who have now infected adults. Such discourse is not uncommon among teachers in sub-Saharan Africa (Wood & Webb, 200

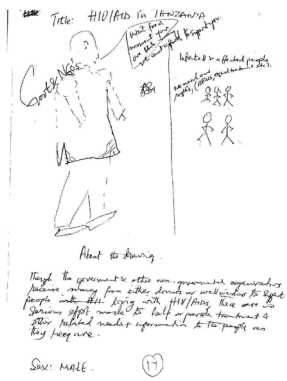
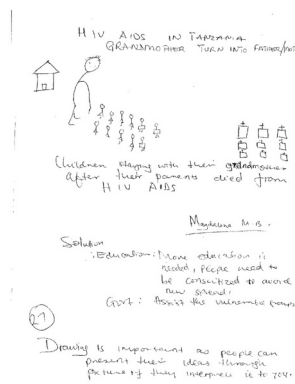
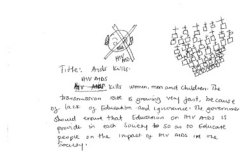
Figure 2: Selection of drawings to illustrate Theme 2

1 	2 
HIV/AIDS is a threat in the society as a snake in the diagram above. We are living with it but the poorest are much threatened than the rich (non-educated and educated). However, collective effort from both the poor and the rich is required to defeat it.	Rich and powerful communities with small % of HIV infection "OECD" (we're safe) Poor communities affected with HIV (SSA) (they are not safe)
13 	16 
Loss of manpower in Tanzania form 1980s to 2009. Indicates loss in economic status as deaths increase.	My name is …. What came in my mind is that HIV/AIDS is the most dangerous disease which causes death to the people. This is due to the fact that it has no cure nor medicine to treat the disease.

Theme 3: Teachers are silent on their role as agents of change

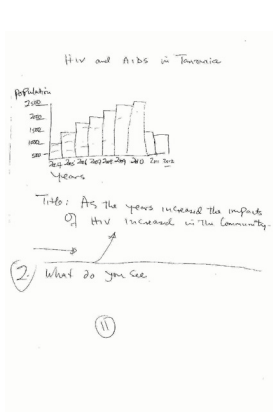
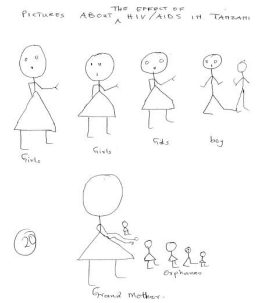
Several drawings indicated that the teachers primarily blamed the government for not taking action to improve the circumstances of the poor, including ensuring that education is available for all.

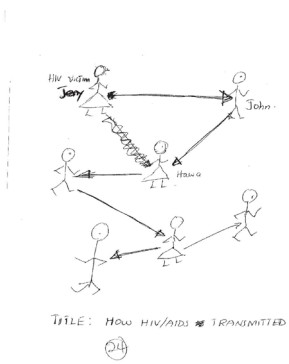
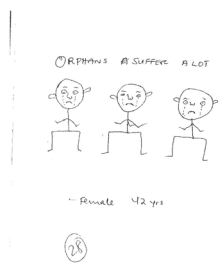
Figure 3: Drawings illustrating Theme 3

17  	27 
"Wait for a moment, you are too many, we cannot afford to support you" "Infected and affected people, we need our rights". Though the government and other non-governmental organisations receive money from other donors or well-wishers to support people living with HIV/AIDS, there are no serious efforts made to help or provide treatment and other related needs and information to the people as they require.	Children staying with their grandmother after their parents died from HIV AIDS. Solution: Education: more education is needed, people need to be conscientised to avoid new spread. Govt: assist the vulnerable groups.
14  	19 
HIV AIDS kills women, men and children. The transmission rate is growing very fast, because of lack of education and ignorance. The government should ensure education on HIV AIDS is provided in each society so as to educate people on the impact of HIV AIDS in the society.	The symbol above shows that HIV and AIDS is dangerous to the life of Tanzanians, especially people from 18-30 years. So the government should take care of it so that we can reduce the spread of HIV and AIDS in Tanzania.

While we agree that governments are socially responsible for providing adequate services, participants' drawings suggest that they regard government as being solely responsible for educating and raising awareness about HIV and AIDS (cf. drawings 17, 14 and 19) and that such knowledge would suffice to curb the spread of HIV. None of the drawings or narratives explicitly stated that teachers themselves should educate the learners about HIV. Although drawing 27 acknowledged the importance of education, the participant did not mention that teachers were responsible for this education. Instead, the participants turned to "researchers" (drawing 11) and government to discover ways to reduce HIV infection, rather than stating that teachers are able to play a meaningful role in this. The drawings reveal a narrow and naïve understanding of HIV education, equating it with condom use (drawing 4); the promotion of "moral behaviour" by preaching the ABC message (drawings 15 and 16), and biomedical knowledge (drawings 24, 27 and 28b).

Figure 4: Drawings depicting a narrow view of HIV and AIDS education

4	11	20	15
			
Only 20% of the people do not know how to control HIV	As the years increased, the impact of HIV increased in the community. (on other side) – The government should educate the people; we need more researchers to investigate good ways of reducing the impact of HIV on our community.	In my picture it shows that girls are more affected by boys by HIV, therefore there is a need to educate about it. Grandmother remains with children.	My drawing is about HIV/AIDS transmission through unpreventine (*sic*) sexual relationships between male and female. Thereafter advice that it is possible to live in an HIV free zone by being faithful to your partner.

24	28B	22
		
HIV is being transmitted by many ways, including sexual intercourse. When you are doing sex with a victim of HIV you will get infected and when you sex with another person, you will transmit it and so the trend continues.	In Tanzania orphans suffer a lot, there are many who do not attend school, do not have homes and they are not sure whether they can have anything to eat. Some of the orphans engage in things they do not like because of the situation they are in. There are many cries in towns and villages as AIDS does not choose a specific place.	It is about a person who is very ill, he is in bed, cannot sit or talk. His family is crying. They think he is going to die soon. Also, because of the sick person the family members do not work, they stay with him, thus increasing poverty. Solution: it is important to give hope to the person and try to work hard instead of waiting for his death.

Implications of the findings

Based on our findings from this study, we are led to conclude that the participating teachers do have a limited and biased understanding of HIV and AIDS in Tanzania. They equate it with biomedical interventions, assuming that knowledge about the virus will help to curb the spread of HIV. Although there is awareness of the link between HIV and AIDS and social injustices, this is not regarded as something that they are able to influence, rather relying on government to take action. We tend to agree with Fullan (1993:5): "… teachers will never improve learning in the classroom … unless they also help improve conditions that surround the classroom".

We, therefore, propose that teacher education curricula provide opportunities for teachers to engage in reflection and debate about their own epistemological and ontological understandings to deconstruct and reconstruct their own philosophies and theories on behavioural change towards a more socially just society. They need to learn how to develop teaching strategies that will enable them to engage learners in a similar process, leading to authentic learning rather than parrot-fashion repetition of facts about human rights and social justice. Social justice in education can be promoted by including service learning and community involvement requirements in a curriculum that centralises the vision for social justice (Duncan-Andrade, 2007), as well as by modelling and embodying values that promote social justice. We add our voices to the call made by other researchers (Baxen, Wood & Austin, 2011; HEAIDS, 2010) for a transformation in teacher education curricula to allow for the engagement of teachers with the political, social, cultural and economic contexts that give rise to social inequalities, so that they are in a position to "create effective pedagogical spaces" (Macedo, 2006: xii) for the integration and debate of such factors in their everyday interaction with learners. Given that there is no one solution to stemming the spread of the

virus, continual critique and disruption of existing social, cultural, economic and political ideologies and structures (Fine, 1994) needs to be woven into the fabric of the curriculum.

Conclusion

As Borrero (2009) admits, teacher education programmes can never offer all that is required to address social injustice. However, they can help the teacher develop a passion and vision for social justice and the skills of knowing how to engage with learners on these issues in pedagogically appropriate ways, offering opportunity for real engagement with regard to learning. In this article, we have shown how the use of a participatory visual methodology created a space for teachers and researchers to explore participant constructions of HIV. The data analysis reported on in this instance has alerted us to the need to engage with the participating teachers to raise their awareness about their potential role as agents of change. We are fully aware that our interpretation of the drawings cannot be taken as 'truth', and further exploration of how the participants envisage their contributions to HIV and AIDS education is necessary. Having the actual drawings in front of them will help facilitate such discussion and permit us to make our interpretation clear as a point of departure for further exploration.

This article has argued that teacher education should be founded in a critical paradigm, where the aim is to enable teachers to critically analyse the status quo and find ways to move towards a more just way of being (Perumal, 2009). If this is not the foundation of learning in university and schools, then education could become a tool for maintaining the status quo and perpetuating social injustices in society (Villegas & Lucas, 2002). In this age of AIDS, no one can afford to let this happen.

References

Baxen J & Breidlid A (eds) 2009. *HIV/AIDS in sub-Saharan Africa. Understanding the implications of culture and context*. Cape Town: UCT Press.

Baxen J, Wood L & Austin P 2011. Reconsidering and repositioning HIV and AIDS within Teacher Education. *Africa Insight*, in press.

Bennell P 2004. *AIDS in Africa: Three scenarios for the education sector.* Retrieved from www.eldis.org/fulltext/UNAIDSscenariosfinal.pdf on 22 March 2011

Bogdan R & Biklen RC 2006. *Qualitative research for education: An introduction to theory and methods*. Boston, MA: Pearson Education, Inc.

Boler T 2003. *The sound of silence: Difficulties in communicating HIV/AIDS in schools*. London: ActionAid.

Borrero N 2009. Preparing new teachers for urban teaching: Creating a community dedicated to social justice. *Multicultural Perspectives*, **11** (4): 221-226.

Campbell C & MacPhail C 2002. Peer education, gender and the development of critical consciousness: Participatory HIV prevention by South African youth. *Social Science & Medicine*, **55** (2): 331-345.

Chege F 2006. Teachers' gendered identities, pedagogy and HIV/AIDS education in African settings within the ESAR. *Journal of Education*, **38**: 25-44.

Clarke DJ 2008. *Heroes and villains: Teachers in the education response to HIV*. Paris: UNESCO.

Cochran F & Mays J 2004. Cultural barriers to behaviour change among adolescents. *Health Psychology*, **5**: 462-473.

Cohen D 2002. HIV and education in Sub-Saharan Africa: Responding to the impact. *Perspectives in Education*, **20** (2): 13-23.

De Cock KM, Mbori-Ngacha D & Marum E 2002. Shadow on the continent: Public health and HIV/AIDS in Africa in the 21st century. *Lancet*; **360**: 67-72: 68.

De Lange N 2008. Visual participatory approaches to HIV and AIDS research as intervention in a rural community setting. *Journal of Psychology in Africa*, **18** (1): 181-186.

Duncan-Andrade J 2007. Gangstas, wankstas, and ridas: Defining, developing, and supporting effective teachers in urban schools. *International Journal of Qualitative Studies in Education,* **20** (6): 617-638.

Fine M 1994. *Chartering urban school reform: Reflections on public high schools in the midst of change*. New York: Teachers College Press.

Francis D 2008. Beyond HIV, there is stigma; beyond stigma, there is activism. In N Muthurkrishna (ed), *Educating for social justice and inclusion in a South African contex.* (pp. 207-222). New York: Nova Science Publishers.

Freire P 2003. From pedagogy of the oppressed. In A Daarder, M Baltodano & RD Torres (eds) *The Critical Pedagogy Reader* (pp. 57-68). New York: Routledge Farmer.

Githinj V 2009. Children's vulnerability to HIV/AIDS, poverty and malnutrition in Buhaya: Advancement through women's empowerment. *Childhood in Africa,* **1** (1): 11-18.

Grinnell RM & Unrau YA 2005. *Social work research and evaluation: Quantitative and qualitative approaches*. 7th ed. Itasca, Ill: Peacock.

Gupta GR, Parkhurst JO, Ogden JA, Aggleton P & Mahal A 2008. Structural approaches to HIV prevention. *The Lancet*, **372** (9640): 764-775.

HEAIDS 2010a. *HIV and AIDS in teacher education. Evaluation report of a pilot project in South African higher education institutions*. Pretoria: Higher Education South Africa (HESA).

HEAIDS 2010b. *Curriculum-in-the-making: Being a teacher in the context of the HIV and AIDS pandemic*. Pretoria: Higher Education South Africa (HESA).

Hoadley U & Jansen J 2009. *Curriculum: Organising knowledge for the classroom*. 2nd ed. Cape Town: Oxford University Press Southern Africa.

James S, Reddy P, Ruiter RAC, McCauley A & Van den Borne B 2006. The impact of an HIV and AIDS life skills programme on secondary school students in KwaZulu-Natal, South Africa. *AIDS Education and Prevention*, **18** (4): 218-294.

James-Traore T, Finger W, Ruland C & Savariaud S 2004. *Teacher training: Essential for school-based reproductive health and HIV/AIDS education.* Arlington: Family Health International.

Kauffman KD 2004. Why is South Africa the HIV capital of the world? An institutional analysis of the spread of a virus. In KD Kauffman and DL Lindauer (eds), *AIDS and South Africa: The social expression of a pandemic* (pp. 17-30). New York: Palgrave MacMillan.

Kaare S 2005. National HIV/AIDS communication strategy. Backgrounder: Socioeconomic impact of HIV/AIDS. Most Vulnerable Children (MVS).

Khau M, Masinga L & Pithouse K 2009. 'Let's talk about sex baby; let's talk about you AND ME.' Facing the challenges of including teachers' selves in sexuality, HIV and AIDS education. In M Heston, D Tidwell, K East & L Fitzgerald (eds), *Proceedings of the 7th International Conference on the Self-Study of Teacher Education Practices,* Herstmonceux Castle, England. Cedar Falls, IA: University of Northern Iowa.

Kimaryo SS, Okpaku JO, Githuku-Shongwe A & Feeney J (eds) 2004. *Turning crisis into an opportunity: Strategies for scaling up the national response to HIV and AIDS pandemic in Lesotho*. New Rochelle, New York: Third Press Publishers.

Lane S, Lacefield-Parachini N & Isken J 2003. Developing novice teachers as change agents: Student teacher placements against the grain? *Teacher Education Quarterly*, **30** (2): 55-68.

Leedy PD & Ormrod JE 2001. *Practical research: Planning and design.* 7th ed. City where published?, New Jersey: Merrill Prentice Hall.

Lindeboom W, Leach V, Mamdani M & Kilama B 2006. *Vulnerable children in Tanzania and where they are. Report to UNICEF Tanzania*. Dar es Salaam: REPOA.

Macedo D 2006. AIDS and human dignity. In D Macedo (ed), *Humanising pedagogy through HIV & AIDS prevention: Transforming teacher knowledge* (pp. ix-xxii). Boulder, Colorado: Paradigm.

Martino WJ 2008. Male teachers as role models: Addressing issues of masculinity, pedagoy and the re-masculisation of schooling. *Curriculum Enquiry*, **38** (2): 189-223.

Maylor U 2009. 'They do not relate to Black people like us': Black teachers as role models for Black pupils. *Journal of Education Policy*, **24** (1): 1-21.

Merriam SB 2009. *Qualitative research: A guide to design and implementation*. San Francisco: Jossey Bass.

Meyer-Weitz A 2005. Understanding fatalism in HIV protection: The individual in dialogue with cultural factors. *African Journal of AIDS Research*, **4** (2): 75-82.

Mkumbo KAK 2009. Content analysis of the status and place of sexuality education in the national school policy and curriculum in Tanzania. *Educational Research and Reviews*, **12**: 616-625.

Mkumbo KAK 2010. Correlates of teachers' attitudes towards and comfort in teaching school-based sex education in urban and rural Tanzania. *Papers in Education and Development*, **29**: 57-76.

Ministry of Education and Culture 2004. *The United Republic of Tanzania: Guidelines for implementing HIV/AIDS and life skills education programmes in schools*. Dar Es Salaam: Ministry of Education and Culture.

Muthukrishna N 2009. Preface. In N Muthurkrishna (ed), *Educating for social justice and inclusion in a South African context* (pp. ix-xxv). New York: Nova Science Publishers.

Mwale M 2008. Behavioural change vis-à-vis HIV/AIDS knowledge mismatches among adolescents: The case of some selected schools in Zomba. *Nordic Journal of African Studies*, **17** (4): 288-299.

Ogden J 2008. Paper presented as part of aids2031 Social Drivers Working Group, Understanding and addressing structural factors in HIV prevention. Mexico City, 5 August 2008. Retrieved from http://www.aids2031.org/library/videos?videoid=36 on 23 March 2011.

Oster E 2009. HIV and sexual behaviour change: Why not Africa? Unpublished mimeo, University of Chicago.

O'Sullivan LF, Harrison A, Morrell R, Monroe-Wise A & Kubeka M 2006. Gender dynamics in the primary sexual relationships of young rural South African women and men. *Culture, Health and Sexuality*, **8** (2): 99-113.

Peabody R & Cairns G 2008. Prevention – there will be no magic bullet, we need 'combination prevention'. Retrieved from http://www.aidsmap.com/Prevention-there-will-be-no-magic-bullet-we-need-combination-prevention/page/1431161/ on 23 March 2011.

Perumal J 2009. Reading and creating critically leaderful schools that make a difference: The post-apartheid South African case. *International Journal of Leadership in Education,* **12** (1): 35-49.

Piggot-Irvine, E 2012. Creating authentic collaboration: A central feature of effectiveness. In O Zuber-Skerrit (ed), *Action research for sustainable development in a turbulent world* (pp. 89-106). Bingley, UK: Emerald.

Pithouse K, Mitchell C, Moletsane R, De Lange N, Olivier MAJ, Wood L, Stuart J & Van Laren L (in press). Arts-based and other participatory strategies for teacher development in the Age of AIDS. In J Kirk & M Dembélé, *More and better teachers: Teachers and teacher issues in development contexts*, UNESCO IIEP and id21 Insights Education.

Poggenpoel M 1998. Data analysis in qualitative research. In AS de Vos, H Strydom, CB Fouche & CSL Delport (eds), *Research at grass roots* (1st ed) (pp. 342-351). Pretoria: Van Schaik

Price JN & Valli L 2005. Preservice teachers becoming agents of change: Pedagogical implications for action research. *Journal of Teacher Education*, **56** (1): 57-65.

Schratz M & Walker R 1995. *Research as social change*. New York: Routledge.

Stiegelbauer S 1992. 'Why we want to be teachers'. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, April 20-24, 1992.

Stuart J 2006. From our frames: Exploring visual arts-based approaches for addressing HIV and AIDS with pre-service teachers. Unpublished doctoral thesis. Durban: University of KwaZulu-Natal.

Stewart KA 2006. Can a human rights framework improve biomedical and social scientific HIV/AIDS research for African women? *Human Rights Review*, January-March: 31-36.

Tiendrebepgp G, Meijer S & Engleberg G 2003. *Life skills and HIV education curricula in Africa: Methods and evaluations*. USAID technical paper No 119. Washington, DC: USAID.

Thornton R 2008. The demand for and impact of learning HIV status: Evidence from a field experiment. *American Economic Review*, **98** (5): 1829-1863.

UNAIDS 2006. *Report on the global AIDS epidemic*. Geneva: UNAIDS.

United Republic of Tanzania 2007. *The second national multi-sectoral strategic framework on HIV and AIDS (2008-2012)*. Dar Es Salaam: TACAIDS.

Varga C 2003. South African young people's sexual dynamics: Implications for behavioral responses to HIV/AIDS. *Resistances to Behavioral Change to Reduce HIV/AIDS Infection,* **10** (3): 13-34.

Villegas AM & Lucas T 2002. Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education*, **53** (1): 20-32.

Wood LA 2009. 'Not only a teacher, but an ambassador': Facilitating HIV/AIDS educators to take action. *African Journal of AIDS Research*, **8** (1): 83-92.

Zisser A & Francis D 2006. Youth have a new attitude on AIDS, but are they talking about it? *African Journal of AIDS Research*, **5** (2): 189-196.