

Educator perception of educators' and learners' HIV status with a view to wellness promotion

L.C. Theron

School of Educational Sciences, North-West University, Vaal Triangle Campus, P O Box 1174, Vanderbijlpark, 1900 South Africa
opwlct@puknet.puk.ac.za

An analysis is presented of the results obtained from a pilot study conducted with 319 educators in the Pimville and Vaal Triangle regions of Gauteng Province regarding educator perceptions of the HIV status of colleagues and learners and the impact thereof on educator and school wellbeing. In essence, educators perceived HIV/AIDS to be deleterious, both to personal and school wellness. The ultimate consequence of such perception is a teaching corps in need of empowerment.

Introduction

The AIDS pandemic, which is "deadlier than war, deadlier than tyranny, deadlier even than malaria" (Guest, 2003:ix), is putting the survival, especially of the African continent, at stake.

A contemporary study of African universities noted an "... overwhelming atmosphere of ignorance, secrecy, denial and fear of stigmatisation and discrimination in relation to AIDS" (World Bank, 2002: 14). Preliminary research in the United States concerning educator perceptions of HIV positive individuals suggests that despite widespread education concerning HIV/AIDS, there are still some educators that hold many negative perceptions. Such perceptions include a projected desire to quit teaching before working with someone who has AIDS; fear at having to work with HIV positive individuals; and a belief that AIDS is a just punishment for immorality (Carboni & Dawson, 2001).

The focus in this article is on Gauteng educators' perceptions of the HIV status of colleagues and learners and the impact thereof on educator and school well-being with a view to making recommendations towards the empowerment of educators. Educators are in the epicentre of the reality of HIV/AIDS pandemic as outlined in the following literature overview.

The reality of HIV/AIDS

The statistical proportions of the reality of HIV/AIDS are well documented — their familiarity makes them no less disquieting, however. Approximately 22 million deaths from AIDS have been recorded and roughly 42 million people worldwide (concentrated among working age individuals) are HIV positive (World Bank, 2002; United Nations, 2003).

The reality is especially grim in sub-Saharan Africa. It is estimated that 29.4 million of the 42 million infected persons reside in sub-Saharan Africa. Quinn (2003) suggests that more than 1 in every 10 South Africans is HIV positive. According to the Pretoria News (2003) the projected number of daily deaths in SA from AIDS is approximately 1000. In contrast to eastern Africa where prevalence levels have decreased or stabilised in the last 10 years, southern Africa is recording augmented incidence levels. Consequently, southern African populations are projected to decrease by 14% by 2025 (United Nations, 2003). In South Africa where adult HIV prevalence is at 21.3%, life expectancy at birth is expected to plummet from 68 years to 41.5 years by 2005–2010 (United Nations, 2003). The reality is therefore one of regression: life expectancy levels were previously that low in the 1950s and 1960s (United Nations, 2003). The impact on socio-economic well-being is equally regressive: a debilitated adult population cannot function adequately as providers or caregivers. Education is also sabotaged.

The impact of aids on education

Education is driven by people and in sub-Saharan Africa many of the people integral to the education process are dying. AIDS sabotages education in at least four ways:

1. Educators are dying;
2. the quality of education is being eroded (fewer experienced educators);
3. the demand for education is decreasing (fewer children entering

and/or remaining at school); and

4. education sector costs are soaring as substitute and temporary educators are required.

For the purposes of this article, only the first two factors will be considered.

At least 12% of South African education administrative staff and educators are thought to be infected (World Bank, 2002:12). Ill educators are frequently absent: infected educators lose approximately 6 months of professional time before developing full-blown AIDS and 12 months thereafter (World Bank, 2002:13; United Nations, 2003). Many educators choose to relocate once they are visibly ill, or simply disappear, leaving classes without educators. Rural areas are especially affected as infected educators require urban medical services. Ill educators who remain in their posts cannot provide the same quality of teaching. Learners observe HIV positive educators' health decline, absenteeism and their eventual death. The value of educators as positive role models will be severely diminished. Absenteeism is not restricted to infected educators: educators who have infected family members have higher rates of absenteeism too as they are engaged in caring for ill relatives or burying them (Fredriksson & Kanabus, 2002).

The ultimate death of infected educators saps available teaching resources and sector knowledge. In 1999, 100 000 South African learners lost educators to AIDS. In KwaZulu Natal, random sampling in 100 schools indicated a significant increase in educator mortality rates between 1997 and 2001. In 1999 and 2000 the mortality rates of female educators between the ages of 30 and 34 increased by 70%. AIDS related deaths of SA educators was polled at 1% in 2000 and is projected to reach 5% by 2010 (The Centre for the study of AIDS, 2003). In some African countries it is estimated that by 2010 two thirds of educators will be substitute educators for those who will have died from AIDS (Development Gateway, 2003). The consequence of teacher mortality is a vicious and perennial cycle of increased illiteracy, deterioration in human capital, national knowledge debilitation, a decline in economic growth, less fiscal support for education and ultimately the prevalence of HIV is worsened.

Healthy educators prefer to avoid densely populated AIDS infected areas, increasing educator mobility and decreasing educator-learner ratios. Temporary educators without adequate experience or scanty training may be hired. Both of the aforementioned are inimical to the quality of education (Coombe, 2000; United Nations, 2003).

The implications for remaining educators are also bleak. Healthy educators will have to contend with augmented workloads and heightened responsibility. Their psychological wellness will be taxed as work demands escalate, and as they witness HIV positive colleagues and/or relatives die. The stigma of AIDS causes social isolation which heightens trauma and decreases effective teaching (Coombe, 2000; World Bank, 2002:13).

The stigma of AIDS

The stigma surrounding AIDS is complex. Whilst discrimination is prohibited, stigmatisation of infected persons is an entrenched response (Coombe, 2000). It is primarily caused by inadequate knowledge, fear of death and disease, sexual mores and poor acknowledgement of stigma. The stigma surrounding AIDS includes, amongst others, the following prejudiced perceptions, (Kelly, 2000; Nyblade,

Pande, Mathur, MacQuarrie, Kidd, Banteyerga, Kidanu, Kilonzo, Mbwambo & Bond, 2003):

- HIV is associated with sexual taboos and immoral behaviour;
- HIV is considered a punishment from God for sexual sin;
- HIV is caused by sorcery, witchcraft or ill-will;
- HIV can be casually transmitted which engenders fear of HIV positive individuals; and
- HIV results in painful death and therefore HIV positive individuals must be avoided.

Stigmatisation results in us/them distinctions and the categorisation of in- and out-groups (Makena, 1999: 44). Clearly educator adherence to the above stigmatised perceptions could lead to a decline in school and personal wellness.

Educator perceptions of AIDS

Perception can be broadly defined as the manner in which meaning is made. Meaning in turn impacts on attitude and behaviour (Donald, Lazarus & Lolwana, 2002: 53).

In a study conducted amongst 20 SA rural high school educators, it was established that educators are less likely to hold negative perceptions of AIDS/HIV positive individuals, primarily because they are educated individuals (Makena, 1999:46-7). A second study conducted among 96 SA educators suggested more mixed perceptions: educator responses generally expressed sympathy towards AIDS victims, but typical stigmatising responses were included (Rees, 1998: 9).

When perception is pervasively negative, wellness must necessarily suffer.

Wellness and empowerment

In order to consider the impact of educators' perceptions of the HIV status of colleagues and learners on educator and school wellbeing, it is necessary to understand what is meant by wellness.

Wellness or holistic health can be defined as a state of complete physical, mental, and social well-being (World Health Organisation, 1998). Such wellness is considered to be dynamic and is affected both by personal and environmental factors (Ross & Deverell, 2004:14).

When personal and/or environmental factors are perceived as negative, stress ensues and a comprehensive physiological response (including mental, emotional, behavioural and physical components) is provoked. Chronic stressful responses are at loggerheads with emotional wellness or resilience (Ross & Deverell, 2004: 302). Resilience can be seen as the capacity to continue functioning adaptively despite adversity (Emspon & Nabuzoka, 2004:42; Theron, 2004:317). Thus, the resilient individual will continue to experience wellness despite unfavourable personal and/or environmental factors.

Perhaps one of the most crucial transformations within psychological theory is the notion that wellness can be nurtured and that environmental and intra-psyche onslaughts can be mediated. In this way the individual can be empowered to function adaptively, regardless of deleterious circumstances. This notion is termed health promotion (World Health Organisation, 1998).

Health promotion empowers both individuals and communities. Empowerment is a process through which people gain hegemony over choices and behaviour affecting their health (World Health Organisation, 1998). Empowerment is centred on (Scriven & Stiddard, 2002):

- the acquisition of skills (including thinking and decision-making skills);
- the acquisition of assertiveness, interpersonal competence and cognitive knowledge (which includes a deeper understanding of the issue at hand); and
- psychological perception (including self-esteem and perceptions of control).

It is well documented that the HIV/AIDS pandemic is impacting adversely on education and educators and disempowering the system (Coombe, 2000). In order to empower educators affected by the HIV/AIDS pandemic, it is necessary to ascertain educator perceptions of the HIV status of colleagues and learners and the impact thereof on educator and school wellbeing.

Research design

In an attempt to address the above research problem, survey research was conducted. A total of 500 primary and high school educators in the Pimville and Vaal Triangle regions of the Gauteng province were polled by means of a questionnaire. The questionnaire consisted of 11 open-ended questions. It was pre-tested on a multiracial group of 20 educators to ascertain that the language used in the questions was readily comprehensible. Two field workers (who are educators in these areas) requested colleagues to complete the questionnaire voluntarily. They ensured participants of the anonymity of responses. The number of questionnaires returned was 319 (64%). Table 1 summarises the sample of educators who participated voluntarily and anonymously in the completion of the questionnaire:

Table 1 Sample of educators

Educators	Number
Black female	150
Black male	64
White female	50
White male	42
No gender indicated	13
Total	319

The written responses were content analysed for common themes, patterns and biases relating to educator perceptions of the HIV status of colleagues and learners. The responses were also analysed by an independent content analyst and a composite of the analyses was used to understand educator perceptions.

Educator perceptions of HIV and HIV positive colleagues and the impact thereof on wellness

The survey conducted revealed the following trends in educator perception regarding the HIV status of colleagues and learners and its impact on education:

Trends in educator perception

- Educators generally perceived HIV to be a sexually transmitted terminal disease. Responses suggestive of stigmatisation were in the minority. Only 3.4% of respondents suggested that AIDS is a moral scourge, reflective of sexual taboos or unwise sexual practices.
- Educators generally perceived HIV positive individuals to be terminally ill people who may not be discriminated against. Responses suggestive of stigmatisation were in the minority, 7.5% of respondents suggested that HIV positive individuals are immoral and irresponsible, 5.9% of the responses reflecting negative perception came from white educators.
- Educators generally perceived HIV positive learners to be ordinary learners requiring special support and deserving of acceptance and care. Only 6.5% of educators hold stigmatised perceptions of HIV positive learners. Nevertheless, 15% of respondents suggested a need to be careful to avoid contact with HIV positive learners.
- Educators generally perceived HIV positive educators as terminally ill people who should be allowed to continue their profession without being discriminated against. There is a call for infected educators to be treated with dignity. Only 8.1% of respondents suggested that HIV positive educators are immoral and irresponsible or should be barred from teaching, 6.5% of the responses reflecting negative perception came from white educators, 7.2% noted that ill educators are prone to absenteeism, 6.8% of the latter responses were made by black educators, 20% of all responses suggested a need to be careful to avoid contact with HIV positive educators.

- The impact of HIV positive educators on general school wellness was considered negative, 65% of all respondents suggested that HIV positive educators are physically and emotionally ill with concomitant poor teaching. Absenteeism and curriculum disruption, with an ultimate deterioration in school standards, were specifically referred to. Educators feared that in due course schools' reputations will suffer which will result in a decline in learner enrolments.
- The impact of HIV positive educators on learner wellbeing was also perceived as negative, 52% of all responses suggested that learners' wellbeing suffers as a result of disrupted education. Education is disrupted by frequent educator absence, educators' emotional distress and the use of substitute educators. Reference was also made to the negative affective impact on learners that positive HIV educator status has, 11% of respondents perceived the impact in terms of traditional stigmas governing AIDS: HIV positive educators pose a health risk to learners and colleagues and their continued service at schools sanctions immoral behaviour.
- The impact of HIV positive educators on colleagues' wellness was generally considered to be negative, 29% of educators responded that HIV positive educators create tension. Such tension results either from a desire to avoid HIV positive educators because of general discomfort in their presence or from the stress of providing support to HIV positive educators, 27% of all responses suggested that increased workloads and overcrowded classes result when HIV positive educators are ill and absent. The net result of both of the aforementioned was that healthy educators cannot function optimally.
- The knowledge that colleagues might be HIV positive engendered an empathic response in 28% of respondents. Significantly, 24% of these responses were from black educators. White educators typically responded that such knowledge would have no or little effect. The latter might well suggest that white educators are in denial about the reality of the HIV pandemic or that they are not yet affected by it.
- The knowledge that HIV is a pandemic impacted negatively on educators' personal wellness, 33% of educators were psychologically burdened because of the death of loved ones and friends and depressed by the stigma of AIDS. Furthermore, they experienced the added stress of responsibility for personal health and safe sexual practices. A further 19% project worried about their personal status and the future of the country, 16% of educators did not elucidate how the HIV pandemic affects them personally — the latter may be because their lives have not yet been personally touched or because they prefer to deny the reality of the pandemic.
- In general, black educators were of the opinion that HIV should be demystified and seen as any other disease. School curricula should be adapted to accommodate AIDS education and all schools should have an effective AIDS policy. Furthermore, black educators were of the opinion that the government and Department of Education should intervene to save the education system from certain crisis. They call for an effective national HIV strategy; affordable, good drugs for all and care for AIDS orphans. White educators indicated concern about the impending education crisis (attrition rate of educators and learners), but suggested no solution. Instead they suggested increased awareness of AIDS via education and the inculcation of morality.

General analysis of reported educator perceptions with reference to wellness

From the responses it is clear that there is a high level of informed perception: most educators are familiar with the facts surrounding HIV/AIDS. Of the 319 respondents only 4 responses (1.2%) suggested inaccurate perception. Such misperceptions were:

- HIV is a judgement on immoral behaviour;
- HIV comes from baboons; and

- HIV is developed by whites to kill blacks.
- The political and official commitment to education of educators appears to have succeeded. In terms of wellness, this informed perception suggests adequate cognitive knowledge. The fact that educators polled do have an adequate understanding of HIV/AIDS is empowering.

The responses suggest evidence of cognisance of the Department of Education's National Policy on HIV/AIDS for Learners and Educators (South Africa, 1999) — educators' perception of HIV positive learners and educators reflect awareness of their rights and a general lack of discrimination. Commitment to education of learners to prevent HIV is also noted. The generally positive tone of the responses is crucial — educators occupy pivotal positions in influencing our youth and, by implication, society. The positive tone also suggests assertiveness with regard to the rights of HIV positive individuals. This advocates wellness.

Analysis of reported educator perceptions on school wellness

From the responses, it can be deduced that educator perceptions of the impact of HIV positive educators on school wellness reinforced current findings in literature: the reality of AIDS for school wellness is perceived as negative. In other words, educators are realistic about the impact of AIDS on education. The negative implication of the AIDS pandemic for school wellness is not as a result of negative educator perception, but as a result of the grim reality of AIDS. Increased educator absenteeism, educator and learner attrition and declining quality of education are intrinsic to the actuality of AIDS.

According to the responses of the educators polled in this study, it would seem that whilst educators recognise the impact of AIDS on quality of education, they do not generally reject or condemn HIV positive educators or learners. Educators generally distinguish between the impact of AIDS and the infected individuals. Only 10 of the 319 respondents (3.1%) suggested that HIV positive educators should be barred from teaching. In comparison, one third responded that HIV positive educators are people deserving of equal treatment and respect. No educators suggested that HIV positive learners should be excluded from schooling. It can therefore be deduced that school wellness remains generally unaffected by the reality of HIV when educator attitude towards infected colleagues and learners is considered.

Nevertheless, to suggest that acceptance of HIV positive colleagues and learners does not mar interpersonal relationships, would be both utopian and naïve. Tension results from conflicting poles: educators either seek to avoid or support HIV positive colleagues and learners — either impetus results in stress. Educators indicate that increased workloads also impact adversely, resulting in strain. If the wellness of affected educators is to be promoted, interpersonal skills and perceptions of self-control need to be fostered.

Of significance is how stigmatised responses differ according to race. Prejudiced responses about HIV positive persons were made by 5.9% of white educators, but only 1.6% of black educators. Prejudiced responses about HIV positive educators were made by 6.5% of white educators, but only 1.6% of black educators. Prejudiced responses about HIV positive learners were made by 5.0% of white educators, but only 1.6% of black educators. It would seem therefore as if there is a greater acceptance of infected HIV people among black educators. The knowledge that colleagues might be HIV positive initiated an empathic response from 34% of black respondents, but only 17.4% of white. A study exploring why this is so would be meaningful — the insight gleaned could perhaps be used to inculcate greater acceptance of HIV positive education stakeholders. Unconditional acceptance of all education role players is necessary for school wellness.

The 15% of the responses suggesting that HIV positive learners should be avoided and the 20% of responses suggesting that HIV positive educators should be avoided, need not necessarily be interpreted as prejudiced. Such statements referred specifically to the need to avoid personal, physical contact in order to avoid HIV transmission. Such caution could be bred by education on HIV transmission.

Analysis of reported educator perceptions on personal wellness

On a personal level, HIV/AIDS is deleterious to personal wellness and includes the following responses:

Fear

The common response was one of fear: 13.3% of black female respondents; 7.8% of black male respondents; 16% of white female respondents and 23% of white male respondents reported dread of personally contracting HIV. Perennial fear erodes wellness and the ability to provide quality professional service. Other respondents chose to interpret such fear less passively, by indicating active concern for personal safety: 13.3% of black female respondents; 28.1% of black male respondents; 7% of white female respondents and 33.3% of white male respondents expressed caution regarding personal habits in order to prevent contraction of HIV.

Concern for the future of South Africa

Concern for the future of South Africa was also projected: 6% of black female respondents; 6.3% of black male respondents; 26% of white female respondents and 14.2% of white male respondents expressed apprehension about the sustainability of South Africa's economy and general future.

Negative psychological experiences

Reports of severely negative psychological experiences when considering the fact that HIV is a national pandemic was gender and race-specific, 17% of black female respondents reported experience of psychological trauma or stress, 15.6% of black male respondents and 8% of black female respondents reported depression and suicidal ideation. White respondents made no equivalent responses.

All of the above allude to emotion which sabotages personal wellness. It would seem that affected educators are lacking in the skills, assertiveness and positive psychological perceptions needed to sustain wellness.

The consequences for education

The reality of HIV/AIDS is sinister. Educator perception of HIV/AIDS is in line with this reality. Educator perception of HIV positive colleagues and learners is both humane and enlightened. Their perception of the bleakness of the impact on education is pragmatic. Their perception of the impact of HIV/AIDS on personal wellness is bluntly realistic. All the education and/or management programmes cannot circumscribe or negate perception that is true to reality. Whilst education programmes have succeeded in inculcating a compassionate approach to HIV positive individuals, perception of the impact of HIV on the day-to-day routine of educators cannot be coached. The focus should rather be on acknowledgement of educator perception with a view to empowerment.

Recommendations for educator empowerment

Black educators polled call for government or departmental intervention. The Department of Education's National Policy on HIV/AIDS for Learners and Educators (South Africa, 1999) has succeeded in inculcating civilized attitudes, but does not address the systemic ramifications that educator attrition and morbidity hold. There is an urgent need for education policy (similar to that of the Comprehensive HIV and AIDS care, management and treatment for SA, released on 19 November 2003) concerning the management of the reality of HIV for education systems. Such policy will empower educators in that it should afford them a sense of order amidst the upheaval that HIV is engendering. The creation of policy is seen to be health-promoting (World Health Organisation, 1998).

It is not sufficient, however, to only call for departmental intervention. To do only that would be to succumb to a culture of dependence and external locus of control. Educators need to be empowered to deal with the reality of HIV/AIDS themselves. If they are to be empowered, their perception that HIV/AIDS is deleterious to education

must be accepted and educators must be empowered within this reality.

Educators can be empowered in numerous ways. The starting point must necessarily be acceptance of the fact that the face of education has changed. The previous paradigm of generally healthy educators with low absenteeism and high commitment has expired. The *status quo* of educators grappling with AIDS-related illnesses, related trauma and concomitant flagging teaching standards is the current reality. There is a need to call a spade a spade — until a cure is found, colleagues and learners will continue to die from AIDS and remaining stakeholders will need to make adjustments accordingly. This reality includes a flexible approach to the curriculum, additional teaching and administrative workloads and possibly less classroom contact time if learners without educators are to be accommodated. By accepting this reality, educators will be empowered to redefine their response to the HIV/AIDS pandemic.

Acceptance of the reality of HIV/AIDS for education and a redefinition of educator response, in order to empower, can be facilitated in three ways (Scriven & Stiddard, 2002):

1. Facilitation of skills acquisition which empower. Such skills could include:
 - empowering educators to cope with the anticipated adjustments by providing staff development plans and cognitive-behavioural workshops focusing on resilience and coping skills.
2. Facilitation of the acquisition of assertiveness, interpersonal competence and cognitive knowledge. Such skills could include:
 - providing educators with projected statistics of educator attrition and morbidity may discourage denial of the reality and acceptance of the fact that remaining educators will need to make professional and personal adjustments; and
 - continuing to recognise and minimise workplace risk, along with continued communication about the facts and myths of HIV transmission, thereby addressing educator fears for personal safety.
3. Facilitation of positive psychological perception. Such facilitation could include:
 - empowering educators practically by considering a policy of rotating educators: schools could employ an experienced rotating educator whose primary responsibility would be to alleviate workloads created by ill educators and simultaneously lessen educators' sense that their circumstances are beyond control;
 - instituting a mentor system to assist educators to survive the auxiliary demands and altered teaching load;
 - providing educators with safe spaces to discuss their feelings surrounding HIV/AIDS and its impact on their role and workload; and
 - forming a coalition between all educational stakeholders, parents and community leaders, as suggested by the Deputy Minister of Education, at the National Conference on HIV/AIDS in May 2002 (Mangana, 2002). Such a coalition will empower educators by virtue of the ensuing synergy and shared resources.

Ultimately, educator empowerment is a personal choice. Educators cannot choose to nullify the impact of HIV/AIDS on education, but they can choose their response to this reality. Cognitive-behavioural therapies accentuate the individual as a rational actor in modifying responses. However, recent research underscores the significance of group norms and collective change (Harrison, Smit & Myer, 2000: 285). There is a need, therefore, to inculcate group acceptance amongst the South African teaching corps of the altered education reality. Group acceptance can be facilitated by:

- education leaders modelling positive acceptance of the new *status quo*;
- tertiary institutions and NGOs providing intensive pre-service training for new educators regarding the reality of teaching and coping in an HIV-ridden environment;

- tertiary institutions and NGOs providing intensive in-service training for experienced educators regarding the altered reality of teaching and coping in an HIV-ridden environment;
- continued research into educator response towards the pandemic, with an emphasis on the coping responses of educators in the epicentre of the pandemic;
- the establishment of a common language of acceptance which will not stigmatise infected individuals or suggest that remaining educators are victimised or martyred by virtue of their acceptance of redefined roles; and
- a coalition of all education stakeholders modelling positive acceptance of the current educational *status quo*, sharing resources and supporting one another — an educational *tirisano* as such.

Conclusion

It is improbable that an effective cure for HIV will be available by 2010 (Harrison *et al.*, 2000:285). Speculation regarding the availability of a cure is tentative at best. What is real is the attrition and morbidity rates of learners and educators and the negative impact thereof for educator and school wellness. In the face of the HIV/AIDS cataclysm, it is inadequate to focus only on containing the pandemic — educators must be empowered to cope with the pandemic. Empowerment involves recognition of educator perception and management of their response. In the words of the Deputy Minister of Education, such empowerment must necessarily "... be imaginative, doing things we did not do before or in ways we did not follow before" (Mangana, 2002).

References

- Beasley M, Thompson T & Davidson J 2003. Resilience in response to life stress: the effects of coping style and cognitive hardness. *Personality and Individual Differences*, 34. [Online] Available url: <http://www.sciencedirect.com>.
- Carboni A & Dawson L 2001. *The role of academic discipline and gender in high school teachers' aids-related knowledge*. [Online] Available url: <http://web9.epnet.co>.
- Centre for the Study of AIDS 2003. *Over 55 KZN teachers died every month in 2000*. [Online] Available url: <http://www.csa.za.org/article/articleview>.
- Coombe C 2000. Keeping the education system healthy: managing the impact of HIV/AIDS on education in South Africa. *Current Issues in comparative education*, 3. [Online] Available url: <http://www.tc.columbia.edu/cice/content3.htm>.
- Development Gateway 2003. *HIV/AIDS: The social and economic impact of an epidemic*. [Online] Available url: <http://www.developmentgateway.org>.
- Donald D, Lazarus S & Lolwana P 2002. *Educational Psychology in Social Context*. Cape Town: Oxford University Press.
- Empson JM & Nazuboka D 2004. *Atypical child development in context*. New York: Palgrave McMillan.
- Fredriksson J & Kanabus A 2002. *The impact of HIV and AIDS on Africa*. [Online] Available url: <http://www.avert.org/aidsimpact.htm>.
- Guest E 2003. *Children of AIDS. Africa's orphan crisis*. Pietermaritzburg: University of Natal Press.
- Harrison A, Smit JA & Myer L 2000. Prevention of HIV/AIDS in SA: a review of behaviour change interventions, evidence and options for the future. *South African Journal of Science*, 96:285-290.
- Kelly MJ 2000. Standing education on its head: aspects of schooling in a world with HIV/AIDS. *Current Issues in Comparative Education*, 3. [Online] Available url: <http://www.tc.columbia.edu/cice/content3.htm>.
- Mangana M 2002. Together — the education coalition against HIV/AIDS. Address by Deputy Minister of Education at the *National Conference on HIV/AIDS in the education sector*, Midrand, May 2002. [Online] Available url: <http://education.pwv.gov.za/Media/Mangana/may02/hiv aids.htm>.
- Makana P 1999. Attitudes of teachers and street hawkers towards people who suffer from HIV/AIDS. *UNISA Psychologia*, 26:43-47.
- Nyblade L, Pande R, Mathur S, MacQuarrie K, Kidd R, Banteyerga H, Kidanu A, Kilonzo G, Mbwambo J & Bond V 2003. Disentangling HIV and AIDS Stigma in Ethiopia, Tanzania and Zambia. *Collaborative research report*. [Online] Available url: <http://www.icrw.org/docs/stigmareport093003.pdf>.
- Pretoria News 2003. The corpses pile up every Saturday. [Online] Available url: <http://www.learnscapes.co.za/HIVnews.htm>.
- Quinn A 2003. *S. Africa turns on AIDS — but some fear too late*. [Online] Available url: <http://www.learnscapes.co.za/HIVnews.htm>.
- Rees S 1998. Teachers' attitudes towards the AIDS crisis in South Africa. *NUE Comment*, 2:9.
- Ross E & Deverell A 2004. *Psychosocial approaches to health, illness and disability*. Pretoria: Van Schaik.
- Scriven A & Stiddard L 2002. Empowering Schools: translating health promotions principles into practice. *Health Education*, 103. [Online] Available url: <http://www.sciencedirect.com>.
- South African Department of Education 1999. National policy on HIV/AIDS for learners and educators in public schools, and students and educators in further education and training institutions of the Department of Education. *Government Gazette, No. 20372*. Pretoria: Government Printer.
- Theron LC 2004. The role of personal protective factors in anchoring psychological resilience in adolescents with learning difficulties. *South African Journal of Education*, 24:317-321.
- United Nations Department of Economic and Social Affairs 2003. *The impact of AIDS*. [Online] Available url: <http://www.unpopulation.org>.
- World Bank 2002. Education and HIV/AIDS. A window of hope. World Health Organisation 1998. *Health Promotion Glossary*. [Online] Available url: <http://www.wpro.who.int/hpr/docs/glossary>.