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Traditions and New Beginnings
for Knowledge and Impact

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CHAPTER 14

Culturally appropriate linguistic responses to taboo issues when teaching biology

Ayanda Simayi, Paul Webb

Introduction

Global discourse on science education has increasingly called for the expansion of its scope through the development of culturally responsive strategies (Abrams et al., 2014). A growing body of literature, including works by Abrams et al. (2014), Gay (2013), Gee (2015), and Mhakure and Otulaja (2017), has underscored the importance of these strategies, particularly within diverse cultural contexts. These scholars advocate for a pedagogical approach that takes into account the cultural backgrounds of teachers and students.

Furthermore, within this discourse, there is a recurring emphasis on the fundamental role of language in the effective teaching of science. Gay (2013), Lewthwaite et al. (2014), and Mpofu et al. (2014) have all highlighted the pivotal role of language in conveying the unique terminology and concepts inherent to various scientific disciplines. As Hodson (2009, p. 242) succinctly put it, “a subject is its language”, emphasising the inseparable connection between language and the subject matter.

Yore and Treagust (2006, p. 296) extend this notion by introducing the concept of a “three-language problem”. They contend that science education involves an intricate interplay of three distinct language domains: the students’ home language (L1), the language of instruction in school (L2), and the specialised language of science disciplines (L3). This perspective provides a comprehensive framework for understanding the complexities of language in conveying scientific concepts.

Additionally, a fourth dimension of the language issue (L4) arises when children are educated in a language that is not their native or home language (Webb, 2013, 2017). This situation is prevalent in Africa as a majority of the countries on the continent were colonised and due to their education systems being established in this period, they have inherited systems of education in the languages of their colonisers. This is still the case in most African countries, including South Africa (Maluleke, 2019). The challenges posed by this multilingual and multicultural context underscore the critical need for culturally responsive and linguistically inclusive approaches to science education (Msimanga et al., 2017), which is the focal point of this chapter, with an emphasis on heteroglossia, polyphony, metonyms, and taboos.

There is evidence that the language used when teaching sexual concepts in culturally homogenous communities such as the Xhosa people is constrained, and certain words and phrases are culturally taboo. For example, Doidge and Lelliott (2016) state that there are cultural taboo problems with language used when naming genitalia and sexual language which may not be part of the normal, everyday language of that group of individuals. Using such language may raise conflict between teachers, learners, and parents, bringing to the fore a need to directly confront the connection between culture, ethnic grouping and learning between individuals and groups (Gee, 2015; Kral & Schwab, 2016; Odora Hoppers, 2009)

Such taboos are common in rural areas where traditional culture persists most strongly (Deyi, 2016; Simayi & Webb, 2020). As such, the phenomenon of how cultural taboos influence language use when teaching aspects of human sexual reproduction has led to an interest in how, when teaching culturally sensitive issues in culturally homogenous classes, these metonyms, words and phrases can be used to alleviate this problem.

African teachers of Xhosa culture experience similar inhibitions when talking about sexual reproduction terms and processes in the schools where they teach and have difficulties providing a culturally appropriate response to these challenges. We also know that teachers perceive these inhibitions and language issues as taboos when teaching children of their own culture, and do not know how to alleviate them. As such, in this chapter, which is based on portions of Simayi's doctoral thesis (2021), we examine linguistic issues of polyphonies, metonyms, and taboos surrounding menstruation where strong traditional Xhosa culture persists, that is in rural areas of the Transkei, South Africa.

Language and taboos

In the film *We Still Live Here – âs nutayuneân* (Newell, 2011) which documents the efforts of the Wampanoag people to revive their indigenous language, the renowned linguist, Noam Chomsky, reminds the viewer that “a language is not just words. It's a culture, a tradition, a unification of a community, a whole history that creates what a community is. It's all embodied in a language” (Hajek, 2021). First-nation peoples and those communities whose languages are in danger of extinction understand better than most how language encapsulates cultural heritage and history, acting as a core element of communal identity. Language is an effective communication tool, but intracultural epistemic access requires intracultural communication (Kecskes, 2015, 2018). However, there is the issue of lexical ambiguity that exists within the same culture, concepts referred to as heteroglossia, polyphony and metonyms by linguistic scholars (Akuno, 2017; Mtintsilana, 1990).

Heteroglossia is a concept introduced by Russian linguist and literary theorist Mikhail Bakhtin (Todorov, 1984). It refers to the coexistence of multiple voices,

languages, and discourses within a single linguistic or cultural space. In other words, heteroglossia acknowledges that language and culture are dynamic and constantly evolving, with various voices and perspectives interacting and influencing one another.

Polyphony is a literary and linguistic concept that is closely related to heteroglossia. It refers to the existence of multiple voices or perspectives within a text or discourse (Bakhtin, 1984, 2010). In polyphonic texts, different characters or speakers may express their own viewpoints and ideologies, creating a rich and complex narrative. Polyphony is a manifestation of heteroglossia in literature.

Metonyms are figures of speech in which one word or phrase is substituted with another closely related word or phrase to represent a larger concept or idea (Akuno, 2017; Hutchison, 1998). Metonyms rely on the idea that words are connected to broader cultural and social contexts. In a heteroglossic environment, metonyms can take on various meanings and connotations, as different voices and discourses influence their interpretation.

Teaching and talking about content of a sexual nature is a problem in many parts of the world (Buni, 2013; Kral & Schwab, 2016). There are studies on culture and human reproduction in sub-Saharan Africa such as Doidge and Lelliott's (2016) research on metaphorical language and sexuality education but generally, African research projects focus mainly on HIV and sexuality (Gudyanga et al., 2019; Mpondo et al., 2018; Ngabaza & Shefer, 2019). In particular, MacEntee (2020) cites Masinire et al. (2014), emphasising a paucity of research on the existence and influence of cultural taboos in African contexts. However, we do know that intracultural communication is a foundational element for effective teaching and discussions surrounding sensitive/taboo topics in communities that have deeply rooted conservative cultural views.

Taboos are social or cultural restrictions or prohibitions related to certain topics or behaviours. They vary across cultures and can include restrictions on discussing or teaching certain subjects, such as sexuality and menstruation. In a heteroglossic context, taboos may be upheld by some voices or communities while challenged or reinterpreted by others.

As noted above, heteroglossia is a concept that highlights the diversity of voices and perspectives within language and culture. In the context of teaching sexual concepts in culturally conservative communities, heteroglossia highlights the complexity of balancing traditional taboos with contemporary educational goals and values.

There is evidence of such taboos in Xhosa rural communities (Simayi & Webb, 2019). In classes where isiXhosa speaking children are taught what may be considered to be sensitive sexual content by isiXhosa first-language teachers in the English language in rural schools, these taboos persist and negatively affect any meaningful teaching and learning of the topic.

Such a taboo is the teaching of sexual concepts in culturally conservative communities like the Xhosa cultures in South Africa, it appears that in such communities there can be a clash of heteroglossic voices and perspectives. On one hand, there may be traditional or conservative voices that adhere to long-standing taboos surrounding the discussion of sexual concepts and menstruation. These taboos could stem from cultural, religious, or social beliefs that consider these topics as sensitive or inappropriate for open discussion, especially in educational settings.

On the other hand, there may be voices advocating for a more inclusive and informative approach to sex education, recognising the importance of providing accurate information about sexual health, menstruation, and related topics to young learners. These voices may draw from global or contemporary discourses on comprehensive sex education, human rights, and gender equality.

The coexistence of these diverse voices and discourses within the community creates a heteroglossic environment. It is within this context that educators and policymakers must navigate and make decisions about the curriculum and teaching methods in schools. They have to address and potentially challenge certain taboos while respecting the cultural values and beliefs of the community.

Design and methodology

In Simayi's (2021) original doctoral study, polyphonies, metonyms, and taboos surrounding menstruation were explored as part of the research with teachers of Grade 12 biology. A preliminary semi-structured questionnaire was administered using pen and paper to 30 participants. The questionnaires included demographic questions aimed at establishing relevant sampling based on cultural grouping, subject taught, and rural location of the schools during the initial data collection session. The second data set was captured from focus group questions aimed at establishing use of polyphonies and metonyms by teachers or learners during teaching. The third data set was generated from a flow-chart which was sourced as personal reflections by the teachers.

Thematic data analysis was conducted on the generated data by identifying similarities through colour-coded themes and key terms (Braun & Clarke, 2019; Clarke & Braun, 2014). Following the translation and transcription processes, data were analysed by organization into patterns and themes through manual coding involving sorting, writing, and labelling techniques (Creswell & Plano-Clark, 2007; Denzin, 2012). In phase one, the exploratory study consisted of 18 female and 12 male participants, making a total of 30 participants as the first phase of critical participatory action learning and action research (CPALAR) design. Results of data analysis from open-ended questions revealed cultural avoidances and no use of Xhosa terms in explaining menstruation due to Xhosa cultural restrictions. Focus group interviews revealed the following: that there are multiple terms used for

menstruation by Xhosa teachers; even the teachers indicated that they do not teach menstruation due to poor learner behaviour when sexual topics are taught.

Heteroglossia was used as the theoretical underpinning to comprehend the intricacies of intracultural communication within the context of sensitive/taboo topics in this study, and a linguistic framework using Bakhtin's theory of heteroglossia was applied using the topic of menstruation within the Xhosa culture to offer insights into the language-related issues examined in this study, namely heteroglossia, or polyphony, which represent diverse language discourses where nuanced variations in meaning emerge within specific social contexts. An illustrative example of polyphonies in isiXhosa is illustrated where menstruation is termed '*engceni*,' signifying 'on the grass,' and '*exesheni*,' connoting 'on time.' The notion of polyphony denotes multiple voices or discourses within a social grouping, which is also referred to as multi-voicedness (Bakhtin, 2010).

This exploratory study sought to unravel the potential of heteroglossic terms within a seemingly homogenous culture, with a specific focus on the Xhosa culture. However, it was found that even individuals within the same culture residing in different geographical regions exhibit subtle variations in the terminology they use. As such, this chapter endeavours to uncover and analyse the presence of diverse linguistic expressions and their implications within the context of intracultural communication within Xhosa culture.

Results and findings

Results of data analysis from open-ended questions revealed that participants avoided talking about sexual concepts in their biology classes and in community settings due to Xhosa cultural restrictions. Counting of participants' responses indicate that all 30 participants responded with "*no*" to the question of whether they thought that human reproduction topics such as menstruation, ejaculation, fertilization, pregnancy and childbirth are part of the normal cultural conversation among young and old members of their culture. Out of the 30 participants, 10 participants did not give explanations for their *no* responses.

Based on translation and coding of the transcripts using Atlas ti. 8 software, two dominant patterns that emerged from the responses were: "*Asibizi*" around sexual concepts. A Xhosa term meaning avoidance of talking about something, signifying how cultural taboos restrict teaching of sexual concepts due to innate Xhosa cultural beliefs. Results of data analysis indicated that 20 out of 30 participants responded with explanations indicating that they avoided explaining sexual topics in isiXhosa as their culture prevented talk about sex matters such as vagina, penis and menstruation.

Verbatim responses were as follows (the original identifiers are presented on the left and on the right further down):

- P29: *Asibizi, not allowed in our culture.*
- P9: *According to our culture, it is seen as a sign of disrespect and looking down at our culture.*
- P20: *We don't say these things, siyahlonipha, asibizi.*
- P30: *Yhoo! Even menstruation is difficult to talk about, it is a No-No! We talk sex things with friends. Boys are very naughty and uncontrollable in class.*
- P7: *Traditionally we don't talk about it.*
- P23: *Tradition dictates silence on sex language or talk.*

Data analysis showed additional support for the development of *asibizi* was provided by the “groundedness” (Friese, 2019, p. 14) of the code, showing the number of times that a particular written text was connected to a particular code. For example, results show in vivo coding that generated the code *asibizi, not allowed in our culture*, had a grounding of 17. This means that 17 text passages were connected to the code *asibizi, 'it's not allowed in our culture'*.

Supporting comments for the general description of the cultural aspect of *asibizi* was shown by statements that did not disclose specifically what was being avoided in sexual talk. For example, participants gave general statements such as “*gender and age restrict sex talk*” and “*people respect sex (ukuhlonipha) topics*”. There were also direct statements that named the sexual concepts they avoided and how they felt about the avoidance, such as “*Menstruation talk is culturally taboo*” and “*Penis talk is taboo in presence of circumcised boys*”.

Supporting statements for cultural limitation on talking about sexual concepts was derived from the participants' written responses:

- P1: *I was raised in a community of Xhosa people who respected private parts and never called them with their real names. Even now, we don't talk about sexual parts and sexuality openly.*
- P4: *No, it's called 'amanyala/izimanga'(vulgar) in isiXhosa, so we don't talk about these sex things, parents used to hit us and said we are using vulgar language when we asked anything close to sex.*
- P5: *My culture does not allow talking about sex matters, we respect instructions of older people as forbearers of our Xhosa tradition.*

Further data analysis indicated an expression of a common text in the vernacular of ‘*siyahlonipha*’, meaning ‘We are respectful’ in English. Again, cultural value was coded as central to the avoidance of naming sexual concepts. A theme emerged indicating that there were common cultural taboos expressed as ‘*siyahlonipha*’,

meaning that participants avoided naming sexual concepts out of respect for their cultural values as indicated by the participants' comments:

P10: *Talking about sex, reproduction, parts or organs is not normal in our culture, siyahlonipha.*

P22: *My family values don't allow sex talk.*

Various responses indicated that Xhosa language was not used to clarify sexual concepts, only English was used:

"It is difficult for me to call vagina in isiXhosa, even in English. Instead, I use substitute terms ... I end up using slang and call vagina 'usisi'." (1A)

"Explaining and teaching fertilization in learners seems as if you say they must do sexual intercourse." (1B)

"Learners disrespect me as if we are of the same age." (1C)

"It is easy to say it in English, but I don't feel comfortable to say it in my own language." (1F)

Xhosa beliefs acted as a barrier as female teachers were held back by Xhosa cultural beliefs related to circumcised men, that is, boys who had undergone the rite of passage (usually at eighteen years of age) to become considered as men:

"According to our culture, as a woman you have to respect men especially those who have reached 'manhood' (circumcised)." (1G)

"I feel like culture is a barrier in teaching reproduction." (1G)

"Teaching about the penis is very difficult. It seems as if you are invading the privacy of men." (1B)

"My Xhosa culture stops me and does not allow the pronunciation of these terms." (1D)

"It becomes difficult for me to call vagina; I use substitute terms to call it. Terms that are acceptable to use in my culture." (1A)

The unexpected gender trend continued to develop from data analysis as results showed that male teachers felt uncomfortable and disrespected when teaching sexual concepts, particularly when teaching sexual concepts related to typical male anatomy. Male participants felt naked, as if learners could see the anatomy of the male reproductive system through their clothes while presenting the topic:

"I am a male teacher, and these parts are in me and kids start to see these parts in me. It made me feel uncomfortable to disclose some of the sensitive parts such as testis. Learners want me to explain their personal issues because they start talking about their male and female problems." (1E)

“Testes, it is easy to draw and label both the testes. It is difficult to explain in Xhosa language. I do not feel comfortable to say it (penis) in my own Xhosa language.” (1F)

In addition, male participants feared being disrespected by learners when having to teach both male and female sexual concepts. Male participants feared losing their respected status as men when having to explain the structure and functions of sexual concepts:

“The kids disrespect me as a male teacher because I have disclosed some of my private parts such as penis and testis and these kids look at me that way (funny and disrespectful way).” (1E)

“I am unable to call sexual terms by their name in my language. I explain in English as I am uncomfortable to explain in Xhosa.” (1F)

Male participants were also scared of being viewed as having disclosed secret Xhosa cultural practices that occur in male rites of passage to manhood such as circumcision:

“Kids start to doubt that I am a Xhosa guy because I am disclosing everything in front of the female kids, and they doubt that I am a man. It made me feel uncomfortable to disclose some of the sensitive parts such as testis.” (1E)

“Because of culture, I am unable to call (parts of) the female reproductive system by their name using my own Xhosa language.” (1F)

There were moments of excitement emanating from the use of the vernacular “*yiyeke kanjalo mam, yibamb’ apho*”, meaning ‘stop there, just there’ (PF2) in addressing the issue of female teachers being stopped by male learners in class, observed from simultaneous talk as more female participants continued talking while PF2 was still talking:

“When you start talking about circumcision they say, ‘No, stop there Mam, stop just there (yiyeke kanjalo mam, yibamba’ apho’ (immediately) there is a confirmation from others while the speaker is on of ‘heeke’ and laughter from others and excited talk amongst each other.” (PF2)

The reported negative responses of male learners towards female teachers was exacerbated by their living in the same rural village as the learners:

“Heey! It is more difficult to teach these sexual things as we are staying in the same vicinity with them, and you also see the manner they look at you that it is totally disrespectful and different than before the sexual lesson.” (PF1)

Heteroglossia and terms for sexual concepts

Probing for the actual Xhosa terms used in simplifying sexual concepts was key to getting the language used by the teachers to clarify sexual concepts to Grade 12 learners of Xhosa cultural background in rural secondary schools. However, it started on a negative footing as teachers kept quiet and did not respond to the question. Participants were required to say these Xhosa sexual terms aloud in the focus group session. There was total silence, nobody was talking, and men looked down at the desk in front of them after I had posed this question. This was followed by unintelligible murmurs, some fidgeting with a pen, others looking down at the desk in front of them, coupled with turning and tossing on swivel chairs. I could sense that my question had created some tension as participants kept quiet.

Generating data proved difficult as participants continued to share their challenges instead of giving specific responses to the direct question requiring examples of Xhosa terms used in clarifying sexual concepts. The teachers kept deflecting questions on the naming of Xhosa sexual concepts expressing their frustration. Even though I felt anxious that I was not addressing the research question, I allowed the participants to communicate their views as allowed by the selected research design. For example, a participant reported on the difficulty of being labelled as non-Christian for teaching sexual concepts (PF4):

“In my school, I used to teach human reproduction and had learners who labelled me. Learners who were saved by Jesus labelled me as a person who was no longer part of the Christian brethren, not 100% saved because of what I was saying in class.” (PF4)

I was stressed a bit as I thought that my study was about to fail due to a lack of responses. At the same time, I thought the participants required guidance as they remained seated and continued to be part of the study. Probing the participants to say out loud (to name) Xhosa concepts that are known and used in their mother tongue when referring to sexual concepts, I elaborated on the question and used specific Xhosa substitute terms such as ‘*inkomo*’ (cow), ‘*igusha*’ (sheep) when referring to the vagina.

I had to alleviate tension as the teachers could not share openly the specific terms that they use to explain how they teach sexual concepts. Silence and occasional unintelligible sighs and shock mumbling in isiXhosa like ‘*Mnxccxx*’ (a mostly involuntary sound and action made in frustration, known in English as ‘sucking one’s teeth’), indicating helplessness and frustration, emerged from the data. I had to think quickly and made an inoffensive joke about specific sexual concepts, this exercise helped to break the ice, and they all laughed. I had to identify with them and really be an insider and they openly shared their isiXhosa terms after this playful activity.

An inoffensive joke about the penis was the icebreaker in this tense situation. Saying the real Xhosa word for penis aloud, ‘*umthondo*’, without using nicknames

or substitutes, produced emotions of shock such as ‘Yhuuu’ in Xhosa, mingled with laughter, broke the silence. ‘Yhuuu’ is an exclamation term in isiXhosa therefore, the results show that the participants were shocked at first on the use of the term ‘umthondo’. However, the shock was followed immediately by laughter and participants shared their views (PF4):

“I, in my personal teaching experience, I would never explain in isiXhosa such that I use simple English that I think they can understand because I am avoiding to say these things. I get scared of saying these scary things. (There is an emotional minute where participants spontaneously talk, some saying ‘yhuu’ (shock) and helplessness, mxxcm (disdain) and hands thrown in the air to show loss of hope).” (PF4)

Barriers about pronouncing Xhosa names were broken as participants joined in, in a jovial atmosphere and shared Xhosa substitute terms that they used for sexual concepts. A male participant revealed that, to him, the penis is a “kettle (*iketile*)”, and this substitute word was used to avoid saying “vulgar terms like penis”:

“On my side I use my home experience for example, the kettle is a substitute for the penis. So, when teaching, I use the kettle instead of using penis as a substitute as a way of avoiding the use of repeated English vulgar terms like penis.” (PM6)

Data analysis showed that there were less suitable substitute Xhosa terms as some sexual concepts have more than one substitute for the concept. A different substitute name for a penis was given by another participant, calling it a “*tososo*”. The *tososo* produced laughter among the participants:

“The penis is also a ‘tososo’ (laughter from all the participants).” (PF4)

No additional substitute terms were given as participants shared only the two substitute terms for the penis (*ketile* and *tososo*).

However, the Xhosa cultural time period used by the model teacher explained the menstrual process using ‘gentle’ Xhosa concepts for fertilization and active sex days for women wanting to fall pregnant:

“We know that ovulation from the science curriculum is the release of the egg cell. Therefore, we can integrate the period of ‘jumping the fireplace after being on the grass or on time’ as equivalent to having sex after menstruation and that is the ovulation period.” [T: 00:03:00:00]

A cognitive shift was reported by the model teacher and confirmed by the teachers as:

“We have integrated our cultural terms which were used by the elderly as we use them now in our menstruation talk. We have moved to what is called ... chorus response from colleagues ... equipollent cognition.” [T: 00:02:30:00]

There is a Xhosa culture counting programme that compared similarities in the counting of the number of days in the 28-day menstrual cycle, using Xhosa euphemistic concepts. Ovulation was counted from day 11 of the menstrual cycle and was regarded as the *free time* for copulation (jumping the fireplace) for families that wanted a pregnancy:

“After 10 days, from day 11 it’s free time to jump the fireplace and is regarded as ovulation because the egg cell has been released, although old people did not have this term of ovulation.” (PF1)

Thickening of the endometrium (*grass*) and nourishment by the blood capillaries (*soil*) was known as a preparation for receiving a fertilized egg cell that would be implanted in the readily prepared grass (endometrium):

“As our teacher explained just now, the grass which is the endometrium and its soil which is the blood vessels, have become thicker and ready to receive something new for attachment, that’s a fertilized egg cell that will be implanted inside the fertile grass which is the womb or endometrium.” (PF1)

The importance of an endometrium that was reported as becoming *thicker like a thick carpet*, signified that historical Xhosa women, although they were reportedly unlearned, instinctively knew about developmental challenges that took place inside a young woman’s body. Moreover, knowing that the thickening of the endometrium takes place on completion of menstruation and a thickened endometrium represents a state of readiness for fertilization is important for integrating IK into the teaching of sexual concepts:

“Once menstruation or ‘being on grass’ stops, the endometrium inside the womb grows and grows thicker just like a thick carpet for the attachment of the embryo while the soil (capillaries), get ready to provide nourishment for the growing embryo.” (PF1)

There was a change from avoidance to naming of sexual concepts, to using the euphemistic Xhosa words first before using the ‘avoided’ scientific sexual concepts. Participants reported feeling less frustrated as they shared ideas and they could not believe that they were talking amongst each other openly about concepts such as copulation and fertilization *“without stress”*:

“Can’t believe that I’m saying these things like copulation, fertilization and menstruation without stress ... laughter ... seriously this IK and CAT information has made saying and using these terms lighter.” (PF1)

“Yes.” (group members agree in unison)

Participants revealed that before the research discussions, teaching sexual concepts would make them feel like “*dying inside because of pain*” of having to talk about sexual concepts to learners:

“To me, feeling like a wilted flower means that I feel like dying inside because of pain of saying these sexual words. These things that we teach strip us of our humanity so much and kills the self-respect that we have deep down inside just like this wilted flower.”
(PF4)

Discussion and conclusions

It was revealed early in the research process that the teachers did not know of any form of culturally responsive teaching strategies that they could use to teach sexual concepts. They reported that “*we do not know any culturally responsive strategies, we simply teach these things in English*”. This lack of existing culturally responsive strategies is affirmed by research studies that reveal that professional development strategies are scarce (Desimone, 2009). Adedeji and Olaniyan (2011) comment on this general lack of knowledge about IK-based strategies, citing that there is little to no direction on how to teach IK by departments of education. The participants’ lack of knowledge is thus not confined to the context of this study but is supported by literature.

Considering that the different isiXhosa speakers used polyphonies and metonyms for sexual terms enabled the improved teaching of sexual terms via this research intervention, the following broad recommendations can be made for stakeholders with an interest in developing culturally responsive strategies in rural schools. They are to conduct regular professional development (Desimone & Pak, 2017) sessions on IK and science teaching where teachers can develop a bank of Xhosa terms that can be used as substitutes for sensitive concepts. Extending the professional development to include officials of the Department of Education so that the new knowledge is used by the governing education sections in school material and empowering rural-based teachers through science content-based sessions which are linked with their IK so that they can develop culturally responsive strategies (Budge, 2006, 2010; Nkambule et al., 2011).

Although the substitute terms referred to in this study are specific to, and were drawn from, Xhosa history used long ago by unlearned yet authoritative women elders, the methods are probably transferrable to other aspects of teaching and learning in communities located in rural spaces (Gay, 2013). This claim is made because this small-scale research intervention with rural teachers in a deeply culturally determined community has been shown to be effective where there are local linguistic heteroglots who know the cultural history still known by many deeply rural Xhosa people (Mda, 2007).

In short, this study suggests that the use of culturally responsive teaching strategies developed by isiXhosa speaking teachers who teach children of the same culture has a meaningful prospect of success. The issue of familiar language is regarded as a fundamental form of communication and as a means of empowering teachers working in marginalised, rural and indigenous Xhosa communities. Not only is the claim made that using local linguistic heteroglossia and cultural history is an effective strategy among rural Xhosa communities that are steeped in their indigenous culture, but that it may also be an effective strategy for many indigenous people worldwide (Hodson, 2010).

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