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## Connecting embodied learning to social and environmental responsibility for the realisation of Life Orientation outcomes

#### Abstract

There is a lack of knowledge about how embodied educational practices can be used to challenge and problematise traditional Life Orientation teaching approaches that normally result in a lack of learner engagement on socio- environmental challenges. The objective of this small-scale exploratory qualitative study was therefore to establish whether Grade 10 Life Orientation teachers encouraged embodied learning experiences that are grounded in learners' lived experiences, creativity, expressive potential and perspectives. Data were generated from lesson observations combined with semi-structured individual interviews that were analysed thematically. The findings revealed that the participating teachers struggled to transform complex social and environmental matters into concrete embodied educational experiences for their learners. An additional finding highlighted the importance of how the Life Orientation curricula can serve as a stimulus to aid an embodied teaching-learning approach towards social and environmental responsibility. These findings provide a starting point for the development of a framework to guide Life Orientation teachers to employ embodied learning practices and, thus, meet the outcomes of the subject as envisaged in policy statements.

**Keywords:** CAPS, embodied learning, holistic education, lived-environment, Life Orientation, social and environmental responsibility.

#### 1. Introduction

Children have become increasingly exposed to and must deal with social and environmental challenges in their lived environments. Challenges such as climate change, substance abuse, HIV/Aids, tuberculosis, etc. therefore warrant the need for the inclusion of social and environmental responsibility in the Life Orientation (LO) curriculum with the aim to encourage learners to evolve into responsible citizens (Department of Basic Education [DBE], 2011: 8). Successful direction by LO teachers regarding social and environmental challenges becomes important because learners must be able to translate acquired knowledge into action. In line with this, Nel and Nel (2016: 35) as well as Magano (2011: 119) raise the valuable point that meaningful learning in LO is evident when learners are responding to real-life challenges by the application of what they have been taught. Le Grange (2004:390) also reminded us that learners come to know their environment through self-discovery and self-clarification of values. Policy also states that educating for social and environmental responsibility must be based on the application of knowledge, skills and values in real-life situations (DBE, 2011: 8). This suggests that educating for social and environmental responsibility, a holistic endeavour (DBE, 2011: 8), strengthened through a combination of academic and experiential dimensions (Nel & Coetzee, 2018:11) is needed. Such an approach has the potential to enrich learners' lives by transforming the way they see and experience social and environmental responsibility. It is here where embodied learning comes into its own.

The term "embodiment", as coined by Payne (1997), presumes that our body and its experiences present a way of knowing. Within the South African context, Le Grange (2004; 2019) expanded the discussion on embodied learning by applying it to social praxis and its relation to embodiment. For him embodied learning constitutes a contemporary pedagogical theory of learning that emphasises the use of the body in the educational practice and the teacher-learner interaction inside and outside the classroom (2004:338). This argument is supported by Munro (2018:5) who sees the body as situated in the environment, and, as such, interacts with that environment on a daily basis. It can therefore be argued that teacher-learner bodies are not passively located in the world, but that they are able to change social conditions through action. This has implications for how LO teachers view their learners, including their teaching and learning approaches towards social and environmental challenges. I therefore want to suggest that the application of embodied learning practices towards social and environmental challenges is necessary for at least the following reasons:

- it presents an alternative to conventional textbook-driven assessment activities;
- it helps to take social and environmental challenges off outdated textbook pages;
- it narrows the gap between the LO classroom and the lived environment of learners; and
- it has the potential to encourage responsible citizens through praxis.

Given the above, I draw on the principle of embodiment and an embodied pedagogy, relate it to LO and argue that if learners can make embodied connections – at a sensory level – with social and environmental challenges in their lived environment, they will be able to translate head knowledge into positive behavioural outcomes.

The purpose of this study was therefore to understand how social and environmental responsibility manifested in LO classrooms as a foundation for the initial design of an easy-to-follow framework. Such a framework can assist LO teachers to make effective embodied pedagogical choices with the aim to develop knowledge, values and skills that are transferable to real-life situations. My research question was specific: What guidelines should be included in such a framework that will encourage LO teachers to effectively link social and environmental responsibility to embodied learning?

# 2. Conceptualising embodied social and environmental responsibility through pragmatism

Central to LO is its transformative orientation toward empowerment, enablement and development (Nel & Coetzee, 2018:10) as well as holistic development (DBE, 2011:8). This implies that what learners learnt in the LO classroom must be applied in real-life situations in order to live a meaningful and successful life in a rapidly changing society (DBE, 2011:8). Thus, teaching social and environmental content alone means that learners stop at knowing. Learners need to be engaged as active human bodies at all levels on matters that affect them in the lived environment. Valuing the whole learner (mind-body) as a key area of enquiry can therefore ensure that they may experience life skills education through multiple entry points (Yoo & Loch, 2016: 528). This approach potentially affords opportunities to equip and empower learners with meaningful embodied knowledge, values and skills to mitigate the challenges that social and environmental issues present to their wellbeing in their lived environment. Such action, according to Zipin (2017: 81), can encourage learners to become collaborative problem solvers through which they can recognise their agency.

The aforementioned reiterates the importance of a philosophy of pragmatism towards social and environmental challenges. The basis for this philosophy, according to Nel and Coetzee (2018: 10), is that knowledge should be applied to real-life challenges through a process of gathering information, considering possibilities, making choices and putting them into effect. In this regard, Le Grange (2010: 13) proposes viewing the learner body as a "site" for understanding, explaining and acting. This suggests the need to implement teaching and learning strategies in LO classrooms that will create conditions in which learners can become aware of and develop their own voice, power and agency (Athiemoolam, 2021: 161). Here, education that addresses the interests and particular needs of learners and is directed at resolving social and environmental challenges in the lived environment can encourage competencies such as embodied knowing, doing and being. Therefore, to enable learners to purposefully share and explain ideas and explore ways to address social and environmental challenges in the lived environmental challenges social and environmental challenges social and environmental challenges in the lived environmental challenges in the live

#### 3. Methodology

I chose a qualitative research approach because Mertens (2020: 243) describes this methodology as a situated activity that locates the observer in the world and where the world is made visible through interpretive practices. Such methodology assisted me to generate enough data and to develop a plan of action (Mills, 2011:5).

#### 3.1 Sampling

Participants for this study were purposefully recruited, as insight and understanding were sought (Curtis, Murphy & Shields, 2014: 29; O'Leary, 2014: 186) regarding their pedagogical practices towards lessons under the topic "social and environmental responsibility". The criteria for recruiting Grade 10 LO teachers were as follows: they had to have taught LO at their school for at least three years and had to have some formal qualification in LO or participated in training workshops on CAPS organised by the Department of Basic Education in the North-West Province. Five of the participants had specifically been trained in teaching LO. The schools that were selected ranged from middle to high socio-economic status.

#### 3.2 Trustworthiness

To ensure the trustworthiness of lesson observations, I drew on my experience as a teacher for 20 years and eight months and as an LO lecturer for more than 12 years. Internal trustworthiness was also ensured through the completion of an observation sheet to gain input from the participants on my lesson summaries. To avoid any misinterpretation regarding lesson observation and responses during the semi-structured individual interviews, I shared my interpretations with the participants (Okeke, 2015: 219).

#### 4. Ethical measures

Written permission to conduct this study was obtained from the Department of Basic Education (North-West) as well as the school principals and teachers involved. Ethical clearance was obtained from the ethics committee of the North-West University (NWU-00040-14-A2), which ensured that I complied with its stringent ethical requirements of justice, beneficence and fairness.

### 5. Data generation

Various data generation methods were employed, namely lesson observations, semistructured individual interviews, the analysis of education policy statements and my own observation of relevant aspects within the classroom. I conducted 14 lesson observations (two per participant) with the consent of the teachers when they covered social and environmental responsibility. I relied on a process of overt observation whereby my intentions were made known to the participants (Okeke, 2015: 210). My reliance on lesson observations was an opportunity to move beyond the participants' opinions towards an evaluation of their action in practice (Shulman, 2014: 342). Table 1 gives an overview of the behaviours I observed.

#### Table 1: Examples of items on the observation sheet

How are learners encouraged to experience social and environmental challenges in a holistic manner?

How does the teacher incorporate useful learning and teaching strategies to encourage embodied knowledge, values and skills regarding social and environmental challenges?

All seven participants were interviewed after each lesson to understand their ideas of why they used specific teaching-learning strategies and learning material to gain an empathetic understanding of and sensitivity to their educational needs (Okeke, 2015: 218). Using these data-generating methods enabled me to derive findings that have relevance to the real-world settings of the participants (Gay, Mills & Airasian, 2006: 400).

#### 6. Data analysis

I thematically analysed the data, which allowed the analysis process to become an embodied and a re-lived experience (Struwig & Stead, 2013: 12). From the lesson observations and semi-structured interviews, three important themes emerged. These are discussed in the following section.

### 7. Discussion of findings

This section shares insight into the three broad themes that indicate that the participating teachers did not provide opportunities for learners to have embodied educational experiences. I explain each theme substantiating my claims with direct quotations (Participant A–G) and discuss these in relation to relevant literature.

#### 7.1 Theme 1: Teachers tend to rely on disengaged pedagogies

Classroom observations revealed that all the participants relied on learner textbooks to address social and environmental issues (see Table 1).

Participant	Lessons observed	Preferred learning and teaching support material for two lessons	Teaching-learning practices
A	Introduction to social and environmental responsibility Violence, HIV and Aids	Textbook	Teacher-led discussion based on textbook topics
В	Poverty, violence, food security, HIV and Aids Skills for participation (activism)	Textbook	Group assignment
С	Introduction to social and environmental responsibility Poverty, unemployment and corruption	Textbook	None
D	Introduction to social and environmental responsibility Poverty, unemployment and lack of housing	Textbook	None
E	Social and environmental injustice Violence and corruption	Textbook	None
F	Social and environmental injustice Violence and corruption	Textbook	None
G	Poverty, violence and social and environmental injustice Poverty, lack of housing and unemployment	Textbook	None

 Table 2:
 Lessons observed and preferred learning and teaching support material

For me as a researcher, the reliance on textbooks not only disengages learners from their lived environment but it also overshadows the underlying outcomes-based curriculum principles such as active learning, critical and creative thinking (DBE, 2011:3). The following responses provide evidence of my conclusion -

Well, I go and read up on the lesson topics to make sure that I understand it [sic]. I supplement this with visual aids. At the end of the lesson, learners complete the activities in the textbook (Participant A).

I first look at the policy statement and then you take the textbook and see what learners must learn for the examination (Participant B).

No. I work according to the guidelines of the policy statement. This document specifically indicates what must be done, and then you go back to the textbook, and then you prepare accordingly (Participant D).

I basically look at the textbook (Participant E).

I first use the textbook which is prescribed for learners (Participant F).

I read a lot – newspapers – and follow the news. I then use the learner textbooks during the presentation of such topics (Participant G).

Textbooks, life skills books and magazines, as recommended sources in LO policy statements (DBE, 2011:14), strengthened the emphasis on cognitive learning *about* (own emphasis) social and environmental challenges without having to do anything to help address them. The danger of such learning is that it disengages learners from their lived environments which serve as a major barrier for embodied learning. Furthermore, if textbooks are seen as the sole source of transmitting knowledge and values to the youth then the assumption, according to November (2015: 325), is that social and environmental challenges and the impact thereof on children in the lived environment, must be regarded as a normal occurrence. LO textbooks, in my view, support this thinking because they provide a safe space in which learners can do their work through neutral life skills educational approaches – a process that leads to learner disengagement (Ankiewicz, Batchelor & De Beer, 2015: 212). This arguably, has the potential to reduce teacher creativity and restrict social and environmental challenges and learner experiences to the four walls of the classroom.

Contrary to this, only two participants (A and B), who both held a one-year Postgraduate Certificate in Education (PGCE) in LO, engaged their learners in the lesson topics through class and group discussions. Their willingness to create a space for learners to share their views and ideas and express their feelings about social and environmental challenges showed that they at least realised the importance of such challenges. This could be related to the fact that they had specific postgraduate training in LO, indicating that teachers' experience is important in determining how they approach social and environmental challenges.

## 7.2 Theme 2: Dual perceptions of social and environmental responsibility

During my interview sessions, it became clear that participants attached different meanings to social and environmental responsibility. The first perception is that of an act of "caring" as expressed by the following:

In the context of LO, it is to give kids an awareness of how to live, how to be and how to take care of the world they live in (Participant A).

I think it links with Ubuntu and our Christian values, which tell me we must care for each other (Participant C).

The above responses suggest that a different way of facilitating social and environmental challenges in LO classrooms is necessary. In this regard, Petersen and Osman (2015:30) emphasise an important point namely that teachers themselves must learn how to "do" care

in their ideas, expectations and practice. This practice was not evident during classroom observations because LO teachers viewed textbooks as the trusted source to address social and environmental challenges.

Another perception concerning social and environmental responsibility is that of the broadness of LO as reflected in the responses of three participants.

I see it as your communication and interaction with other people and your relationship with your animals, your parents, your friends, your peers and your religion (Participant D).

I think it is important to educate the learner as a whole. I don't think it must be removed from LO. Learners must be orientated in terms of their responsibility. This is important (Participant E).

It focuses on the well-being of the person. I think it integrates well with well-being of the human being healthy and fit. In terms of these aspects, social and environmental responsibility links very well with the human as a whole (Participant F).

I concur with these responses because there is something special about life skills education through LO – which is the idea of being a responsible citizen (DBE, 2011:8). This observation is important because LO allows children to "do" something. This "doing" can be specific, such as preparing learners meaningfully to act responsibly in their lived environment. But preparing learners meaningfully is not just about knowledge dispositions. Enriching learners with skills and values is equally important.

Two participants (B and G), who held a social view of social and environmental responsibility, emphasised the importance of the human being. This was evident from the following responses:

It does not matter if children go into this world and are not aware of different crises in the world and especially in SA (Participant B).

I think it refers to the human responsibility towards the environment. Here we can think about air pollution, which is caused by human beings. So, in other words, it is the human responsibility towards the environment in terms of pollution (Participant G).

Although it is encouraging that most of the participants held a holistic view of social and environmental responsibility, it was not visible during their lesson presentations. Even Participants B and G's narrow focus on only social aspects presents a challenge for the effective implementation of social and environmental responsibility. It is evident that these dual interpretations of social and environmental responsibility resonate with Jacobs' (2011: 212) opinion of a detachment between LO theory and the preferred practices within the CAPS curriculum (DBE, 2011: 25).

#### 7.3 Theme 3: Teachers' experience and encounters of implementing embodied learning to social and environmental responsibility

From the interview sessions it was clear that LO teachers are easily overwhelmed by the practical demands of the topic social and environmental responsibility. Four participants expressed concerns about taking a practical approach towards social and environmental challenges. Their concerns were centred on time (Participants D and G), a lack of resources (Participant E) and a lack of experience in teaching LO (Participant F). These challenges,

which are not new (see, for example, Diale, 2016; Jacobs, 2011; Lamb & Snodgrass, 2017; Mthatyana & Vincent, 2015; Prinsloo, 2007; Stroebel, Hay & Bloemhoff, 2018; Van Zyl, Webb & Wolvaart, 2021), should not serve as deterrents to steer away from implementing embodied learning experiences for learners. My argument is that the root causes of social and environmental challenges are often found in human activities, and as such, learner bodies should be encouraged to seek ways to address such issues. In this instance, Yoo and Loch (2016: 539) point out that embracing the body as a rich and a diverse knowledge source, can afford learners with valuable experiences and continual learning that can be beneficial in addressing social and environmental challenges.

During the interviews, two participants (A and C) mentioned that the prescribed practical task from the DBE assisted them in involving learners in a community project.

They (learners) go out to experience it (volunteering) so that they can get an awareness; like trying to promote awareness (Participant A).

Yes, the project from the Department of Education saves us time, but it gives children an opportunity to experience volunteering (Participant C).

Although the LO curriculum advisors from the DBE are detached from the lived environments of learners, I view their support as a positive intervention strategy because their project linked to embodied learning. For me it is important that LO teachers, who play an instrumental role in putting the curriculum into practice (Stroebel *et al.*, 2018: 124), must be supported to successfully fulfil their roles as curriculum implementers. Furthermore, such intervention can assist LO teachers to take social and environmental responsibility off textbook pages. Through such an action the boundaries between theory and practice, especially regarding social and environmental responsibility, will become less obvious or blurred. However, my concern, despite hints on how the curriculum must be implemented, does not guarantee that LO teachers may unlock opportunities to connect other social and environmental lessons to embodied learning experiences for their learners.

The above findings of participants regarding classroom pedagogies around social and environmental challenges limit the realisation of embodied learning experiences. Based on these findings, I suggest a framework that can guide teachers more easily and more effectively to fulfil LO expectations as raised in this small-scale qualitative study.

## 8. Embodied learning to strengthen social and environmental responsibility for the realisation of LO outcomes

The beneficial impact of social and environmental responsibility will only be optimised when teachers start to realise that LO reaches far beyond the classroom and a textbook-based curriculum (Diale, 2016: 107). Figure 1 therefore serves as an organisational and visual illustration to reconceptualise social and environmental responsibility through embodied learning which has the potential to narrow the gap between the LO classroom and learners' lived environment. Furthermore, this framework supports the view of Magano (2011: 124), Magano, Mostert and Van der Westhuizen (2010: 22) as well as Griessel-Roux *et al.* (2005: 255) state that a more practical approach towards life skills education through LO is important. Through such an approach LO teachers will understand how active learner bodies react to, organise and coordinate their own engagements with social and environmental challenges in the lived environment. The suggested framework therefore focuses on making learning around social and environmental challenges self-directed, purposeful and life-long.



Figure 1: Step-by-step process of how to provide embodied learning approaches to engage diverse learners for the enhancement of social and environmental responsibility

This framework provides an opportunity for teachers and learners to change the LO classroom into an enquiry hub in which learners can raise their voices and (re)discover their power and agency regarding social and environmental challenges in the lived environment.

Within the first educational phase, "learning to know", LO teachers and learners have a direct multisensory, fully contextualised and actual experience of social and environmental challenges in the lived environment. When learners walk in their lived environment to capture social and environmental challenges that beset their communities through "reading the world" (Freire, 2000: 75–76), they can see their environment anew. Experiencing learning in this way becomes useful and relevant because learners can take ownership of their work. Even more important is that a closer resemblance and connection between the learning tasks and the knowledge, values and skills learners hope to attain on social and environmental challenges, become a real experience. Therefore, if the argument of Ellis, Cupido and Samuels (2021: 55) that walking is an embodied form of knowing, then learners carry contextual knowledge that they accumulate during their presence in their living environment. This embodied knowledge can then be brought to the LO classroom, where the teacher becomes a "resource consultant" (Oduaran, 2018: 178). Within such a space, meaningful learning can be created through constructive, engaged conversations that are embedded in classroom presentations (e.g. environmental print [videos/photographs] and environmental plays [drama, poetry, world café, tableaus, etc.] that can be combined with techniques such as pointing out what are the challenges and why do they exist? and making suggestions [appropriate responses/ reactions]. LO teachers can also utilise chalkboards or whiteboards to further engage learners with the new environmental content. Through summaries, the highlighting of keywords, making connections, drawings, and so forth, the chalkboard or whiteboard becomes an audiovisual aid. Through all these methods, talk, which Burke (2019: 61) sees as an essential part of children's learning, can help to create a community of enquiry regarding social and environmental challenges within the LO classroom. Not only do these activities bring learner bodies "in conversation" with their lived environments, but the learners are also able to scaffold their own understanding of social and environmental challenges through critical and creative thinking. This observation links with Dei's (2012: 115) suggestion that the education site is not just the school or the classroom but also the community. These contextualised embodied educational experiences can ensure that their reality is neither muted nor removed, as is the case with static, often outdated, textbooks with pre-designed learner activities.

During the second educational phase, "learning to act", teachers are encouraged to draw upon the imaginative abilities of their learners when engaging them with local social and environmental challenges. For the sake of continuity, it is advisable that teachers combine contextualised activities from the learning to know phase. Providing printouts of mobile phone photographs with texts of local social and environmental challenges that affect the well-being of the learners' community is a preferred starting point. This can be followed up with problem-solving techniques, such as letters to ward councillors or community leaders, to sensitise them to the impact of social and environmental challenges on the local community. Additional projects can be organised, such as cleaning campaigns in and around the school premises, joining established community volunteering projects, starting vegetable gardens, and so forth. Through all these suggested activities, it is possible that learners can be embodied with particular environmental knowledge, values and skills that can enhance their responsibility through "thought in action" (Le Grange, 2004: 388). In this way, learners can become what Wood (2021: 604) refers to as "action learners" and "action leaders".

Integrating assessment for learning during the two phases (learning to know and learning to act) will assist learners to learn through the tasks they have performed in relation to the lesson outcomes and feedback during the analysis sessions.

#### 9. Limitations

A limitation of this small-scale exploratory qualitative study was that it only focused on seven Grade 10 LO teachers from the North-West Province in the Tlokwe Municipality district of South Africa. Nevertheless, the findings provided sufficient data to suggest a framework for the topic "social and environmental responsibility", with the potential to be refined and modified to suit contextual needs that will best benefit diverse learners as the curriculum intends LO to do. Furthermore, this small-scale study opens up the possibility for future research because LO teachers have a critical role to play in the rethinking of social and environmental responsibility in light of real-life issues, such as climate change, social and environmental inequality, crime, poverty, HIV/Aids, teenage pregnancy, and so forth, through critical thinking, agency and concrete action.

### 10. Conclusion

LO teachers cannot effectively prepare their learners to enter their live environment through teaching social and environmental challenges in a rote manner. Instead, LO teachers need to help their learners to become creative and collaborative problem-solvers. The knowledge gained through this study therefore assisted me to argue for the acknowledgement and inclusion of embodied educational practices when addressing social and environmental responsibility. In line with this argument, a framework is presented that has the potential to bring into being pedagogical recommendations contained in the CAPS curriculum. With the thoughtful implementation of such a framework, it is possible to instil in learners a critical and creative mind-set to reflect on real-life social and environmental challenges and to work towards possible solutions that provide a catalyst for their own learning (Geduld & Sathorar, 2016: 50). Furthermore, the distinct potential of this framework is that it encourages learners not to grow distant from their communities.

#### 11. Disclosure statement

The author declares no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

#### References

Ankiewicz, P., Batchelor, J. & De Beer, J. 2015. The teacher as a user of media. In: S. Gravett, J.J. de Beer & E. du Plessis (Eds.). *Becoming a teacher*, second edition. Cape Town: Pearson Southern Africa.

Athiemoolam, L. 2021. An exploration of pre-service student teachers' understanding of social justice issues through theatre-in-education. *Educational Research for Social Change*, 10(2): 161-177. https://doi.org/10.17159/2221-4070/2021/v10i2a10

Burke, A. 2019. *Invitations to play. Using play to build literacy skills in young learners*. Canada: Pembroke.

Curtis, W., Murphy, M. & Shields, S. 2014. *Research and education: Foundations of education research*. New York: Routledge. https://doi.org/10.4324/9781315858326

Dei, G.J.S. 2012. Indigenous anti-colonial knowledge as 'heritage knowledge' for promoting black/African education in diaspora contexts. *Decolonization: Indigeneity. Education et Sociétés*, 1(1): 102-119.

Department of Basic Education (South Africa). 2011. *Curriculum and Assessment Policy Statement. Life Orientation. FET Phase: Grades 10-12.* Pretoria: Government Printers.

Diale, B.M. 2016. Life orientation teachers' career development needs in Gauteng: Are we missing the boat? *South African Journal of Higher Education*, 30(3): 85-110. https://doi. org/10.20853/30-3-670

Ellis, W., Cupido, C. & Samuels, M.I. 2021. Walking with herders: Following into the multispecies classroom. *Anthropology Southern Africa*, 44(2): 50-63. https://doi.org/10.1080/23323256.2021.1912615

Freire, P. 2000. *Pedagogy of the oppressed*. New York: Continuum.

Gay, L.R., Mills, G.E. & Airasian, P. 2006. *Educational research: Competencies for analysis and application*. Upper Saddle River: Pearson/Merrill Prentice-Hall.

Geduld, D. & Sathorar, H. 2016. Humanising pedagogy: An alternative approach to curriculum design that enhances rigour in a BEd programme. *Perspectives in Education*, 34(1): 40-52. https://doi.org/10.18820/2519593X/pie.v34i1.4

Griessel-Roux, E., Ebersöhn, L., Smit, B. & Eloff, I. 2005. HIV/AIDS programmes: What do learners want? *South African Journal of Education*, 25(4): 253-257.

Illeris, K. 2017. *How we learn. Learning and non-learning in schools and beyond*, second edition. London: Routledge Taylor & Francis Group.

Jacobs, A. 2011. Life orientation as experienced by learners: A qualitative study in the North West Province. *South African Journal of Education*, 31: 212-223. https://doi.org/10.15700/saje.v31n2a481

Lamb, S. & Snodgrass, L. 2017. A nonviolent pedagogical approach for life orientation teacher development: The alternatives to violence project. *Educational Research for Social Change*, 6(2): 1-15. https://doi.org/10.17159/2221-4070/2017/v6i2a1

Le Grange, L. 2004. Embodiment, social praxis and environmental education: Some thoughts. *Environmental Education Research*, 10(3): 387-399. https://doi. org/10.1080/1350462042000258206

Le Grange, L. 2007. The 'theoretical foundations' of community service-learning: From taproots to rhizomes. *Education as Change*, 11(3): 3-13. https://doi.org/10.1080/16823200709487174

Le Grange, L. 2010. The environment in the mathematics, natural sciences, and technology learning areas for general education and training in South Africa. *Canadian Journal of Science, Mathematics and Technology Education*, 10(1): 13-26. https://doi. org/10.1080/14926150903574247

Le Grange, L. 2019. Different voices on decolonising the curriculum. In J. de Beer (Ed.). *The decolonisation of the curriculum project. The affordances of indigenous knowledge for self-directed learning*. Durbanville: AOSIS. https://doi.org/10.4102/aosis.2019.BK133.02

Magano, D.M. 2011. The new kind of a teacher, to handle the new subject life orientation, in a township high school in South Africa. *Journal of Social Sciences*, 28(2): 119-127. https://doi. org/10.1080/09718923.2011.11892936

Magano, D.M., Mostert, P. & Van der Westhuizen, G. 2010. *Learning conversations: The value of interactive learning*. Sandton: Heinemann.

Mertens, D.M. 2020. Qualitative research and action research. In D.M. Mertens (Ed.). *Research and evaluation in education and psychology. Integrating diversity with quantitative, qualitative and mixed methods*, fifth edition. London: Sage.

Mills, G.E. 2011. *Action research: a guide for the teacher researcher*, fourth edition. Boston, MA: Pearson Publications.

Mthatyana, A. & Vincent, L. 2015. Multiple femininities in a 'single sex' school: Re-orienting life orientation to learner life worlds. *Perspectives in Education*, 33(2), 49-62.

Munro, M. 2018. Principles for embodied learning approaches. *South African Theatre Journal*, 31(1): 5-10. https://doi.org/10.1080/10137548.2017.1404435

Nguyen, D.J. & Larson, J. B. 2015. Don't forget about the body: Exploring the curricular possibilities of embodied pedagogy. *Innovative Higher Education*, 40: 331-344. https://doi. org/10.1007/s10755-015-9319-6

Nel, M. & Coetzee, S. 2018. Pedagogy of life orientation/life skills. In M. Nel (Ed.). *Life orientation for South African teachers*, second ed. Pretoria: Van Schaik.

Nel, N. & Nel, M. 2016. Learning in an inclusive environment. In N. Nel, M. Nel & A. Hugo (Eds.). *Learner support in a diverse classroom. A guide for foundation, intermediate and senior phase teachers of languages and mathematics*. Pretoria: Van Schaik.

November, I. 2015. The teacher as an agent of transformation. In S. Gravett, J.J. de Beer & E. du Plessis (Eds.). *Becoming a teacher*, second edition. Cape Town: Pearson Holdings Southern Africa.

Oduaran, A. 2018. An African perspective on development. Learning to live and living to learn in the 21<sup>st</sup> century. London: Academica Press.

Okeke, C. 2015. Achieving qualitative validity, reliability and generalisation. In C. Okeke & M. van Wyk (Eds.). *Educational research. An African approach*. Cape Town: Oxford University Press.

Payne, P. 1997. Embodiment and environmental education. *Environmental Education Research*, 3(2): 133–153. https://doi.org/10.1080/1350462970030203

Petersen, N. & Osman, R. 2015. The teacher as a caring professional. In S. Gravett, J.J. de Beer & E. du Plessis (Eds.). *Becoming a teacher*, second edition. Cape Town: Pearson Holdings Southern Africa.

Pillay, J. 2012. Keystone Life Orientation (LO) teachers: Implications for educational, social, and cultural contexts. *South African Journal of Education*, 32: 167-177. https://doi. org/10.15700/saje.v32n2a497

Prinsloo, E. 2007. Implementation of life orientation programmes in the new curriculum in South African schools: Perceptions of principals and life orientation teachers. *South African Journal of Education*, 27(1): 155-170.

Shulman, L.S. 2014. *The wisdom of practice: Essays on teaching, learning and learning to teach*. San Francisco: Wadsworth/Cengage Learning.

Stroebel, L.C.E., Hay, J. & Bloemhoff, H.J. 2018. Challenges facing life skills and life orientation subject advisors in implementation of physical education. *South African Journal for Research in Sport, Physical Education and Recreation*, 40(3): 121-136.

Struwig, F.W. & Stead, G.B. 2013. *Research: Planning, designing and reporting*, second edition. Cape Town: Pearson Education South Africa.

Swarts, P. 2021. Assessing selected teachers' adaptions towards an adolescent-orientated life orientation curriculum: A case study. *Perspectives in Education*, 39(30): 169-182. https://doi.org/10.18820/2519593X/pie.v39.i3.13

Van Zyl, A., Webb, E.M. & Wolvaart, J.E. 2021. Striving for equity: Life orientation resources in South African high schools. *South African Journal of Education*, 41(1): 1-10. https://doi. org/10.15700/saje.v41n1a1830

Wood, L. 2021. Youth leading youth: A PALAR approach to enabling action for sustainable social change. *Educational Action Res*earch, 29(4): 603-618. https://doi.org/10.1080/096507 92.2020.1858913

Yoo, J. & Loch, S. 2016. Learning bodies: What do teachers learn from embodied practice? *Issues in Educational Research*, 26(3): 258-542.

Zipin, I. 2017. Pursuing a problematic-based curriculum approach for the sake of social justice. *Journal of Education,* 69: 67-92.