

Democratic Pedagogy in South Africa: A Rethinking Viewpoint for knowledge Construction

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Abstract

This study critically examines teaching-learning as a means of actualising the tenet of the infusion of democracy and human rights in the subject Life Orientation in the classroom in all levels of education (Primary, Secondary and Tertiary) in South Africa. The study focuses on three established approaches namely teaching and learning as collaborative knowledge construction, teaching and learning as a critical reasoning process, and teaching and learning as a disruptive caring pedagogy in a bid to exterminate the old or traditional ways of teaching and learning, which were perceived as anti-democratic education. Experiential and dialogical teaching methods as one of the effective ways in which the infusion of democracy and human rights could be implemented in the Life Orientation curriculum are also examined in a bid to fulfil the objectives of Life Orientation, transform schooling and the school system, and develop the society through education. This study further recommends the use of teaching-learning, which is known as a disruptive caring pedagogy, as the most inclusive approach. Likewise the use of both experiential Problem Based Learning and dialogical teaching methods are recommended.

Key words: Teaching-learning, Democracy, Human rights, Life orientation, Experiential learning, Dialogical learning.

Introduction

Drawing from a nostalgia reminiscent of radical version of people's education, popularised against the template of apartheid in South Africa, is an indication that the South African education system has been under oppression and domination from both colonial and apartheid systems. This seems to have negatively influenced the teaching and learning process in classrooms. At the very least it affected learners who were exposed to Bantu education (Reddy, 2004). In 1953, during the time of Bantu Education there were drastic differences between the black and white schools, as generally white schools received more financial resources than black schools (Villette, 2016). Even though there are claims that South Africa has transcended this type of oppression and domination, it seems that the education system in South Africa and its policies still wallowing in

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the lingering aftermath left behind by apartheid, though various concerted efforts were made to rectify the situation (Odhav, 2009).

Nevertheless, the government and various notable education agencies have attempted to liberate the South African education system through various transformation agendas in an attempt to provide South African learners with education that fits their contextual needs. This is evidenced in a number of documents showing a high commitment to sustainable education for all in the republic of South Africa. These documents include but not limited to: the National Conference Report: Saamtrek: Values, Education and Democracy In the 21st Century (held on February 2001); the Manifesto on Values, Education and Democracy (held in August 2001 presented by the Department of Education (DOE) on Strategies and how to infusing the culture of human right in classroom); and the Research Report on Values, Education and Democracy (held in April 2002). This document emphasises certain issues concerning the philosophy of human rights within the context of curriculum (Botha & Du Preez, 2018).

A paradigm shift is taking place. Traditionally teaching methods focused on the teacher as the only source of information in the classroom. It embraces the idea of a teacher-centered method involving face-to-face interaction, mainly from the teacher to the student, in classroom, focusing exclusively on students knowing the content of their textbooks and notes (Dimitrios, Labros, Nikolaos, Maria & Athanasios, 2013; Wei Li, 2016). The movement is towards a system that requires and recommends critical thinking as well as the enhancement of higher order competencies and skills. Life Orientation as a subjects in the South African curriculum was introduced to address issues such as these and to make learners aware of these controversies, based on the outcome of research conducted by researchers from South Africa, the United States, the United Kingdom and Europe. This research focuses on the importance and the necessity of Life Orientation programmes for learner preparedness to be able to cope with the inevitable complexity and dynamism of life (Prinsloo, 2007).

The South African Department of Education (2003) defines the Life Orientation (LO) as the study of the self in relation to others in the society which is concerned with the intellectual, spiritual, social, personal, emotional, motor and physical development and growth of learners, and to be able to respond positively to societal demands, issues and contingencies associated with life. The aim of the subject is predominately to develop self-efficacy and self-esteem, and to encourage the development of balanced and confident learners to be able to contribute positively to the

nation's economy, improved quality of life for all and a just and democratic society (Wasserman, 2014; Prinsloo, 2007). Therefore, the explorative aim of this paper is to critically expatiate and examine teaching-learning for democracy and human rights in Life Orientation. The focus is on various teaching and learning approaches coupled with experiential and dialogical teaching methods as an effective way in which this could be implemented at all levels of education. This exploration is discussed under the headings teaching-learning experience, and methodologies for democratic pedagogy.

TEACHING-LEARNING EXPERIENCE

Teaching and learning has been understood in various ways over a long period of time as an important aspect of curriculum that must be considered when aiming at infusing a culture of human rights and democracy in a diverse education setting. Initially, it was explained as a process of transmitting information to a learner with an empty mind. This was conceptualised by Piaget (1977) as a *tabula rasa*. This idea was corroborated by (Goddard, 2012), who referred to John Locke who stated that children were born blank (*tabula rasa*), and that what they became solely depended on their learning and environmental experiences. This type of teaching and learning is definitely teacher-centered, where teacher is seen as a purveyor of information at the fount of all knowledge (Andrews, 2017; Sequeira, 2017). This picture of teaching and learning depicts that students sit in the four walls of the classroom and listen passively to their teachers talking and disseminating holistic knowledge to them, either with or without the use of teaching aids, materials and consultation to general knowledge construction

In this approach, teachers are regarded as all-knowing the learners/students are just empty slates which are waiting to be spoon-fed by their teachers. In recent times this traditional method has generated a lot criticism from scholars, teachers and other educational stakeholders due to its undemocratic nature and because it does not allow learners to think critically and outside the box and to develop their own problem solving skills. As a result of this criticism, the idea of teaching and learning as a collaborative knowledge construction, teaching and learning as a critical reasoning process and teaching-learning known as a disruptive caring pedagogy were introduced and conceptualised (Du Preez & Botha, 2018). These approaches are undoubtedly supportive of education for human rights and democracy, because it allows both teachers and learners to construct and share knowledge around real-life scenarios and to solve complex issues in classroom.

Teaching and Learning as a Collaborative Knowledge Construction

This concept becomes very important and necessarily relevant to the teaching and learning process, especially in the 21st century Vygotsky's constructivism buttresses this approach by stressing the importance of discussion and interaction between learners and teachers, and their environment (Vygotsky, 1986). This in turn is a panacea for learners' level of achievement as well as their academic performance, because potential could be grasped in a process that encourages interaction with each other and support from the human environment (Rimor & Rosen, 2010). This why Hmelo-Silver (2012) suggests that to create an enabling environment that supports collaborative knowledge construction, opportunities for must be provided constructive discourse. That is, knowledge to find solutions to problems if generated through collaboration, the exchange of ideas through discourse and the sharing of relative thought from an individual point of view.

To further show the importance of the collaborative teaching and learning process as a knowledge construction parameter, Rimor and Rosen (2010) further express that collaborative parameters and the social context of a meaningful teaching and learning process are based on group discussions and prior knowledge, which in turn allow the development of thinking abilities among learners. A number of researchers in the field of social construction concluded that individual interpersonal views serve as personal-cognitive functions, with the further group sharing of knowledge (Akpan, 2018; Arvaja, 2005; Amineh & Asl, 2015; Suhendi & Purwarno, 2018). This is absolutely in accord with Rimor & Rosen (2010) who concluded that knowledge is constructed when people interact with one another, which means that knowledge and reality are grounded on social interaction and agreement. No wonder Solomon (2002) in his work also toes the same line, namely that intelligence is not a matter of (individual) ownership, but maturity that emanated out of intrapersonal negotiation. It is described as being supportive of education in and for human rights and democracy simply because it focuses on how teachers and learners become partners in in the process of sharing knowledge, which practically enables learners to construct knowledge in real-life scenarios. Knowledge and the act of teaching and learning is therefore a social relation and an acknowledgement of the context in which this social relationship develops (Nel, 2014). This approach therefore gives learners an opportunity to explore education on their own without

having to rely on what teachers present to them. In my opinion, this allows critical thinking, reasoning as well as the development of independent logical reasoning.

Teaching and Learning as a Critical Reasoning Process

In an attempt to address and enhance the effectiveness of the teaching and learning in the classroom, the idea of teaching as a critical reasoning process becomes necessary. This type of teaching-learning, according to Qureshi (2004), situates education in human rights and democracy due to its emphasis on addressing complex social matters in relation to the context in which they occur. According to Carbogim, Oliveira, Mendonça, Marques, Friedrich & Püschel (2017) these engender knowledge, skills, attitudes, capacity for criticism and reflection, clear communication, knowledge application to professional practice, understanding people's diversity, ability to work in teams, and a moral and humanistic consciousness, which in unison are essential to the current pedagogical system. I therefore argue that teaching and learning as a critical reasoning tool builds the spirit of analysis and evaluation in learners. These include individual personality traits and the development of intellectual traits. It also enables learners to think on their own, with recognition of other people's thinking, and logically draw a justifiable conclusion to issues.

So in using this approach, learners are presented with real-life matters that concern them as well as the societies in which they live. They are made aware of life and social issues, and get the opportunity to reflect on those issues, consider and provide tentative solutions based on their independent thinking. Gutek's argument (2009) corroborates this by justifying that the main focus of teaching and learning as a critical reasoning approach is to develop learners to be competent, critical and wide thinking citizens. Meanwhile, it is not only a matter of thinking critically in accordance with the rules of logic and probability, but it is elevated to the idea of the application of theory or a frame of thinking to real-life matters (Karakoç, 2016). In addition, this has to do with the analysis and the evaluation of complex social issues such as teenage pregnancy, crime and other issues.

According to Waghid (2003), this encourages teachers to address the issues that will help in the transformation and development of society through education. This fulfills the objectives of Life Orientation by addressing learners holistically. Learners are exposed to various disciplines that affect them and that are significant for lifelong learning. These include Psychology, Sociology, religious studies, human movement, political science, labour and industrial studies,

civic education and social studies, among others. This activates learners' knowledge and awareness, and has a significant impact on their health, physical fitness, thinking patterns, personalities and their relationships with their families, schools and society. This impact may even be felt in their personal economy and the nation's economy. It can therefore be argued that this approach provides guidance for learners to make informed decisions about their lives holistically and become responsible citizens in a democratic society. It also addresses the issues of human rights and democracy, where learning becomes applicable to real-life situations, encounters and experiences. It further teaches learners to be accountable for their ideas. In other words, it gives them a chance to make informed choices and select actions that may be substantiated in a reasonable manner.

Teaching and Learning as a Disruptive Caring Pedagogy

The term "disruptive" was initially conceptualised in related with technologies and later rephrased to "disruptive innovation" (Christensen & Raynor, 2003). This was probably done in order to encapsulate the term in a broader context to embrace both technology and its application, because innovation becomes disruptive when it replaces old practices, the old way of doing things. In relation to teaching and learning, the relationship between new technology and ways of learning and teaching makes pedagogy disruptive (Hedberg, 2010; Kagema, 2018). The criticism meted out to the above-mentioned approaches (teaching and learning as collaborative knowledge construction and teaching and learning as a critical reasoning process) led to the production of teaching-learning known as disruptive caring pedagogy. This approach diverted from the earlier discussed approaches in its assertion that reasoning alone is not enough, since it does not give learners the opportunity to interact with one another and show empathy towards each other, and it does not always encourage dissonance.

Teachers must make room for dissonance in the teaching-learning context as it allows learners to learn from each other's experiences and acknowledge one another's differences. This means that the process of teaching and learning should structure the content in such a manner that learners have room for disagreements which, according to Freire (2008), allow them to learn, accept and internalise tolerance. This does not only enhance the aspect of tolerance but it also gives learners an opportunity to learn from the varied experiences of others. In my own perspective, the idea of education as a disruptive caring pedagogy can be explained as a teaching-learning process

that allows learning beyond learning. I further argue, based on these premises, that learners move from their comfort zones and learn to acknowledge other people's thoughts and ideas which may, in one way or the other, teach them some of the important lessons in life.

In addition, when one takes a closer look at this teaching and learning method, it can be argued that it promotes diversity as it promotes the acceptance and acknowledgment of differences among people. It undoubtedly teaches diplomacy through the use of arguments and disagreements as a way of building and enhancing each other's basic knowledge. In a classroom that consists of learners from different cultural and racial backgrounds, the teacher is expected to create an environment conducive to both sides to enhance empathic listening. Meanwhile, to be able to create an environment for teaching and learning based on the principle of difference and respect for others, requires a culture of human rights and democracy. It is therefore of great importance that teachers promote critical thinking, Socratic dialogue and autobiographical learning forms of learning, as these are of great significance in this type of learning (Slattery, 2006).

This form of teaching-learning gives both teachers and learners a chance to deal with human rights and democracy in every sphere of learning, and make it more important to learners. This basically means that when learners are exposed to a pedagogical environment that imposes the recognition of humanity with regards to the past, they get to unmask their pain, fears and anxiety so as to address issues of racism and are able to move forward and enjoy the benefits of living in a democratic society. The approach of teaching-learning as a disruptive caring pedagogy by nature is democratic and creates learners who are accountable for their actions and ideas while upholding the human rights of others in their societies. With this said, teachers should create an atmosphere that promotes learners' worth, dignity and human rights. In doing so, learners are able to develop skills, attitudes and values that improve relationships, groups and society, and are also able to demonstrate respect for human rights and democracy. This form of expression of disagreement provides prospects for learners to gather the courage to disagree and develop skills on how to argue constructively. This approach allows learners to express their views on topics that are presented to them in the classroom. Their opinions on teenage pregnancy, for example, may vary depending on their cultural backgrounds which may in turn lead to disagreements. These disagreements are not to create conflict but will help learners to learn to acknowledge the views of others.

In the case of all of these features of teaching and learning, it is important for teachers to recognise various approaches to teaching which will cater for learners from different cultures, world views, languages and religions, which make schools diverse places for teaching and learning. This is specifically crucial in the case of teachers of Life Orientation, as they are the ones who deal with these issues in a detailed manner. They should be aware of the teaching methods they use, and contemplate whether it provides learners with opportunities to think critically and independently. The approaches used by Life Orientation teachers should be structured in a manner that facilitates teaching and learning for human rights and democracy. The content for Life Orientation includes sections that directly address the issues of democracy, human rights, and other real-life and social issues that affect the learners' being. It is also important for teachers to promote diversity and to be sensitive to the diverse needs of their learners in order to create a space for effective pedagogical dialogue. This will empower teachers as effective mediators and decision-makers who show respect and acknowledgement for diverse cultures, languages and needs.

Methodologies for Democratic Pedagogy

In order to achieve the above proposition of teaching-learning as a collaborative knowledge construction, as a critical reasoning process and as a disruptive caring pedagogy in classroom, appropriate methods need to be adopted. One of the most important aspects to be considered in the teaching and learning processes of Life Orientation teachers when teaching for democracy is to make use of relevant strategies, methodologies and resources. It therefore becomes essential to note that the type of methodology or teaching style adopted by a teacher will go a long way to develop learners' respect for human rights and their democratic functioning. Teachers should endeavor to use methods that will promote democratic instruction and respect for human rights in classroom. These methodologies include, amongst others, experiential and dialogical learning (Botha & Du Preez, 2014).

Experiential Learning Methodology

Experiential learning, which is generally regarded as learning through experience, has gained more support from educational scholars in recent times, especially from those who focus on classroom transformation. Carl Rogers, John Dewey and David Kolb are regarded as the

trailblazers in the development of this teaching-learning method focusing on “learning through experience” or “learning by doing.” (Schwartz, 2012). The concept of experiential pedagogy as propounded by Dewey dwelled more on problem-solving and critical thinking skills than on memorisation and rote learning (Yoon, 2000; Kolb, 2000). This is probably drawn from an argument of Piaget (1977) that intelligence does not necessarily exist inherently at birth, but could also be as a result of the interaction between the individual and his/her immediate environment. This is why Alkan (2016) concluded that concrete experiences are turned into abstract concepts within this process, and these concepts are used in attaining new experiences, and which is eventually considered as an effective teaching-learning method.

Experiential learning denotes a shift from a teacher-centred teaching-learning system, where knowledge is solely transmitted to students, to an inclusive approach that requires learners to cooperate with one another and learn through direct experiences of real-life happenings. This means that learners become active participants though shaping, directing and controlling the pace at which the content is delivered. Adams (2006) describes it as a way of educating through personal experience where knowledge, skills and experience are learnt outside of the normal classroom setting. This may include studies abroad, field research, internships, field trips and service-learning projects. This kind of teaching method is described by Gutek (2009) as the best methodology based on the premise that experiencing something is much better than theorising about it. This is why learners have to be exposed to the practical and experiential terms of learning. A good practice of this would be to give learners projects and assignments which would require them to be fully engaged in certain experiences and encounters. This may include research about health issues that would compel them to go to healthcare institutions to better experience and observe the situation instead of merry-go-rounding theoretical information from textbooks.

An emphasis is placed on Problem Based Learning (PBL) to further buttress the usefulness of experiential learning in teaching-learning for democracy and human rights. Freire (2008) argues that Problem Based Learning (PBL) is one of the key sub-methodologies of experiential learning. According to Phungsuk, Viriyavejakul and Ratanaolarn (2017) experiential learning is an active way for students to learn basic problem-solving skills and acquire knowledge through interaction with others in or outside the classroom. This approach, as one of the various approaches of experiential learning, compliment the assumptions of experiential learning because it also places emphasis on inquiry and discovery, which usually encourages learners to participate in the

academic domain (Botha & Du Preez, 2018). This method can reinforce students' ability to gain knowledge from various situations (Ismail, Harun, Zakaria & Salleh, 2018). Therefore, PBL is an instructional system that is learner-centered which empowers learners to conduct research, integrate theory and practice, and apply knowledge and skills to developing a viable solution to a defined problem. In addition, the implementation of this in the classroom will not only reduce teacher-centredness, but will also give learners a chance for solo learning.

In constructing learning within a particular context, be it social, political, economic or other, problem-based learning makes the curriculum relevant and specifies and narrows down learning to the core information, which prevents work overload. Motivation is also witnessed within the learners as their learning stems from and can be applied to real-life issues. Problem Based Learning also ensures the transfer of lifelong valuable skills such as communication, teamwork, leadership, problem-solving etc. It further ensures that learners control and facilitate their own learning. This can have long-term benefits such as inquisitiveness, planning and effective time management. I therefore argue in line with the conclusion of Hmelo-Silver (2004) and Ding & Zhang (2018) that PBL is a constructional technique through which learners construct new learning around existing knowledge as they attempt to solve the problem at hand.

Dialogical learning Methodology

Dialogical learning can also be used as a way of promoting teaching-learning for human rights and democracy in a classroom context. The concept "dialogical" emanates from the word dialogue, which promotes the teaching and learning that focuses on deep engagement of learners with and about the content at hand. This according to Renshaw (2004) is traceable to Socrates and a contemporary exemplification of sociocultural theories derived from a variety of influences in psychology, linguistics, anthropology, and above all education, which includes the use of debates and dialogue to infringe the culture of communication among learners (Callander, 2013:2). Dialogical teaching and learning is embedded with four principles that enable interaction in classroom as opposed to the transmissive teaching-learning process most common in classrooms today. According to Gillies (2016) these principles are: (a) collective transmission, where the teacher and students work together to achieve a learning task; (b) student-teacher reciprocity, where teachers and students attend to each other by sharing ideas for better alternatives; (c) supportive spirit between and among students, including teachers, where students assist each

other's learning with the teacher's guidance; and (d) the fact that every discursive activity must be purposeful, where teachers are expected to ensure that discussions are designed to achieve specific educational goals.

From the above, dialogical learning is closely linked to the communicative approach which asserts that conversation and communication is the best way of administering learning content to learners. This is simply because communication is a natural occurrence in our everyday lives, so as a result it is easy to implement it in the teaching and learning environment. It is said to be the best way to trigger learners' prior knowledge based on their everyday experiences (Lehesvuori, 2013). In addition, teachers should ensure that the issues they discuss in the classroom are those that are related to and applicable to learners' real-life experiences.

This gives learners a chance to infuse different teaching-learning spaces with a culture of human rights. It is also significant to fully engage learners in all types of conversations taking place in the classroom, asking them about their personal views and criticism of a specific issue. This allows fairness as well as a balance between the content, the teacher and the learners, and thereafter promotes a learner-centered approach. Adams (2006) insists that this makes learning meaningful and allows collaborative knowledge construction and critical reasoning. It also breaks the convention of a teacher as an all-knowing entity, transferring subject information to a *tabula rasa*. It offers learners the opportunity to democratically participate in the construction of knowledge.

Conclusion and Recommendations

In conclusion, the success of the Life Orientation curriculum depends largely on teachers' readiness to implement the intention of the curriculum, especially the infusion of human rights and the development of democracy. So how teachers present themselves and the content of their instruction goes a long way in ensuring the accommodation of teaching-learning for democracy in the classroom. Teachers should therefore be encouraged to use creative means of delivering the content. It is also crucial for the overall curriculum to consider the issue of human rights and democracy by acknowledging some teaching-learning methods that will enhance the infusion of human rights and democracy, which could engage learners in interactive and reflective opportunities conducive to presenting human rights and democratic practices. It is however not only Life Orientation teachers who should address these significant issues, but all teachers.

Teachers should try to integrate this aspect of democracy where learners are given a chance to reflect, think critically, reason logically and interpret independently. It is therefore important for Life Orientation teachers and teachers in general to consider the idea of democracy and human rights in their teaching strategies and methodologies. Hence, experiential and dialogical teaching and learning could be helpful to instill classroom cultural practices, participation and engagement of students with real-life issues and other critical matters.

Based on the above explorative premises ranging from the pedagogical background, to the importance and features of teaching-learning in the form of approaches and methodologies to implement democracy and human rights in classroom, it is therefore recommend that:

- Teachers in all levels of education should endeavor to practice teaching-learning as disruptive caring pedagogy as one of the modern teaching-learning approaches that has the potential to meet the expectations of learners for better societal preparedness. This approach is will be appropriate because it is based on the premise that reasoning alone is not enough. It will ensure that learners interact with one another and show empathy towards each other without any negative dissonance. Teachers will however have to create an environment for learners to safely disagree with one another to enable learners to learn from the experiences of others and acknowledge one another's differences.
- Teachers at all levels of education should internalise the principles of experiential learning to be able to equip learners with problem solving and critical thinking skills. This method is necessary because it is an all-inclusive method that requires the cooperation of learners through direct experiences of real-life happenings. This will enable learners become active participants in the learning content as a result of what they have experienced. Therefore, learners are expected to be exposed to practical experience in terms of learning, which would require them to be fully engaged in necessary experiences and encounters for the sake of knowledge.
- Teachers are also encouraged to make use of Problem Based Learning as appropriate, as this is one of the active ways for learners to acquire basic problem-solving skills. This method according Ismail, Harun, Zakaria and Salleh (2018) can reinforce students' ability to acquire values, and to gain knowledge from various situations. The implementation of this will in turn empower learners to conduct research, integrate theory and practice, and apply knowledge and skills to issues with little or no supervision from their teachers.

- Finally, teachers should encourage dialogical teaching-learning processes since communication and conversation have been linked empirically to the effective delivery of learning content to learners in class. When teachers initiate relevant conversations about real life, it gives learners a chance to infuse learning spaces with a culture of human rights. This will also give learners a sense of belonging, and they will be willing to fully engage in the classroom.

References

- Adams, N. (2006). *Habermas and theology*. United Kingdom & New York: Cambridge University Press.
- Akpan, L. (2018). The political undertone in the development of nomadic education in Africa: Lessons from Nigeria. *American Journal of Qualitative Research*, 2(1), 1-21.
- Alkan, F. (2016). Experiential Learning: Its Effects on Achievement and Scientific Process Skills. *Journal of Turkish Science Education*, 13(2):15-26.
- Amineh, R.J and Asl, H.D. (2015). Review of Constructivism and Social Constructivism. *Journal of Social Sciences, Literature and Languages*. 1(1): 9-16, 30.
- Andrews, K. (2017). Culture, Curriculum, and Identity in Education. [Book Review]. *Journal of Ethnic and Cultural Studies*, 4(2), 99-101.
- Arvaja, M. (2005). *Collaborative knowledge construction in authentic school contexts*. Institute for Educational Research, University of Jyväskylä: University Printing House. <https://jyx.jyu.fi/handle/123456789/44295>
- Botha, J. & Du Preez, P. (2014). Teaching-learning for democracy and human right in the Life Orientation Curriculum: experiential and dialogical learning methodologies. In M. Nel (Ed.), *Life orientation for South African teachers*. Pretoria: Van Schaik. Chapter 5. 39-53.
- Botha, J. & Du Preez, P. (2018). Introduction to the history and nature of human rights and democracy in the South African curriculum In M. Nel (Ed.), *Life orientation for South African teachers*. Pretoria: Van Schaik. Chapter 3. Page 15-21.
- Callander, D. (2013). *Dialogic Approaches to Teaching and Learning in the Primary Grades*. Master's Thesis, University of Victoria. <https://dspace.library.uvic.ca/handle/1828/5017>.
- Carbogim, F.C, Oliveira, L.B., Mendonça, E.T., Marques, D.A., Friedrich, D.V.C. & Püschel, D.A.A. (2017). Teaching critical thinking skills through problem based learning. *Texto & Contexto - Enfermagem*, 26(4):1-10.

Christensen, C.M. & Raynor, M.E. 2003. *The innovator's solution: creating and sustaining successful growth*. Boston, Mass.: Harvard Business Review Press.

Department of Education. (2003). *National Curriculum Statement Grades 10-12 (General): Life Orientation*. Pretoria: South Africa.

Dimitrios, B., Labros, S., Nikolaos, K., Maria, K. & Athanasios, K. (2013). Traditional Teaching Methods Vs. Teaching Through The Application Of Information And Communication Technologies In The Accounting Field: Quo Vadis? *European Scientific Journal*, 9(28):73-101.

Ding, Y. & Zhang, P. (2018). Practice and effectiveness of web-based problem-based learning approach in a large class-size system: A comparative study. *Nurse Education in Practice*, 31:161-164.

Du Preez, P. & Botha, J. (2018). Teaching-learning for democracy and human right in the Life Orientation Curriculum. In M. Nel (Ed.), *Life orientation for South African teachers*. Pretoria: Van Schaik. Chapter 4. Page 27-35.

Freire, P. (2008). Problem-solving models of education. In Curren, R. (Ed.), *Philosophy of education: an anthology*. Australia: Blackwell Publishing, 4010-416.

Gillies, R. M. (2016). Dialogic interactions in the cooperative classroom. *International Journal of Educational Research*, 76:178-189.

Goddard, N. (2012). Human personality development. *Core Psychiatry (Third Edition)*. 55-61. <https://www.sciencedirect.com/science/article/pii/B9780702033971000045>.

Guttek, G.L. (2009). *New perspective on philosophy and education*. Columbus: Pearson.

Hedberg, J.G. (2010). Towards a disruptive pedagogy: Changing classroom practice with technologies and digital content. *Educational Media International* 48(1):1-16.

Hmelo-Silver C. E. (2004). Problem-Based Learning: What and How Do Students Learn? *Educational Psychology Review*, 16(3):135-166.

Hmelo-Silver C. E. (2012). Facilitating Collaborative Knowledge Construction. *Proceedings of the 36th Hawaii International Conference on System Sciences (HICSS'03), 2012*. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.102.7465&rep=rep1&type=pdf> retrieved on 31/07/2018.

Ismail, N. S., Harun, J., Zakaria, M. A. Z. M., Salleh, S. M. 2018. The effect of Mobile problem-based learning application DicScience PBL on students' critical thinking. *Thinking Skills and Creativity*, 28:177-195.

Kagama, J. (2018). The School Curriculum and Its Influence on Teacher Motivation in

- Curriculum Implementation in Kenya. *Journal of Culture and Values in Education*, 1(1), 9-25. Retrieved from <http://cultureandvalues.org/index.php/JCV/article/view/3>
- Karakoç, M. (2016). The Significance of Critical Thinking Ability in terms of Education. *International Journal of Humanities and Social Science*, 6(7):81-84.
- Kolb, D. A. (2000). *Facilitator's guide to learning*. Boston, MA.: Hay Group.
- Lehesvuori, S. (2013). *Towards Dialogic Teaching in Science Challenging Classroom Realities through Teacher Education*. Academic dissertation, Faculty of Education of the University of Jyväskylä. <https://jyx.jyu.fi/handle/123456789/41268>.
- Nel, M. (2014). Pedagogy of life orientation/life skills. In M. Nel (Ed.), *Life orientation for South African teachers*. Pretoria: Van Schaik. Chapter 1. Page 7-11.
- Odhav, K. (2009). South African post-apartheid Higher Education policy and its marginalisations: 1994- 2002. *SA-eDUC Journal*, 6(1):33-57. Piaget, J. (1977). *The Essential Piaget* New York: Basic Books.
- 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.
- Phungsuk, R., Viriyavejakul, C. & Ratanaolarn, T. 2017. Development of a problem-based learning model via a virtual learning environment. *Kasetsart Journal of Social Sciences*, 38(3):297-306. <https://doi.org/10.1016/j.kjss.2017.01.001>
- Qureshi, M. (2004). *Education and human rights*. New Delhi: Anmol Publications.
- Reddy, T. (2004). Higher Education and Social Transformation South Africa Case Study. *Council on Higher Education*, 1-69.
- Renshaw P.D. (2004) *Dialogic Learning Teaching and Instruction*. In: van der Linden J., Renshaw P. (Eds.). Dordrecht: Springer.
- Rimor, R. & Rosen, Y. (2010). *Collaborative knowledge construction: Why to promote and how to investigate?* In S. Mukerji, P. Tripathi (Eds.). Cases on technological adaptability and transnational learning: Issues and challenges. IGI Global.
- Salomon, G. (2002). Technology and pedagogy: Why don't we see the promised revolution? *Educational Technology*, 42(2):71-75.
- Schwartz, M. (2012). *Best Practices in Experiential Learning*. Learning and teaching office, Ryerson University. <https://www.ryerson.ca/content/dam/lt/resources/handouts/ExperientialLearningReport.pdf>.

- Sequeira, A.H. (2017). Introduction To Concepts Of Teaching And Learning. Page 1-5. Available on <http://ssrn.com/abstract=2150166>. Accessed on 31/07/2018.
- Slattery, P. (2006). *Curriculum Development in the Post-Modern Era*. New York: Francis Group.
- Solomon, R. C. (2002). *Back to Basics: On the Very Idea of “Basic Emotions*. Malden: lackwell Publishers.
- Suhendi, A. & Purwarno A. (2018). *Constructivist Learning Theory: The Contribution to Foreign Language Learning and Teaching*. Paper presented at the 1st Annual International Conference on Language and Literature, April 2018.
- Villette, R. (2016). *The Effects of Apartheid’s Unequal Education System Can Still be Felt Today*. <https://www.iol.co.za/capetimes/news/the-effects-of-apartheids-unequal-education-system-can-still-be-felt-today-2035295>. Accessed on 29/07/2018.
- Vygotsky, L. (1986). *Thought and language*. Cambridge, MA.: MIT Press.
- Waghid, Y. (2003). *Education as virtue: A cultivating Practical and Reasoning Compassion*. Stellenbosch: Stellenbosch University Printers.
- Wasserman, J. (2014). *Life Orientation Teachers’ Experience of Context in the Implementation of the Curriculum*. Master Thesis in Educational Psychology (M.Ed.Psych.), Stellenbosch University, South Africa. <http://scholar.sun.ac.za/handle/10019.1/96109>
- Wei Li, Y. (2016). Transforming Conventional Teaching Classroom to Learner-Centred Teaching Classroom Using Multimedia-Mediated Learning Module. *International Journal of Information and Education Technology*, 6(2):105-112.
- Yoon, S. H. (2000). *Using learning style and goal accomplishment style to predict academic achievement in middle school geography students in Korea*. Ph.D. thesis, University of Pittsburgh.