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Life orientation teacher training needs in career guidance at rural high schools

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The inclusion of career guidance in the life orientation (LO) curriculum has posed a number of challenges for LO teachers in South Africa. LO teachers seem to experience confusion, feelings of incompetence, and insufficient training that points to a need for training and professional development. The purpose of this article is to explore the training needs of LO teachers in teaching career guidance at rural high schools in the Lephalale Municipality of the Waterberg District. A qualitative research approach was followed in this study. This study was a small investigation in which non-probability purposive sampling was used to select 2 secondary schools and 1 LO teacher per selected school. Face-to-face, semi-structured interviews were used to elicit responses from a purposefully selected sample of 2 Further Education and Training (FET) LO teachers at 2 rural high schools in the Lephalale Municipality. FET LO teacher training needs in teaching career guidance emerged as a major theme and is discussed in this article.

Keywords: career guidance; FET phase; Life Orientation; life orientation teacher; rural high schools; training needs

Introduction

In South Africa teachers need to fulfill various roles as stipulated in the Minimum Requirements for Teacher Education Qualifications (Department of Higher Education and Training [DHET], Republic of South Africa, 2011). One of the roles is that of being a subject specialist, which means that LO teachers need to be specialists in teaching LO. According to Sathekge (2014), LO teachers' role is to provide learners with information on careers, related workplace activities, and the admission requirements needed to gain entry into institutions of higher learning. However, from our observations made during involvement in career exhibitions, it appeared as though learners from rural high schools had received no or limited career guidance. The above observation is supported by a statement by Patel (2012:7) in his keynote address at the National Career Guidance Conference: "... to the detriment of learners many schools do not have LO teachers who have sufficient knowledge and experience regarding career guidance." Pursuant to the background above, this study seeked to explore the training needs of two LO teachers in teaching career guidance at two rural high schools in the Lephalale Municipality of the Waterberg District. The study was conducted to answer the following question: What kind of support do LO teachers need to ensure their effectiveness in teaching career guidance at rural high schools?

Rationale for Life Orientation

LO was introduced as a compulsory subject for all learners in South Africa with the introduction of Curriculum 2005 in 1997 (Department of Education, 2003). Curriculum 2005 was developed and introduced to prepare South African learners with the skills and knowledge required for the rapid advancement and development of knowledge and technology in the 21st century, as that was lacking in the South African school curriculum (Du Toit, 2010). Life Orientation presents South African schools with opportunities to empower young people with knowledge and life skills to make meaningful choices regarding their careers and health (Diale, Pillay & Fritz, 2014).

The LO curriculum is complex and includes a number of critical topics that can assist in addressing social challenges such as youth unemployment and shortage of skills. One such critical topic is careers and career choices, which – in the context of this article – is regarded as career guidance. Patel (2012:4), in his keynote address mentioned that career guidance can contribute to the development of human resources, improve the efficiency of education systems, and serve as an instrument to advance the transition from education to the labour market. The above statement indicates how critical the competency of LO teachers is regarding the facilitation of career construction and the guidance process, which creates challenges for teachers teaching career guidance.

Challenges faced by LO teachers in teaching career guidance

In South Africa, career guidance is generally delivered and taught by teachers who are not abreast of changes in the labour market (Sefotho, 2017), and therefore not knowledgeable enough to offer adequate guidance to reflect on changing trends in the labour market (Debono, Camilleri, Galea & Gravina, 2007). Linked to the labour market are the macro-economic benefits which can be highlighted through emphasising the economic impact of career guidance (Hooley & Dodd, 2015). However, teachers, and LO teachers in particular, might not posses the relevant information. Thus, Prinsloo (2007:166) established that:

Life orientation teachers in rural areas had difficulty in finding the necessary information to illustrate aspects of careers and career choice. [Teachers] ... failed to help learners investigate the diversity of jobs according to economic sectors, as well as work settings and forms of activity in each of these sectors. They did not have access to the trends in various careers and the demands of the job market and they did not have the ability to read the market for trends regarding jobs.

In a media interview during the launch of a ministerial flagship project on career guidance, particularly targeting learners in rural areas, Dr Blade Nzimande (Republic of South Africa, 2010) admitted that the country needed to work towards a system where every teacher was skilled as a career guidance counsellor, as the state of career guidance in schools was unsatisfactory. He also mentioned that a lack of career guidance was mostly prevalent in townships and rural areas, and among learners in poor socioeconomic conditions. In a document entitled, National policy framework for teacher education and development in South Africa, (Department of Education, 2007), it is indicated that South Africa requires quality teachers who are appropriately trained and developed to meet the evolving challenges and needs of the developing country.

Van Deventer (2008:141) discovered that teachers who taught LO did not feel that they had received the requisite training to teach all learning outcomes in LO including career guidance. Prinsloo (2007) agrees that LO teachers in rural schools in South Africa did not get formal training in the area of career guidance. According to Phokane (2012) two out of every four teachers that he interviewed in his study indicated that it was really difficult to teach LO when it was first introduced because of a lack of training. The teachers attended some workshops, which were not sufficient and could not empower them to impart knowledge to the learners.

Other authors such as Lai-Yeung (2014), Sultana (2014) and Van Deventer and Van Niekerk (2008) found that teachers seemed to be placed in situations where they lacked expertise in teaching career guidance, which created stressful situations for them. In a study conducted in Botswana on the perceived challenges of implementing guidance in primary schools in Botswana (Shumba, Mpofu, Seotlwe & Montsi, 2011) it is shown that about 50% of teachers lacked knowledge and skills, whereas 20% indicated that they were not assisted in their efforts to teach the subject. The lack of skills and training experienced by LO teachers in South Africa is thus not unique; teachers in other countries experience the same challenge in implementing career guidance.

Training needs of FET LO teachers in teaching career guidance

Teachers need on-going training and professional development to update their knowledge, increase their competency, and acquire skills to continuously encourage today's learners (Krutka, Carpenter & Trust, 2017). It is our belief that training deepens teachers' knowledge and expertise in respect of their professional work. This could be achieved through intensified and targed professional development in the area of career development (Whitworth, Maeng & Bell, 2018). Kennedy (2016) acknowledges that

professional development fosters improvements in teaching in general, and we believe that targeted professional development can greatly benefit LO teachers in teaching career development. We also believe that, through professional development, teachers could benefit from the "theory of improvement" as it advocates content focus, active learning, coherence, duration, and collective participation (Desimone, 2009).

In her study conducted in Kenya, Rukwaro (2011) mentions that many guidance teachers did not have modern skills to handle career guidance. Modern skills may include research skills and the ability to use search engines such as Google. For the purpose of this article, computer training, training in career guidance and networking skills were explored as they seemed to be absent or limited in the professional journey of LO teachers. Hooley and Rice (2019:472) note that "[c]areer guidance plays an essential role in building research and computer training skills and knowledge in countries across the globe."

Computer skills training

Computer training is an important and necessary part of the personal and professional life of every individual in the 21st century. Computer training can significantly influence the teaching methods of LO teachers (Sabzian & Gilakjani, 2013). For example, teachers may use technological tools and teaching aids, such as projectors, in the classroom. McCarthy (2001) revealed that information and communication technology (ICT) is a significant methodology for delivering career information and guidance. It is therefore crucial for LO teachers to be trained in computer skills because a lack of computer training often accounts for teachers' low self-confidence when they need to initiate computer activities and or tasks (Sabzian & Gilakjani, 2013). Computer skills are very important in facilitating career guidance because most career resources in the knowledge economy are web-based.

Networking training

Networking is a 21st-century method of sustaining relationships. It implies being able to build new contacts in one's specialist field, building relationships, and being helpful and supportive to others in the same field. Villegas-Reimers (2003, in Jita & Mokhele, 2014) mentions that teacher networks enable them to work together on problems that they experience in practice. As employer of LO teachers, the Department of Basic Education (DBE) has a responsibility of championing networking, which is cruicial in facilitating effective career guidance. Possible networking relationships that LO teachers can build are relationships and partnerships with the National Youth Development Agency (NYDA), various government departments, the South African

Qualifications Authority (SAQA), the Career Development Services Unit of the DHET, and various sector education and training authorities (SETAs), to mention but a few (DHET, Republic of South Africa, 2014). Networks for teachers enhance the quality of teaching by enabling teachers to expand their capacity in a wide range of dimensions, such as subject matter knowledge, the curriculumn and educational content knowledge (Bacigalupo & Cachia, 2011).

Career guidance training

Many learners in the FET phase encounter difficulties in career decision-making due to inadequate career information, knowledge, and skills (Badugela, 2012). Rukwaro (2011) found that most career guidance teachers were not necessarily trained in career guidance, even in the face of the rapid changes in education and employment trends. All SETAs and the Department of Labour in South Africa bi-annualy publish a list of scarce and critical skills that are in demand to alert job seekers and students who are about to start with their studies of the importance of knowing which skills are in demand. Additionally, internet-based sources such as PACE Career centre, Windmill, and Go study can be used to train LO teachers and empower them with information on career guidance.

As custodian of LO and teachers' employer, it is the DBE's responsibility to ensure that its staff members are adequately trained to impart skills and knowledge relevant to the 21st century. Filland (2008) alludes that the DBE needs to train teachers to possess more skills and knowledge in order to handle career guidance, motivational programmes, commitments, support, and assistance in teaching LO in general. By virtue of their positions, LO teachers are expected to know which skills are scarce and critical and which careers are in demand. It is therefore imperative that SETAs, through the DBE, are given a clear mandate of sharing such information with LO teachers as they are key stakeholders in the education sector. A theoretical framework becomes key in guiding a study of this nature, where training needs of LO teachers are considered critical in the field of career guidance. Below, we present the Systems Theory Framework of career development that underpins the study.

Theoretical Framework

The theoretical framework that guided this study was the Systems Theory Framework (STF) of Career Development by McMahon and Patton (2006). These theorists have extended the utility of systems theory in their application as a metatheoretical framework for career theory (McMahon & Watson, 2007) and a guide to redefine career counselling and the guidance processes. STF is tailored on the systems theory of Von Bertalanffy (1968, in McMahon & Patton, 2018). The central tenets of the systems

theory are interactions and exchanges of systems within their environments. A theoretical framework provides a theoretical structure and vision for a study (Grant & Osanloo, 2014). Central to the STF is the individual system within which a range of intrapersonal influences on career development is depicted, such as personality, ability, gender, and sexual orientation (McMahon & Patton, 2006). The STF presents career development as a dynamic process, depicted through its process influences, recursiveness, change over time, and chance. Significant to STF is that individuals do not live in isolation; the individual system is connected with the influences that comprise the individual's social system as well as the broader environmental or societal systems. McMahon and Patton (2018) explain that STF provides for interrelationships between systems and subsystems which may be directly or inderectly related to careers, but are nonetheless all important.

Therefore, the training needs of FET LO teachers must be understood in the context of the systems theory framework of career development for practical application (McMahon & Patton, 2018). FET LO teachers are individuals who are part of a system influenced by, among others, geographical and societal influences. Contextual variables that need to be taken into consideration when exploring the training needs of LO teachers are social influences (school) and environmental or societal influences (geographic location and socioeconomic status) (Stead & Watson, 2006). This implies that the relevant stakeholders who are responsible for training LO teachers need to be aware of the context in which the teachers are based so that they can train them effectively and appropriately by invoking relavent theories from across different disciplines (McMahon & Patton, 2018).

Research Methodology, Paradigm and Design

A qualitative research methodology was used to guide this study as qualitative research aims at understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences (Merriam, 2009). The interpretivist paradigm (Thanh & Thanh, 2015) was used to guide the study as it caters for multiple realities, which are inherently unique because individuals construct them as they experience the world from their own vantage points (Hatch, 2002). A case study design was used and considered appropriate for this study since it was an exploratory and discovery-orientated research study (Baxter & Jack, 2008).

Sampling Methods, Population and Data Collection This study was a small investigation wherein nonprobability purposive sampling was used in selecting two secondary schools and one LO teacher per selected school. According to Strydom and De Vos (1998), purposive sampling is based entirely on the judgement of the researcher regarding the characteristics of the representative sample, and seeks information-rich cases that can be studied in depth (Panday, 2007). Semi-structred, face-to-face interviews were used to collect data in this study. Interview schedules were crafted beforehand to assist in guiding the interview process. Each interview lasted for about 50 to 55 minutes. To gather rich data, openended questions were posed, followed by follow-up questions derived from the participants' responses.

Ethics

All ethical considerations were observed, and permission and consent obtained from the Faculty of Education at the University of Pretoria, the Department of Basic Education in the Waterberg District municipality where the Lephalale municipality is situated, the FET LO teachers and the principals. Pseudonyms were used to refer to the participants to protect their identities. Privacy, avoidance of harm, voluntary participation, confidentiality, and anonymity were adhered to.

Trustworthiness

Prolonged engagements during data collection, nongeneralisation of findings, and member checking were used in this study to ensure realibility and trustworthiness. The participants' views were subjective in nature and were accepted as their lived experiences.

Data Analysis

Thematic content analysis (TCA) was used as a qualitative method of analysing data in this study. Field notes were taken (De Vos, Strydom, Fouché & Delport, 2011) on the same day that the individual semi-structured face-to-face interviews took place. Data was transcribed and key quotes were identified and summarised. Key themes, subthemes and categories were identified through analysis.

Findings

This study aimed at addressing the following research question: What kind of support do LO teachers need to ensure their effectiveness in teaching career guidance at rural high schools? One theme with three subthemes emerged from the data collected during the investigation into the support needs of LO teachers in teaching career guidance at rural high schools. This article focuses on subtheme 1.1: Training needs of LO teachers and its categories; computer training, networking training and careerguidance training. In reporting the findings of the study, participants' comments are quoted verbatim, but pseudonyms are used to protect the participants' identity.

The data indicates that both participants needed computer literacy skills to assist the FET learners with online application forms, research about their career options, and to complete the

online career interest questionnaires. Participant 1 expressed the need for computer training:

I think the skill that I lack nowadays ... is in the world of technology ... and then as an old teacher ... you know this thing of computers ... we don't have the skills ... because nowadays we should apply for these learners online, we need to assist them with information about various careers and how to complete online tests ... I can't do that so I am asking other teachers to do it for me.

Participant 1 mentioned networking skills as a training need. The participant showed concern when mentioning this need. Below is a verbatim representation of what the participant said regarding the need for networking skills.

I think the liaising skills ... Like you have mentioned I should be able to ask other people to come and teach our learners guidance and other careers ... I should be able to organise those people ... Hhm ... What can I say ... Aaa ... I don't know maybe I as a teacher ... I do not have a clue of where to go to ask for help maybe something should be coming ... my way because sometimes you suffer because you don't know where to go to ask for some help.

Both participants alluded to them receiving training in career guidance in the form of workshops in 2014 on the topic of careers and career choices as a way of preparing them to be able to teach LO in totality. However, they mentioned that the training was not adequate and felt that it was delayed because LO was introduced in 2006 in the FET phase. Participant 2 was appointed in the position of LO teacher and was allocated LO after the phasing out of Afrikaans at the school where she was teaching. Participant 2 alluded to the insufficient training in the following manner:

Yes, I attended the training in 2014 ... that one was focusing on LO: careers and career choices ... and we went to University of Limpopo. The workshop was for a week. Training sessions are few, and since then I did not attend any other training in careers.

Discussion

Although this research was limited to two schools in the Lephalale Municipality, Palala North Circuit, the findings align with the literature and confirm that LO teachers require training. These findings are in line with findings from other studies conducted in similar contexts, which also indicate that teachers who provide career guidance require training (Marumo, Kok & Van der Walt, 2017; Pillay, 2012). The enhanced knowledge and skills would then empower teachers to assist the learners who are faced with the social challenges of the 21st century. Arguably, the training needs that the LO teachers mentioned are among the 21st-century training needs for human capital development (Boholano, 2017). Computer training, networking skills, and career guidance training are critical in the teaching and learning space in the 21st century. Participant 1's experience of a lack of training in computer-related skills in teaching career guidance is reflective of a training need for LO teachers in rural areas. This finding mirrors findings by Usun (2007) indicating that teachers need support and training to positively integrate technology into their classrooms. It is therefore crucial for LO teachers to be trained in computer technology because a lack of computer training often accounts for teachers' low self-confidence when they need to initiate computer activities or tasks (Sabzian & Gilakjani, 2013). Teachers who lack computer literacy might feel intimidated to function in the 4th industrial revolution and the uncertainties it creates regarding job security.

Both participants in this study indicated that they lacked networking skills. This was more evident when they were asked about the career activities that they embarked on, and they mentioned that they only participated in career exhibitions and open days that were arranged by the DBE. Neither of the participants arranged or coordinated career days or career expos for their FET learners. Villegas-Reimers (2003, in Jita & Mokhele, 2014) mentions that teacher networks enable them to work together on problems they experience in practice. Networking skills form part of a set of 21st-century skills for any teacher, more so, LO teachers, as they need to reach out to various types of professionals to help their learners effectively. Working in silos is not to the benefit of the learners.

Both participants in this study indicated the need for career-guidance training. They mentioned that they were exposed to one training workshop which lasted for five days only. Filland (2008) reports similar findings by alluding to the fact that the DBE needed to equip teachers with more skills and knowledge to handle career guidance including motivational programmes, commitments, support, and assistance in teaching LO. Participants mentioned that they needed more training to empower them to provide learners with career guidance and information of career choices. This could indicate that the training they had received was perhaps insufficient and did not grant them the confidence to assist learners with career guidance. Based on the above, LO teachers need to be trained continuously in the field of career development and guidance.

Limitations of the Study

Since a sample of only two schools and one FET teacher from each school was used in this study, and the interpretations of the participants' voices and comments were of a subjective nature, the findings cannot be generalised to all rural secondary schools.

Recommendations

The aim of the study was to explore LO teachers' training needs in teaching career guidance at rural secondary schools. The study identified gaps in the training of LO teachers. A number of recommendations are made to inform stakeholders involved in the training of LO teachers. The newly developed

career practitioner competencies need to form a fundamental part of the requiremets of every teacher who is required to offer LO, especially careers choices. If a teacher fails to take part in such activities, their practicing certificate (South African Council of Educators) should be revoked.

The DBE should develop and sustain strong relationships with all stakeholders involved in career development services, especially in the delivery or provision of career development training. It is imperative that both DBE and DHET (now called the Department of Higher Education, Science and Technology (DHEST)) synergise their efforts for continuity in the provision of career guidance within the education system. Institutions such as the Department of Labour, various sector education and training authorities and the National Youth Development Agency need to sign a memorandum of understanding and service level agreements with the DBE and DHET. These institutions should serve as information hubs for LO teachers and other practitioners.

Conclusion

The results of this study indicate that the training needs of FET LO teachers are critical in South Africa, especially in this era where social challenges such as youth unemployment and a lack of career guidance are threatening the growth of the economy. The findings in this article therefore become more relevant in the context of transformation in the field of career guidance where South Africa is in the process of developing a policy for career guidance. Based on the findings, all stakeholders, including international stakeholders in the education and training sector involved in career development services should take note of these training needs. This would assist them in devising a strategy to ensure that teachers responsible for career guidance are trained annually on computer and, networking skills, and are also empowered with scarce skills and information on in-demand careers that would enable them to present up-to-date, appropriate, effective, and informed career development guidance to learn-

Authors' Contributions

Matabe Rosa Modiba developed the manuscript and Maximus Monaheng Sefotho (Master's degree supervisor) contributed developmental ideas as well as major corrections and finalisation. Both authors reviewed the final copy of the manuscripts.

Notes

- This article was based on a masters dissertation by the first author with the second author as supervisor.
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References

Bacigalupo M & Cachia R 2011. Teacher collaboration

- networks in 2025: What is the role of teacher networks for professional development in Europe? Luxembourg: Publications Office of the European Union. https://doi.org/10.2791/69124
- Badugela TM 2012. Problems facing educators in implementing the National Curriculum Statement: The case of Tshifhena Secondary School, Vhembe District, Limpopo Province, South Africa. MEd dissertation. Pretoria, South Africa: University of South Africa. Available at http://uir.unisa.ac.za/bitstream/handle/10500/7642/dissertation_badugela_tm.pdf?sequence=1&isAllo wed=y. Accessed 22 September 2019.
- Baxter P & Jack S 2008. Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4):544–559. Available at https://nsuworks.nova.edu/tqr/vol13/iss4/2/. Accessed 20 September 2019.
- Boholano HB 2017. Smart social networking: 21st Century teaching and learning skills. *Research in Pedagogy*, 7(1):21–29. https://doi.org/10.17810/2015.45
- Debono M, Camilleri S, Galea J & Gravina D 2007. Career guidance policy for schools (Report October 2007). Florina, Malta: Ministry of Education, Youth and Employment. Available at https://education.gov.mt/en/resources/documents/policy%20documents/career%20guidance.pdf. Accessed 23 September 2019.
- Department of Education 2003. *Curriculum 2005*. Pretoria, South Africa: Government Printers.
- Department of Education 2007. National Education Policy Act (27/1996): The National Policy Framework for Teacher Education and Development in South Africa. *Government Gazette*, 502(29832):1–40, April 26. Available at https://www.che.ac.za/sites/default/files/publications/NPF_Teacher_Ed_Dev_Apr2007.pdf. Accessed 1 October 2019.
- Department of Higher Education and Training, Republic of South Africa 2011. National Qualifications Framework Act (67/2008): Policy on the Minimum Requirement for Teacher Education Qualifications. Government Gazette, 553(34467):1–64, July 15. Available at http://www.dhet.gov.za/Teacher%20Education/Policy%20on%20Minimum%20Requirements%20for%20Teacher%20Education%20Qualifications%20(2011),%2022%20July%202011.pdf. Accessed 18 October 2019.
- Department of Higher Education & Training, Republic of South Africa 2014. Report on the survey of career dveleopment activities 2013/2014. Available at http://www.dhet.gov.za/SiteAssets/Latest%20News/Report%20on%20the%20survey%20for%20career%20development%20activities.pdf. Accessed 23 September 2019.
- Desimone LM 2009. Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3):181–199. https://doi.org/10.3102/0013189X08331140
- De Vos AS, Strydom H, Fouché CB & Delport CSL 2011. Research at grass roots: For the social sciences and human service professions (4th ed). Pretoria, South Africa: Van Schaik.

- Diale B, Pillay J & Fritz E 2014. Dynamics in the personal and professional development of Life-orientation teachers in South Africa, Gauteng Province. *Journal of Social Sciences*, 38(1):83–93. Available at http://www.krepublishers.com/02-Journals/JSS/JSS-38-0-000-14-Web/JSS-38-1-000-14-Abst-PDF/JSS-38-1-083-14-1334-Diale-B/JSS-38-1-083-14-1334-Diale-B-Tx%5B9%5D.pmd.pdf. Accessed 6 September 2019.
- Du Toit FG 2010. An evaluation of a career guidance programme in rural schools in Mpumalanga. MEd dissertation. Johannesburg, South Africa: University of Johannesburg. Available at https://ujcontent.uj.ac.za/vital/access/manager/Rep ository/uj:8649?site_name=GlobalView. Accessed 6 September 2019.
- Filland LD 2008. Educators' experiences in teaching guidance in Life Orientation in primary schools in an informal settlement. MEd dissertation.

 Johannesburg, South Africa: University of Johannesburg.
- Grant C & Osanloo A 2014. Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house". *Administrative Issues Journal: Connecting Education, Practice, and Research*, 4(2):12–26. https://doi.org/10.5929/2014.4.2.9
- Hatch JA 2002. *Doing qualitative research in education settings*. Albany, NY: State University of New York Press.
- Hooley T & Dodd V 2015. *The economic benefits of career guidance*. England: Careers England. Available at https://cica.org.au/wp-content/uploads/Careers-England-Research-Paper-The-Economic-Benefits-of-Career-Guidance-July-2015.pdf. Accessed 23 September 2019.
- Hooley T & Rice S 2019. Ensuring quality in career guidance: A critical review. *British Journal of Guidance & Counselling*, 47(4):472–486. https://doi.org/10.1080/03069885.2018.1480012
- Jita LC & Mokhele ML 2014. When teacher clusters work: Selected experiences of South African teachers with the cluster approach to professional development. *South African Journal of Education*, 34(2):Art. # 790, 15 pages. https://doi.org/10.15700/201412071132
- Kennedy M 2016. Parsing the practice of teaching. Journal of Teacher Education, 67(1):6–17. https://doi.org/10.1177/0022487115614617
- Krutka DG, Carpenter JP & Trust T 2017. Enriching professional learning networks: A framework for identification, reflection, and intention. *TechTrends*, 61(3):246–252. https://doi.org/10.1007/s11528-016-0141-5
- Lai-Yeung SWC 2014. The need for guidance and counselling training for teachers. *Procedia Social and Behavioral Sciences*, 113(2014):36–43. https://doi.org/10.1016/j.sbspro.2014.01.008
- Marumo LP, Kok A & Van der Walt JL 2017.
 Professional development training programs by the Northern Cape Department of Education: Impact on Life Orientation teachers. *International Journal of Educational Sciences*, 18(1-3):214–223.
 https://doi.org/10.1080/09751122.2017.1335096
- McCarthy J 2001. *The skills, training and qualifications* of guidance workers (Paper prepared for an OECD review of policies for information, guidance and

- counselling services). Available at http://www1.oecd.org/education/innovation-education/2698214.pdf. Accessed 23 September 2019
- McMahon M & Patton W 2006. The systems theory framework: A conceptual and practical map for career counselling. In GB Stead & MB Watson (eds). Career psychology in the South African context (2nd ed). Pretoria, South Africa: Van Schaik.
- McMahon M & Patton W 2018. Systemic thinking in career development theory: Contributions of the Systems Theory Framework. *British Journal of Guidance & Counselling*, 46(2):229–240. https://doi.org/10.1080/03069885.2018.1428941
- McMahon M & Watson M 2007. The Systems Theory Framework of career development: Expanding its research influence. *Australian Journal of Career Development*, 16(3):47–54. Available at https://journals.sagepub.com/doi/pdf/10.1177/1038 41620701600308?casa_token=Xuiyh0zwLUQAA AAA:-
 - 0_LdiZuW8XI_zf93M1fE96UKqZ5qWFwRaHmc 9SVISDWsPLHFXAeeHJUNxxsg2zOk_pEJRczp Ks. Accessed 29 August 2019.
- Merriam SB 2009. *Qualitative research: A guide to design and implementation*. San Fransisco, CA: Jossey-Bass.
- Panday V 2007. Teachers' perspectives on the implementation of Life Orientation as a learning area. Port Elizabeth, South Africa: Nelson Mandela Metropolitan University.
- Patel F 2012. Career guidance policy and delivery in South Africa. Keynote address to the National Career Guidance Conference, Johannesburg, South Africa, 6–7 September.
- Phokane MD 2012. Educators' and learners' experiences of parental involvement in creating a positive climate for the teaching of Life Orientation. MEd diisertation. Pretoria, South Africa: Univeristy of Pretoria. Available at https://pdfs.semanticscholar.org/39b1/e40c57ea01f 98d60147918e71f30da765540.pdf. Accessed 29 August 2019.
- Pillay J 2012. Keystone Life Orientation (LO) teachers: Implications for educational, social, and cultural contexts. *South African Journal of Education*, 32(2):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. Available at http://www.sajournalofeducation.co.za/index.php/saje/article/view/56/83. Accessed 29 August 2019.
- Republic of South Africa 2010. Media statement by Higher Education and Training Minister, Dr Blade Nzimande, on Nelson Mandela Career Guidance campaign. Available at https://www.gov.za/media-statement-higher-education-and-training-minister-dr-blade-nzimande-nelson-mandela-career. Accessed 25 September 2019.
- Rukwaro MW 2011. Provision and access to career information to secondary school girls in Nyahururu Division, Laikipia West District, Kenya. PhD thesis. Eldoret, Kenya: Moi University. Available

- http://ir.mu.ac.ke:8080/xmlui/bitstream/handle/123 456789/333/Rukwaro%20Monica%20W.%202011 .pdf?sequence=1&isAllowed=y. Accessed 27 August 2019.
- Sabzian F & Gilakjani AP 2013. Teachers' attitudes about computer technology training, professional development, integration, experience, anxiety, and literacy in English language teaching and learning. *International Journal of Applied Science and Technology*, 3(1):67–75. Available at http://ijastnet.com/journals/Vol_3_No_1_January_2013/9.pdf. Accessed 27 August 2019.
- Sathekge HS 2014. The roles and perceptions of career guidance teachers in influencing learners' choice of nursing as a career. MSN thesis. Johannesburg, South Africa: University of the Witwatersrand. Available at http://wiredspace.wits.ac.za/bitstream/handle/1053 9/15276/Final%20Thesis.190514.pdf?sequence=1
- Sefotho MM 2017. Career guidance in South Africa as a social justice travesty. *Orientación y Sociedad*, 17:153–163. Available at http://sedici.unlp.edu.ar/bitstream/handle/10915/68 843/Documento_completo.pdf?sequence=1. Accessed 27 August 2019.

&isAllowed=y. Accessed 30 September 2019.

- Shumba A, Mpofu E, Seotlwe M & Montsi MR 2011.

 Perceived challenges of implementing the guidance subject in Botswana primary schools. *Journal of Social Sciences*, 28(1):1–11. Available at http://www.krepublishers.com/02-Journals/JSS/JSS-28-0-000-11-Web/JSS-28-1-000-2011-Abst-PDF/JSS-28-1-001-11-1190-Shumba-A/JSS-28-1-001-11-1190-Shumba-A-Tt.pdf. Accessed 27 August 2019.
- Stead GB & Watson MB (eds.) 2006. Career psychology in the South African context (2nd ed). Pretoria, South Africa: Van Schaik.
- Strydom H & De Vos AS 1998. Sampling and sampling methods. In AS de Vos (ed). *Research at grass roots: A primer for the caring professions*. Pretoria, South Africa: Van Schaik.
- Sultana RG 2014. Livelihood planning and career guidance in Palestine and the broader MENA region. *International Review of Education*, 60(2):177–197. https://doi.org/10.1007/s11159-014-9405-5
- Thanh NC & Thanh TTL 2015. The interconnection between interpretivist paradigm and qualitative methods in education. *American Journal of Educational Science*, 1(2):24–27.
- Usun S 2007. Teacher training programs for computer education and computer assisted education in Turkey. Paper presented at the 7th International Educational Technology Conference (IETC), Nicosia, Cyprus, 3–5 May. Available at https://files.eric.ed.gov/fulltext/ED500110.pdf. Accessed 27 August 2019.
- Van Deventer KJ 2008. Perceptions of Life Orientation teachers regarding the implementation of the learning area in grade 8 and 9: A survey in selected Western Cape high schools. South African Journal for Research in Sport, Physical Education and Recreation, 30(2):131–146. Available at https://www.researchgate.net/profile/Karel_Van_D eventer/publication/268415512_Perceptions_of_Li

- fe_Orientation_teachers_regarding_the_implement ation_of_the_learning_area_in_grades_8_and_9_a _survey_in_selected_Western_Cape_high_schools/links/55254b8f0cf24fc7fdeea334.pdf. Accessed 25 August 2019.
- Van Deventer KJ & Van Niekerk E 2008. *Life*Orientation in grades R-11: Teachers' perspectives
 on the implementation of Life Orientation in
- selected Western Cape Schools (Unpublished research report). Stellenbosch, South Africa: Stellenbosch University.
- Whitworth BA, Maeng JL & Bell RL 2018. Exploring practices of science coordinators participating in targeted professional development. *Science Education*, 102(3):474–497. https://doi.org/10.1002/sce.21337