

Chapter # 17

DEVELOPING CRITICAL THINKING SKILLS IN SECONDARY SCHOOL LEARNERS USING EDUCATIONAL PHILOSOPHIES:

South African teachers' perspectives

Bianca Williams & Celestin Mayombe

Education and Human Rights in Diversity, Faculty of Education, North-West University, South Africa

ABSTRACT

Critical thinking is one of the highly recommended skills for the 21st century that young people should cultivate from secondary education to prepare them for the future of work. This chapter examines how secondary school teachers use educational philosophies in classrooms to develop critical thinking skills in learners. The study used a qualitative research approach and a multiple case-study design to understand the participant teachers' perspectives. The study population consisted of Grade 10-12 secondary school teachers within the Buffalo City Metro (BCM) District in the Eastern Cape, South Africa. The sample size consisted of 12 teachers. Purposive sampling was used to select the participant teachers for semi-structured and focus group interviews. The study used thematic analysis methods to analyse data. The findings reveal that teachers practised social constructivism and progressivism as educational philosophies to develop critical thinking skills in their learners. The authors conclude that developing critical thinking skills in secondary school learners by using relevant educational philosophies could result in preparing them for the future world of work or tertiary education. To develop critical thinking in secondary school learners, the study recommends that the Department of Education and policymakers should implement ongoing teachers' continuous professional development that involves hands-on strategies for teaching each subject in classrooms.

Keywords: critical-thinking skills, progressivism, secondary school, social constructivism, South Africa, teaching and learning philosophies.

1. INTRODUCTION

Critical thinking skills are one of the important 21st-century soft skills that young people need to develop from secondary school to prepare them for the future world of work or tertiary education.

To achieve this goal, secondary school teachers ought to use appropriate types of educational philosophies in classrooms that will help learners develop critical thinking skills (Kagaba, 2025; Wahid, 2022). In the context of the present study, this argument implies that teaching and learning philosophies practised by secondary school teachers impact not only the acquisition of problem-solving skills, but also the academic performance and prepare learners for the future of work. To explore the matter further, the present chapter examines educational philosophies used by secondary school teachers to help Grades 10-12 learners develop critical-thinking skills in South Africa.

The main argument of the chapter is that, where there are adequate resources for teaching and learning, practising suitable educational philosophies in classrooms will help teachers develop critical thinking skills in their learners, hence prepare them for the future

world of work. Drawing from philosophical and educational foundations, the present authors define critical thinking as reflective and purposeful reasoning that involves metacognition, analysis, and evaluation (Alsaleh, 2020). Critical thinking is also a component skill of problem-solving, decision-making, and creating strategies to investigate and explore physical and conceptual spaces.

After the introduction, the rest of the chapter is organised in eight main sections. The next section is the background of the study, followed by the problem statement and study aim. Section four entails the theoretical framework, followed by the literature review. Section six discusses the research methodology used to collect the data. Section seven presents the data collected through the interviews, followed by the discussion of the findings. The last section concludes the study.

2. BACKGROUND OF THE STUDY

Critical thinking has emerged as one of the crucial skills for the 21st century, essential for effective problem-solving, informed decision-making, and democratic engagement. Critical thinking skills are important in education because they are unique and highly valued cognitive skills, characterised as one of the “four Cs” alongside communication, collaboration, and creativity (Daflizar & Alfian, 2023; Kagaba, 2025). For that reason, it has become highly important that secondary school teachers develop critical thinking skills in learners by using appropriate education philosophies and teaching strategies. In other words, there is a relationship between philosophies of teaching and learning adopted by a teacher and learners’ acquisition of critical thinking skills. Similarly, Leng (2020) argues that if the educational philosophy practised by a teacher does not include active engagement of learners, metacognition, analysis, and evaluation, then they cannot develop critical thinking skills, hence potentially perform poorly in that subject.

Through the Curriculum and Assessment Policy Statement (CAPS), the South African Department of Basic Education (DBE, 2011) has embedded critical thinking in the curriculum of secondary school. The DBE introduced a new teaching strategy in the South African Curricula to promote critical thinking. Project-based learning (PBL), problem-based learning (PBL), inquiry-based learning (IBL), and case-based learning (CBL) have been implemented at secondary schools to develop critical thinking skills among learners. However, scholars such as Nikkola et al. (2022) and Leibovitch et al. (2025) have criticised South Africa’s CAPS, arguing that it is more prescriptive and content-heavy, thereby contributing to the challenges teachers face in integrating certain teaching strategies. The CAPS also requires a structured, assessment-driven approach in the classroom, a factor that may prompt teachers to prioritise curriculum completion over encouraging learners’ involvement in collaborative and critical thinking activities (Leibovitch et al., 2025). Thus, time available for developing critical thinking skills is also a significant challenge.

South African classroom realities present some barriers in implementing educational philosophies to develop critical thinking skills in secondary school learners. The first barrier consists of overcrowded classrooms (West & Meier, 2020). Overcrowded classrooms hinder teachers from using appropriate teaching and learning strategies that can help learners develop critical thinking skills. Though there are various policy initiatives to address learner-to-teacher ratios, overcrowding is a persistent and systemic problem in South African public schools (Tshangana et al. 2023). The second significant barrier is curriculum overload. Thornhill-Miller et al. (2023) note that curriculum overload in South Africa negatively impacts teaching and learning outcomes. In this connection, O’Reilly et al. (2022) reported that CAPS can limit teachers from implementing teaching and learning strategies as they are

obliged to rush through content to meet curriculum requirements. As a result, teachers leave a limited time for reflective teaching practices and class activities.

A third major barrier is a lack of resources or teaching and learning materials in many South African schools, hindering the promotion of critical thinking skills (Leibovitch et al., 2025). Under-resourced schools are heated. This challenge is worse in under-resourced schools and in the schools located in rural areas (Makeleni et al., 2023; Zondo, Human-Vogel & Omidire, 2025). The lack of resources entails textbooks, learning materials, assessment tools, and internet connectivity. In some schools, learners often share a textbook in groups of five to seven and cannot complete homework, particularly in disadvantaged community schools (Leibovitch et al., 2025; Makeleni et al., 2023). These challenges imply that secondary school learners cannot develop critical thinking skills if teachers cannot practise relevant teaching and learning philosophies to achieve desired goals.

3. RELATIONSHIP BETWEEN TEACHING PHILOSOPHY AND PRACTICE

A strong connection between teaching philosophy and practice makes teaching purposeful in terms of developing critical thinking skills in learners. As a set of beliefs, teaching philosophy guides teachers on why and how they teach, while practice is the actual implementation of teaching style in the classroom (Leng, 2020). Teaching philosophy and practice should be deeply connected, with teaching philosophy informing teaching methods and practice (teaching style, classroom management, assessment choices, and interaction with students), revealing the connection, and encouraging reflection to create planned, effective learning experiences. In other words, educational philosophy guides practice in the classroom.

Teaching philosophies are significant because they outline the roles and duties of teachers in the classroom. Philosophies enhance the ability of teachers to develop solid reasoning and understanding (Ulubey & Alpaslan, 2022). Consequently, teachers develop solid reasoning and understanding to identify educational practices that have failed and design strategies for the improvement of these failed practices. In the context of China, Leng's (2020) study revealed that the practice of specific educational philosophies motivated secondary school learners to engage in academic activities that stimulated their cognitive development.

Furthermore, teaching philosophies can have a significant influence on the performance of learners in various ways. When teachers have a clear understanding and application of teaching philosophies, they can create a positive learning environment that promotes active engagement, critical thinking, and problem-solving skills in learners. In the context of Nigerian secondary schools, Jabaar's (2018) study revealed that teachers still carried out traditional learning styles of teacher-centred learning. In addition, teachers did not practice appropriate philosophies of teaching and learning to allow them to effectively engage with learners and promote active learning. As a result of teachers practicing incorrect philosophies, poor academic achievement among secondary school learners was evident.

4. PROBLEM STATEMENT AND STUDY AIM

The concern in this chapter is that many secondary school learners complete their secondary school education in South Africa without acquiring soft skills such as critical thinking and problem-solving skills, which could help them in their future work environment

and tertiary education (DBE, 2022; Zondo et al., 2025; Phillips, 2023). The problem lies with teachers facing various challenges hindering them from practising educational philosophies in classrooms to develop critical thinking skills in learners. Besides the inadequate professional development for teachers, the significant challenges are the curriculum overload (Thornhill-Miller et al., 2023), a lack of resources in terms of instructional materials (Leibovitch et al., 2025), overcrowded classrooms (West & Meier, 2020), and time constraints (O'Reilly et al., 2022). Yet even when resources are available, another significant and often overlooked barrier to fostering critical thinking lies in teachers' continuous professional development. As a result, the teaching and learning process tends to emphasise rote memorisation and fundamental material knowledge instead of teaching methods that promote higher-order thinking. Therefore, the chapter aims to examine teaching and learning philosophies that secondary school teachers use to develop critical thinking skills in learners in South Africa.

5. THEORETICAL FRAMEWORK

The study utilised the social constructivist learning theory as a theoretical framework. Social constructivism was coined and developed by Lev Vygotsky in 1968. Vygotsky envisioned that knowledge would be socially constructed using interaction with people in various contexts (Frederick-Jonah, 2022). Social constructivism theory is an educational learning theory that emphasises learners' role in constructing their own knowledge in learning through reflection. Learners construct knowledge and acquire skills through "reflection and active construction process occurring in the mind of individuals" (Brau, 2020, p. 6). In other words, learners accumulate new knowledge through exploring and inquiring about activities with their peers during learning. The theory is based on the premise that learners construct new ideas based on their own prior knowledge and experiences.

Constructivism is suitable for the study topic because it shifts learning from passive reception to active knowledge creation. Social constructivism theory "focuses on interaction, collaboration, and group work for effective learning" (Akpan et al., 2020, p.50). It stresses self-discovery, problem-solving, and deeper understanding through real-world application (Frederick-Jonah, 2022). Furthermore, it promotes self-guided exploration, making learners responsible for their learning process, improving motivation, and fostering independent thinking for critical analysis. Therefore, applying the social constructivist learning theory in secondary schools can be useful because learners engage freely in classroom activities that ignite cognitive skills such as problem-solving and critical thinking (Ullah et al., 2020). As a result, learners gain new knowledge through self-reflection, group discussions, and evaluation in the classroom.

6. LITERATURE REVIEW

It is important to examine the debate in the literature about the most used philosophies of teaching and learning that promote critical thinking skills. These are humanism, constructivism, and progressivism. Firstly, Humanism is a learner-centred philosophy that focuses on developing soft skills to build human relationships and to acquire valuable knowledge (Tolstova & Levasheva, 2019). The proponents of this philosophy believe that learners should be actively involved with their education on all levels and should be able to choose what they will be learning (Tahirsylaj, 2017). In this philosophy, teachers are seen as facilitators and partners in learners' growth, rather than directing the learning process (Fries,

2012). Humanism emphasises the importance of self-directed learning, discovery, and experiential learning, where learners assume responsibility for their education.

Secondly, in a constructivist philosophy, the teacher only acts as a source of information (Aslan, 2018). The teacher encourages the learner to use different tools and methods to seek information and resources. Aung (2020) notes that this philosophy uses a more hands-on approach by allowing learners to construct their own ideas. Furthermore, Ahmad, Sultana, and Jamil (2020) describe constructivism as the knowledge that is constructed based on own experiences and reactions to environments. Constructivism emphasises the active role of learners in the learning process and encourages them to construct their own meaning of the world through hands-on, minds-on, and authentic learning experiences. A study conducted by Sawers, Wicks, Mvududu, Seeley and Copeland (2016) indicate that active, collaborative learning and knowledge creation by learners are more effective than traditional models of learning, in which learners are passive recipients of information.

Thirdly, progressivism is a philosophy that focuses on how individuals participate in activities. It emphasises the learners rather than the content they are taught (Alsalem, 2018). This idea stems from Dewey's theory, which suggests that more care and consideration should be given to the reformation of experience (Williams, 2017). Progressivism views education as a means for social reform, and learners are encouraged to engage in critical thinking and social action to effect positive change in society. Therefore, teachers who use this philosophy must be flexible and adaptable to keep up with changes in the educational landscape (Alanoglu et al., 2022). Overall, the progressive philosophy of education promotes a learner-centred approach to learning that emphasises experimentation, critical thinking, and the active engagement of learners in the learning process.

7. RESEARCH METHODOLOGY

The researchers used the interpretative paradigm to conduct the study and achieve its purpose. Kivunja and Kuyini (2017) define the interpretivist paradigm as a theory where emphasis is placed on trying to understand and interpret the viewpoint of the participants or how they interpret contexts. The interpretative paradigm helped the researchers interpret participants' viewpoints and analyse the data using thematic analysis. Kiger and Varpio (2020) argue that in interpretative research, researchers intend to understand how participants construct reality. The interpretive paradigm helped the researcher to understand the philosophies of teaching and learning that secondary school teachers practice.

The researchers used a qualitative research approach in the form of a multiple case-study research design to understand the phenomenon explored from the perspective of the participants. A multiple-case study design is defined as an in-depth analysis of an occasion or occurrence of a naturalistic phenomenon (Tracy, 2019). Following the view of Majid (2018), when applying the multiple-case study design to this study, the researchers determined that the secondary school teachers who identified their philosophies of teaching and learning were considered the "multiple cases".

7.1. Study Population and Sampling

The study population consisted of 43 secondary school teachers from Circuit Five (5) within the Buffalo City Metro (BCM) District in the Eastern Cape. The study considered Grades 10 -12 teachers only. The sample size consisted of 12 secondary school teachers. The researchers selected three (3) schools within the district. To avoid bias in the process of

selecting the participants, four (4) teachers were considered from each school to make a sample size of 12 participants for the semi-structured and focus group interviews.

The study used the purposive sampling method to select 12 teachers. Kumar (2011) notes that purposive sampling relies on the researcher's own judgment to select suitable participants who hold information to meet the research objectives. Purposive sampling was appropriate for this study because the teachers were recruited based on selection criteria. The researchers sought to find the best possible participants that would suit the criteria set out or created by the researcher.

A school was selected if its language of instruction is mainly English and has more than four teachers in Grades 10-12. Similarly, a teacher was selected if he/she had a relevant teaching qualification to teach in South African schools with at least five years of teaching experience at secondary schools and teaching a subject in Grades 10-12 during the time of the data collection process.

7.2. Data Collection and Analysis

To obtain reliable data from the teachers, the researchers conducted one-on-one semi-structured interviews and focus-group interviews. The researchers could not collect data through classroom observations because of restrictions linked to the permission letter to conduct research from the Department of Basic Education. Semi-structured interviews are conducted individually with participants and consist of a combination of open- and closed-ended questions on topics which the researcher wants to address (Adams, 2015). The researchers conducted semi-structured interviews with the 12 secondary school teachers who formed part of the sample size. The focus-group interview with 12 teachers sought to understand the perspectives and experiences of the participants in the study. The reason behind choosing a focus-group interview was to gain detailed information on the philosophies of teaching and learning that participating teachers used in the classroom (Nyumba et al., 2018). A focus-group interview helped collect rich data that was not revealed during one-on-one interviews.

This study used the thematic analysis method to analyse data from semi-structured interviews and focus group interviews. Kiger and Varpio (2020) define thematic analysis as an analytical-qualitative method used to understand experiences across a data set. The thematic analysis helped identify themes from data that proved to be beneficial to address the research question of this study (Maguire & Delahunt, 2017). Once the data were collected, the researchers analysed the meanings attached to the set of data and were able to use the analysis to determine the philosophies of teaching and learning practiced by secondary school teachers.

This study presented some limitations relating to various aspects of the research study. The first limitation was the sample size (3 schools and 12 teachers were included), which affected the generalisability of the research. The second limitation was the absence of classroom observations due to the restrictions on the permission letter to conduct research and the ethics approval letter. These restrictions hindered the ability to obtain the views from the learners rather than relying on self-reporting responses from the teachers.

8. FINDINGS

It was important to examine the formal teaching qualifications of teachers as they may impact the knowledge and practice of educational philosophies to enhance critical thinking skills in their learners. The analysis of the findings revealed that the participants' highest qualifications range from a bachelor's degree in education, a postgraduate certificate in

education, to a Master of Education. These findings suggest that teachers with university degrees or specialised education training may possess a good knowledge of diverse philosophies of teaching and learning. Therefore, their level of qualification could help them select suitable philosophies of teaching and learning to develop critical thinking skills in learners.

Table 1 presents the themes and sub-themes that emerged from both semi-structured and focus-group interviews with the participants. The interview questions related to teaching and learning strategies associated with philosophies that teachers used in classrooms.

Table 1.
Themes and sub-themes about developing critical thinking skills in learners.

Themes	Sub-themes
1. Teaching-learning strategies to implement the teaching & learning philosophy in classrooms	1. Problem-based learning
	2. Class discussions
2. Importance of critical thinking skills in learners	1. Participating in the learning process
	2. Fulfilling the aim and objectives of the subject contents

The themes and sub-themes presented in Table 1 are developed in the next sub-sections. The findings are presented according to the themes and sub-themes with concise analysis. The discussions of the findings are in another section.

8.1. Theme 1: Strategies to Implement Teaching and Learning Philosophy in Classrooms

Teachers used diverse strategies in classrooms to develop critical thinking skills in learners. During one-on-one interviews and focus group interviews, teachers reported that they used a learner-centred approach to motivate their learners to actively engage during the process of teaching and learning. Data presented in the sub-themes below shows that teachers used problem-based learning, and sharing thoughts and ideas as means to implement a specific teaching and learning philosophy.

8.1.1. Sub-theme 1: Problem-Based Learning Strategy

Teachers used a problem-based learning strategy that involved presenting learners with situations or challenges from the real world that called for them to come up with solutions as a team. They stated that problem-based learning was an effective procedure for implementing their chosen philosophy of teaching and learning. Below are the responses that were given by the teachers on the procedure of implementing philosophy. Teacher (P5) explained as follows:

I used problem-based learning to identify problems and interact with learners to determine solutions. A difficult and real-world problem or scenario is presented to start the learning process. This problem is intended to be interesting and applicable to the lives of the learners.

The teacher (P12) commented the following:

The learners in my classroom were provided with challenges and allowed to use probing tactics to gain more understanding of the challenge. I guided them toward developing a solution for each challenge or problem provided.

The findings from the quotes reveal that teachers used problem-based learning as a strategy to develop critical-thinking skills in their learners. As discussed in the literature review section, the learning strategy is linked to progressivism. The quotes indicate that the teachers used to pose problems from real-life contexts to the learners, which helped them understand how the knowledge they acquired can be applied in real-world situations. Problem-based learning strategy helped teachers to establish a dynamic and engaging learning environment that promotes critical thinking, collaboration, and the real-world application of knowledge.

8.1.2. Sub-theme 2: Class Discussions

Class discussions helped implement a philosophy of teaching and learning by creating a learning environment where learners shared ideas and opinions on a topic among peers. Under the guidance of teachers, class discussions motivated learners to collaborate and express their views respectfully. Teacher (P7) explained the process of class discussions by saying:

I allow the learners to contribute to the lesson by discussing and sharing their thoughts and ideas on a topic. This improves their communication skills. Sharing ideas guarantees exposure to various ideas and thoughts from other learners.

Another teacher (P10) stated as follows:

I create an educational environment that is learner-centred through sharing thoughts and ideas. I enable my learners to actively engage with the materials, take responsibility for their learning, and contribute their original perspectives and ideas to the educational process. Along with improving educational quality, this method equips learners with the skills they need for the rest of their lives.

The analysis of the quotes reveals that teachers provided learners with opportunities to improve and enhance their critical thinking skills by encouraging them to engage with and critically analyse the ideas and opinions of their peers. These findings suggest that the application of teaching philosophies that give priority to each learner's unique needs and strengths can be facilitated through class discussions. The quotes suggest that teachers were practising social constructivism as a philosophy of teaching and learning to develop critical thinking in learners. This can be used to put into practice teaching and learning philosophies that place a high priority on the development of critical thinking abilities.

8.2. Theme 2: The Importance of Critical Thinking Skills in Learners

During both one-on-one interviews and focus group interviews, the researchers asked the teacher participants about their perceptions of the importance of critical-thinking skills in their learners and how they helped learners in classrooms. They responded that critical thinking enables learners to carefully process information and identify areas of weakness. The following sub-themes have been generated based on teachers' responses on the importance of critical thinking skills in learners.

8.2.1. Sub-Theme 1: Participating in the Learning Process

Findings from interviews revealed that teachers used to motivate learners to actively participate in their learning process. During interviews, teachers were asked to explain how they motivated learners to participate in the learning process. Teacher (P3) explained as follows:

As a teacher, I allow my learners to participate in the learning process. This allows them to feel included in the lesson and become more confident. I urge learners to assess

what they have learned, identify their areas of weakness, and set goals for future learning.

Another teacher (P3) stated as follows:

Learner-centred practices allow learners to participate in the learning process. By doing this, teachers create a platform where learners broaden their knowledge by learning from others.

The quotes reveal that teachers promoted the active participation of learners in the learning process. Due to learners participating in the lessons, it became easier for the teacher to include them in all discussions and increase their confidence, and seek knowledge by communicating with others. Therefore, teachers have utilised social constructivism as a philosophy of teaching and learning to cater to the tailored needs of learners.

8.2.2. Sub-Theme 2: Fulfilling the Aims and Objectives of Subject Contents

During semi-structured interviews and focus group interviews, teachers stated that they ensured that their philosophy of teaching and learning assists them in achieving the lessons' aims and objectives. In this connection, Teacher (P4) reported as follows:

Teachers are required to set aims and objectives that are central to the subject content. These aims and objectives should be achieved in a specific time frame. This allows learners to focus on the aspects that are relevant and ignore other aspects.

Teacher (P6) said:

I find that aims and objectives are used to track the progress of both the teacher and the learner. I ensure that I teach the correct content and use adequate assessment strategies to test the learner's ability to successfully follow instructions and retain valuable information that I taught them. I need to use the timeframe that has been stipulated by the department to assess the learners.

The findings from the quotes reveal that teachers developed critical thinking abilities in their learners by ensuring that the aim and objectives of a subject are met within a social constructivist framework. Within the framework of social constructivism, learning is framed by the accomplishment of subject aims and objectives. When the aim and objectives are met, it shows that learners have engaged with the content and have gained a deeper understanding of the subject.

This theme, "Importance of critical thinking skills in learners", addresses the philosophies of teaching and learning that teachers use to develop critical thinking skills. It has been established that teachers use a social constructivist approach to meet the different needs of their learners. By doing this, the teachers developed a bond with learners and helped them to solve problems using progressivism as a philosophy of teaching and learning. The social constructivist framework provides a link between teachers and learners by expanding the learners' knowledge and understanding so that they can apply the theory in real-world contexts. Developing creative thinking skills lays a foundation because it is a skill that can be applied in the real world.

9. DISCUSSION OF THE FINDINGS

The evidence from various quotes reveals that teachers used problem-based learning (problem-posing) and group discussions as teaching strategies to develop critical thinking skills in learners. Through teaching strategies, learners were provided opportunities to analyse, evaluate, and thoughtfully apply reasoning to find a solution to a real-world problem (Leibovitch et al., 2025). The findings suggest that secondary school teachers used progressive philosophy to develop critical thinking skills. In support of Alanoglu et al.

(2022), by using the progressive philosophy of education, teachers used a learner-centred approach to learning that stressed critical thinking and active engagement of learners in groups to find a solution to a posed problem. The inference from the findings is that the use of progressive philosophy enhanced competencies that could prepare learners to navigate the complexities of the contemporary world.

The teaching and learning process also consisted of allowing learners to share their thoughts and ideas as learners were placed in groups. The analysis of the findings reveals that there were aspects of interactive learning, collaborative learning, and learner-centred learning. The findings support the argument of Akpan et al. (2020), who state that the social constructivist philosophy can only be implemented if learners create their knowledge and actively participate in learning by sharing what they have learned and experienced. In this case, teachers took on the role of guides and facilitators (Aung, 2020). It is significant to note that no teacher reported the lack of teaching and learning materials; overcrowded classroom was a hindrance to using the above teaching strategies, as it was reported in the studies conducted by Leibovitch et al. (2025) and Zondo et al. (2025). In the present study, most participants indicated that they felt confident in developing critical thinking in the learners because of the copying mechanism to deal with an adequate supply of teaching materials.

The participants did not mention curriculum overload or time constraint as barriers to developing critical thinking in the learners and reaching learning outcomes. They needed to use the timeframe that had been stipulated by the CAPS to teach and assess the learners. These findings differ from those reported by Thornhill-Miller et al. (2023) and O'Reilly et al. (2022). The inference is that there is no contradiction between meaningful critical thinking participation and curriculum demands. Despite the methodological limitations, our study found that teachers successfully used teaching strategies to develop critical thinking skills through collaborative and discussion-based activities as elements of social constructivist philosophy.

Group activities given to the learners were linked to their daily lives and directed to problem-based learning and creativity, hence developing critical thinking skills. This strategy of teaching is linked to progressive philosophy (Alanoglu et al., 2022). As learners learn to evaluate ideas and their importance to their lives and beliefs, they recognise that meaningful engagement with concepts requires careful reflection. In this context, the teachers used progressive philosophy in classrooms.

10. CONCLUSIONS

The study examined educational philosophies used by secondary school teachers to help learners develop critical-thinking skills. The findings reveal that teachers mainly practised social constructivism and progressivism as educational philosophies to develop critical thinking skills in learners. Based on the findings, the authors conclude that developing critical thinking skills in secondary school learners by using relevant educational philosophies could result in preparing them for the future world of work or tertiary education. The implication from the findings and conclusion is that, to meet the demands of the 21st-century soft skills, critical thinking should no longer be an auxiliary goal but a main objective of the education system. As a recommendation to develop critical thinking in the secondary school learners, the Department of Education and policymakers should implement ongoing teachers' continuous professional development that involves hands-on strategies for teaching each subject in classrooms.

REFERENCES

- Adams, W. (2015). Conducting semi-structured interviews. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey, (Eds.), *Handbook of practical program evaluation* (pp. 192-504). doi:10.1002/9781119171386.ch19
- Ahmad, S., Sultana, N., & Jamil, S. (2020). Behaviorism vs constructivism: A paradigm shift from traditional to alternative assessment techniques. *Journal of Applied Linguistics and Language Research*, 7(2), 19-33.
- Akpan, V. I., Igwe, U. A., Mpamah, I. B. I., & Okoro, C. O. (2020). Social constructivism: implications on teaching and learning. *British journal of education*, 8(8), 49-56.
- Alanoglu, M., Aslan, S., & Karabatak, S. (2022). Do teachers' educational philosophies affect their digital literacy? The mediating effect of resistance to change. *Education and Information Technologies*, 27(3), 3447-3466. <https://doi.org/10.1007/s10639-021-10753-3>
- Alsalem, A. S. (2018). Curriculum orientations and educational philosophies of high school Arabic teachers. *International Education Studies*, 11(4), 92-95. DOI: 10.5539/ies.v11n4p92
- Aslan, S. (2018). Investigating the relation between educational philosophies adopted by prospective teachers and their teaching-learning conceptions. *Pegem Eğitim ve Öğretim Dergisi*, 8(2), 307-326. <http://dx.doi.org/10.14527/pegegog.2018.013>
- Aung, Y. M. (2020). Humanism and Education. *International Journal of Advanced Research in Science, Engineering and Technology*, 7(5), 13555-13562. Retrieved from: <http://www.ijarset.com/upload/2020/may/09-cherry-18.pdf>
- Brau, B. (2020). Constructivism. In R. Kimmons & S. Caskurlu (Eds.), *The student's guide to learning design and research* (pp. 33-43). ED Tech Books. Retrieved from: <https://edtechbooks.org/studentguide/constructivism>
- Daflizar & Alfian. (2023). Nurturing students' 21st-century skills in the classroom: Indonesian EFL teachers' perceived practices. *Issues in Educational Research*, 33(3), 897-919. Retrieved from: <http://www.iier.org.au/iier33/daflizar.pdf>
- Department of Basic Education (DBE). (2011). *Curriculum and Assessment Policy Statement*. South Africa. Retrieved from: https://www.education.gov.za/Portals/0/CD/National%20Curriculum%20Statements%20and%20Vocational/CAPS%20FET%20_%20BUSINESS%20STUDIES%20_%20GR%2010-12%20_%20Web_0CA7.pdf?ver=2015-01-27-154000-470
- Department of Basic Education (DBE). (2022). *Annual Performance Plan*. South Africa. Retrieved from: <https://www.education.gov.za/Portals/0/Documents/Reports/DBE%20APP%202022223.PDF?ver=2022-04-06-140038-883>
- Frederick-Jonah, T. M. (2022). The Implications of Social Constructivism as a Philosophical Theory in the Professional Training of the Mathematics Teacher. *International Journal of Science and Research*, 11(1), 23-27. doi:10.21275/SR211229000631
- Fries, C. H. (2012). *Teaching style preferences and educational philosophy of teacher education faculty at a State University*. (Doctoral dissertation, University of Tulsa).
- Jabaar, S. O. (2018). Teaching styles and educational philosophies of secondary school teachers in Kano Metropolis, Nigeria. *African Journal of Teacher Education*, 7(3), 37-49.
- Kagaba, A. G. (2025). Rethinking Education: The Role of Critical Thinking in Schools. *Newport International Journal of Current Issues in Arts and Management (NIJCIAM)*, 6(10), 112-120.
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No.131. *Medical Teacher*, 42(8), 20-28. doi:10.1080/0142159X.2020.1755030
- Kivunja, C. & Kuyini, A. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, 6(5), 27-37. <https://doi.org/10.5430/ijhe.v6n5p26>
- Kumar, R. (2011). *Research Methodology: A Step-by-Step guide for beginners*. SAGE.

- Leibovitch, Y. M., Beencke, A., Ellerton, P. J., McBrien, C., Robinson-Taylor, C. L. & Brown, D. J. (2025). Teachers' (evolving) beliefs about critical thinking education during professional learning: A multi-case study. *Thinking Skills and Creativity*, 56, 101725. <https://doi.org/10.1016/j.tsc.2024.101725>
- Leng, L. (2020). The Role of philosophical inquiry in helping students engage in learning. *Frontiers in Psychology*, 11(449), 1-12. doi:10.3389/fpsyg.2020.00449
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Teaching and Learning in Higher Education (AISHE-J)*, 9(3), 3351-33512.
- Majid, U. (2018). Research Fundamentals: Study Design, Population, and Sample Size. *Undergraduate Research in Natural and Clinical Science and Technology (URNCTST) Journal*, 2(1), 1-7. doi:10.26685/urnctst.16.
- Makeleni, S., Mutongoza, B. H., Linake, M. A., & Ndu, O. G. (2023). Teacher self-efficacy and learner assessment: A perspective from literature on South African indigenous languages in the foundation phase. *Journal of Curriculum Studies Research*, 5(3), 44-64. <https://doi.org/10.46303/jcsr.2023.30>
- Nikkola, T., Reunamo, J. & Ruokonen, I. (2022). Children's creative thinking abilities and social orientations in Finnish early childhood education and care. *Early Child Development and Care*, 192(6), 872-886. <https://doi.org/10.1080/03004430.2020.1813122>
- Nyumba, T. O., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus- group discussion methodology: Insights from two decades of application in conservation. *Method in Ecology and Evolution*, 9(1), 20-32. <https://doi.org/10.1111/2041-210X.12860>
- O'Reilly, C., Devitt, A. & Hayes, N. (2022). Critical thinking in the preschool classroom: A systematic literature review. *Thinking Skills and Creativity*, 46, 101110. <https://doi.org/10.1016/j.tsc.2022.101110>
- Phillips, H. N. (2023). Developing critical thinking in classrooms: Teacher responses to a Reading-for-Meaning workshop. *Reading & Writing*, 14(1), a401. <https://doi.org/10.4102/rw.v14i1.401>
- Sawers, K. M., Wicks, D., Mvududu, N., Seeley, L., & Copeland, R. (2016). What drives student engagement: Is it learning space, instructor behavior or teaching philosophy? *Journal of Learning Spaces*, 5(2).
- Tahirsylaj, A. (2017). Curriculum field in the making: Influences that led to social efficiency as dominant curriculum ideology in progressive Era in the U.S. *European Journal of Curriculum Studies*, 4(1), 618-628.
- Thornhill-Miller, B., Camarda, A., Mercier, M., Burkhardt, J.-M., Morisseau, T., et al. (2023). Creativity, critical thinking, communication, and collaboration: Assessment, certification, and promotion of 21st -century skills for the future of work and education. *Journal of Intelligence* 11(3), 54. <https://doi.org/10.3390/jintelligence11030054>
- Tolstova, O., & Levasheva, Y. (2019). Humanistic trend in education in a global context. *SHS Web of Conferences*, 69, 1-5. <https://doi.org/10.1051/shsconf/20196900121>
- Tracy, S. J. (2019). *Qualitative Research Methods: Collecting evidence, crafting analysis and communicating impact*. New Jersey: John Wiley & Sons.
- Tshangana, N., Nomtshongwana, T. A. & Buka, A. M. (2023). Teaching experiences with overcrowded classrooms in primary schools in the OR Tambo Coastal District of South Africa. *E-Journal of Humanities, Arts and Social Sciences*, 4(8), 936-946. <https://doi.org/10.38159/ehass.2023483>
- Ullah, Z., Saba, N., Abouzar, M., Imran, S., Khan, M. I., Faheem, Y., & Ahmad, A. (2020). Paradigm shift in education: Learning through social constructivism secondary school classroom experiences. *International Journal of Innovation, Creativity and Change*, 11(7).
- Ulubey, O., & Alpaslan, M. M. (2022). Examination of the relationship between educational philosophy, critical thinking, classroom engagement and academic achievement. *Psycho-Educational Research Reviews*, 11(3), 462-479.
- Wahid, N. T. (2022). Developing critical thinking skills in secondary school students: The potential for strategic management through problem-posing instructional strategy. *International Journal of Academic Research in Progressive Education and Development*, 11(3), 1327-1335.

Developing Critical Thinking Skills in Secondary School Learners Using Educational Philosophies:
South African teachers' perspectives

- West, J. & Meier, C. (2020). Overcrowded classrooms- The Achilles heel of South African education? *South African Journal of Childhood Education*, 10(1), 1-10.
<https://doi.org/10.4102/sajce.v10i1.617>
- Williams, M. K. (2017). John Dewey in the 21st century. *Journal of Inquiry & Action in Education*, 9(1), 91-102.
- Zondo, P. M., Human-Vogel, S. & Omidire, M. F. (2025). Challenges related to teaching critical thinking in the foundation phase. *South African Journal of Childhood Education*, 15(1), a1747.
<https://doi.org/10.4102/sajce.v15i1.1747>

AUTHORS' INFORMATION

Full name: Bianca Williams

Institutional affiliation: Education and Human Rights in Diversity, North-West University

Institutional address: North-West University, Private Bag X6001, Potchefstroom 2745, South Africa

Short biographical sketch: Ms Bianca Williams completed her Master's degree in education, focusing on philosophy of education at North-West University, under the supervision of Dr Celestin Mayombe. She is a secondary school teacher and a PhD candidate in education. She has published articles on teaching and learning philosophies.

Full name: Celestin Mayombe

Institutional affiliation: Education and Human Rights in Diversity, North-West University

Institutional address: North-West University, Private Bag X6001, Potchefstroom 2745, South Africa

Short biographical sketch: Celestin Mayombe is a senior lecturer in the School of Professional Studies in Education and an established researcher in the Education and Human Rights research unit within the Faculty of Education, North-West University. His research focuses on empowering disadvantaged youth and adults in South Africa through effective Technical and Vocational Education and Training, and Adult Education and Training. His research journey highlights a commitment to developing effective educational strategies that equip disadvantaged and unemployed youths and adults with job-related skills for the real world of work. Tackling youth unemployment and poverty, his research is directly informed by the challenge of high youth unemployment, arguing that traditional certificates often fail to provide marketable skills. The practical application of his research entails advocating for practice-oriented methods over purely academic approaches. Dr Mayombe has published one book, several book chapters and articles in peer-reviewed and accredited journals.