

Chapter # 11

INTERMEDIATE PHASE TEACHERS' KNOWLEDGE, BELIEFS, AND CHALLENGES IN PROMOTING SELF-REGULATED LEARNING IN SELECTED SOUTH AFRICAN PRIMARY SCHOOLS

Keneilwe Agbenyegah¹ & Bernadette Geduld²

¹*Tsakani Primary School, Department of Education, South Africa*

²*Research Unit for Self-directed Learning, North West University, South Africa*

ABSTRACT

Primary schooling is a key contributor to the ongoing underperformance and broader crisis in South African education, yet despite increasing demands associated with the twenty-first century and the Fourth Industrial Revolution, it has received limited attention in developing self-regulated learning approaches. Self-regulated learning is essential in contemporary education, equipping learners with cognitive, motivational, and behavioural skills for academic success and lifelong learning. Teachers' perceptions, knowledge, and beliefs about self-regulated learning shape classroom practices and learners' opportunities to develop these skills. However, limited familiarity with SRL concepts may constrain teachers' ability to integrate SRL effectively into their teaching. Although the value of SRL is well established in the literature, less is known about teachers' understanding of SRL and their capacity to promote it in South African primary school contexts. This qualitative study explored Intermediate Phase teachers' knowledge of, and beliefs about, the value of SRL. Situated within an interpretivist paradigm, purposive sampling selected fifteen teachers from three primary schools. Data were generated through semi-structured face-to-face interviews. Findings indicate that while teachers recognise the importance of self-regulated learning and their role in fostering it, limited knowledge and training hinder effective implementation, highlighting the need for targeted professional development.

Keywords: pedagogical content knowledge, perceptions, professional development, teachers, self-regulated learning

1. INTRODUCTION

South Africa's primary and secondary schooling system is divided into four structured learning phases: Foundation Phase (Grade R (Reception-3), Intermediate Phase (Grade 4-6) Senior Phase (Grade 7-9) and the Further Education (Grade 10-12). The Intermediate Phase generally includes learners between the ages of 10 and 13. During this phase, learners are introduced to additional subjects such as Natural Science, Social Science, and Technology, and the curriculum becomes more academic and structured. According to the National Policy on Promotion and Progression (2015), learners may not fail more than twice within any phase of schooling. This policy aims to ensure that learners within each phase remain broadly within the same age group (Agbenyegah, 2022).

Primary schools are the primary source of the South African school education crisis and the issue of low academic performance, according to the National Education Evaluation and Development Unit's (NEEDU, 2018) summary report (Agbenyegah, 2022). In the NEEDU (2018) report, the Minister of Basic Education acknowledges the crisis in South

African school education, noting that the primary schools, which have received little attention, are a fundamental cause of this underperformance. Moreover, amidst the education crisis, primary schools have not had enough attention to keep up with the Fourth Industrial Revolution and education.

The term self-regulated learning gained prominence in the 1980s (Paris & Winograd, 1990). Since then, self-regulated learning skills have become increasingly important in both classroom contexts and beyond, as they equip learners with the knowledge and competencies required for academic success and lifelong learning (Taranto & Buchanan, 2020). Early pioneers of self-regulated learning research, such as Zimmerman (2002, p. 14), define self-regulation as “self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals,” while Paris and Paris (2001, p. 89) conceptualise self-regulated learning (SRL) as emphasising learner autonomy and control, whereby individuals monitor, direct, and regulate their actions towards goals of information acquisition, the expansion of expertise, and self-improvement. Self-control in learning environments, aligned with SRL behaviours, has been shown to enhance learners' problem-solving abilities, academic achievement, intrinsic motivation, and task interest (Schunk & Zimmerman, 2008). Importantly, more recent scholarship continues to draw on these foundational conceptualisations of SRL. For example, Fuentes et al. (2019) describe SRL as a process through which learners actively take responsibility for their learning by regulating their behavioural, emotional-motivational, cognitive, and metacognitive processes in pursuit of academic goals.

Within school contexts, SRL has consistently been associated with improved problem-solving skills, higher academic achievement, increased intrinsic motivation, and greater task interest (Perry et al., 2006). The application of SRL strategies has further been shown to enhance learners' academic performance and strengthen their capacity to develop lifelong learning skills (Bandura, 2015). However, although SRL can support learners in developing knowledge and skills more effectively, the use of self-regulatory processes does not automatically result in high levels of performance. Schunk (2008) cautions that an exclusive reliance on SRL to improve learner achievement may be insufficient, as optimal learning requires a balance between external support and self-directed practice. This positions teachers as key agents in the development of learners' self-regulated learning skills and in providing structured opportunities for independent learning (Zimmerman, 2006, cited in Jossberger et al., 2010). Consequently, educational researchers worldwide have emphasised the importance of fostering learners' capacity to self-regulate their thoughts, motivation, cognition, and behaviour in preparation for the expanding knowledge base, evolving skill demands, and increasing complexity of challenges they will encounter throughout their lives (Zimmerman, 2002; Bandura, 2015; Cleary & Zimmerman, 2004; Schunk & Zimmerman, 2008).

How teachers view SRL has a significant impact on how learners acquire motivation for learning, autonomy, and successful study techniques for academic success (Schunk, Pintrich, & Meece, 2014). Fostering teaching and learning environments that encourage SRL, self-directed, and lifelong learning require acknowledging and improving teachers' perceptions of SRL because teaching practices are directly impacted by teachers' views and understanding of SRL (Kramarski & Heaysman, 2021; Ehlers, 2022). Teachers may find it difficult to incorporate SRL practices into their classes if they are unfamiliar with the concept of SRL or lack trust in them (Greenquist-Marlett, Bol, & Hill, 2025). Numerous studies support the importance of helping learners develop self-regulated learning skills, therefore it is imperative to ascertain if teachers understand the concept of SRL and have the pedagogical content knowledge necessary to support and guide their learners to develop SRL skills

(Greenquist-Marlett et al., 2025; Kramarski & Heaysman, 2021). Self-regulated learning is thus an essential educational priority due to the move toward learner-centred approaches and the increasing demand for autonomous, critical thinkers.

In the summary report of NEEDU (2018), the poor performance of South African primary schools is blamed on the persistent overinvestment in Grade 12 results when the largest education investment should really be in the early school grades. Due to overinvestment in Grade 12 results, research that focus on South African primary school teachers' understanding and beliefs and practices about SRL is minimal, which makes this study essential. South Africa has significantly fewer SRL studies compared to the rest of the world (Alharbi et al., 2011; Zimmerman, 2013). As noted by Schulze and Van Heerden (2015), most SRL research, both locally and internationally, tends to focus more on higher education rather than on primary and secondary education. The investigation in this study may add to the limited knowledge on SRL use in primary schools in the South African basic education context.

The two research questions that guided the study are: (1) What do Intermediate-phase primary school teachers know about self-regulated learning, and what are their beliefs regarding its value? (2) How do Intermediate-phase primary school teachers in South Africa perceive their roles in developing self-regulated learning within the context of South African primary school classrooms. In line with these questions, the main aim of this study was to explore Intermediate-phase primary school teachers' knowledge of self-regulated learning, their beliefs about its value, and their perceptions of how they develop self-regulated learning in South African primary school classrooms. This investigation furthermore aims to enhance the limited understanding of teachers' perceptions of SRL within the context of primary school education in South Africa.

1.1. Literature Review

Teachers' perceptions of self-regulated learning (SRL) are shaped by a complex interplay of factors, as highlighted by various studies (Greenquist-Marlett et al., 2025). Karlen et al. (2023) emphasize that beliefs, attitudes, and prior knowledge of SRL strategies interact to form teachers' understanding and beliefs about SRL. Central to this process are teachers' general beliefs about education and life, which influence their attitudes and subjective norms. These beliefs often shape teachers' autonomy in teaching and learning and their willingness to adopt new teaching strategies, making it challenging to dissociate their personal views from their professional practices (Dignath-van Ewijk, 2016).

Several types of beliefs play a critical role in shaping teachers' engagement with SRL. Dignath-van Ewijk (2016) identifies three primary categories namely epistemological beliefs, which pertain to teachers' views on knowledge and learning systems. Also, beliefs about SRL promotion, which reflect their perceptions of instructional strategies related to SRL; and lastly self-efficacy beliefs, which relate to teachers' beliefs in their capabilities, confidence and motivation to develop and foster SRL skills in their learners. Teachers with strong SRL skills themselves are more likely to value and successfully nurture learners' SRL skills, as they see its importance through their own experiences. Intrinsic factors, such as teachers' competence in their own SRL skills, motivation, and self-efficacy, also play a crucial role in their perceptions and knowledge of SRL. Hirt et al. (2022) for example, found a positive correlation between teachers' intrinsic interest in SRL and their self-reported promotion of these skills in the classroom.

However, even when teachers value SRL, limited pedagogical content knowledge, low motivation, or a lack of confidence can hinder their role as agents of SRL (Greenquist-Marlett et al., 2025). Teachers' theoretical knowledge and comprehension of the

fundamental ideas of SRL are included in content knowledge about SRL, which might be related to terminology, theoretical models, methods, and SRL components like metacognition. Teachers' pedagogical content knowledge concerning SRL is a component of their knowledge about promoting SRL. This includes teachers' understanding of how to help learners develop strategic skills and the several teaching strategies they can utilise to enhance SRL (Karlen et al., 2023). Research has shown that teachers who lack both content and pedagogical content knowledge of SRL have a particularly poor understanding of instructional strategies that can support SRL. Such teachers mostly use transmission teaching approaches and teacher-directed activities for subject matter learning rather than encouraging SRL skills (Geduld, 2019).

Recent studies found that despite recognizing the importance of SRL in learners' self-regulatory activities, many teachers struggle to explicitly teach or model these skills in the classroom (de Boer et al., 2018; Dignath & Büttner, 2018). According to Spruce and Bol (2015) a significant gap between teachers' positive perceptions of SRL and their practical knowledge of its strategies. This misalignment between beliefs, knowledge, and practice often fails to foster SRL effectively in learners. Moreover, teachers' mindsets significantly influence their approach to SRL (Karlen et al., 2023). Some teachers hold personal beliefs and fixed mindsets that their learners are incapable of attaining SRL skills, which further limits their willingness to support learners' academic achievement and lifelong learning skills by implementing SRL skills (Spruce & Bol, 2015). On the other hand, teachers with a growth mindset are more likely to believe that both their teaching and their learners' SRL abilities can improve over time, fostering a more supportive learning environment for SRL development (Karlen et al., 2023).

Pre-service and in-service training play a critical role, as explicit instruction in SRL fosters an appreciation of its importance. Teaching experience also matters, with veteran teachers often having developed SRL strategies over time, while novice teachers may need additional guidance. The school's culture, policies, and ethos can either support or hinder efforts to promote SRL (Ehlers, 2022), as can the curriculum's emphasis on learner autonomy, metacognitive skills, and self-assessment. Teachers' beliefs about their learners' abilities, motivation, and prior knowledge significantly impact their SRL approach, while their own self-regulation skills can shape their effectiveness in fostering these skills in learners (Spruce & Bol, 2015). Collaborative environments, access to resources, and support systems enhance teachers' ability to implement SRL strategies, and staying current with research and engaging in ongoing professional development further refines their practice (Geduld, 2019). These factors can influence teachers' understanding, beliefs, and practices related to SRL, shaping their ability to promote SRL in their learners.

2. RESEARCH DESIGN AND METHODOLOGY

The research paradigm, interpretivism, encompasses this qualitative study. Proponents of the interpretative paradigm believe reality is created by subjective perceptions. According to Maree (2016), the interpretivist paradigm serves as the foundation for any study that examines the perspectives and opinions of both individuals and groups regarding a given phenomenon. This study is appropriate for an interpretivist paradigm because it explores the lived experiences, attitudes, and viewpoints of individual primary school intermediate phase teachers, as well as their understanding of SRL.

The empirical inquiry was approached with a qualitative research design in the form of a phenomenological study to explore what intermediate-phase primary school teachers know and believe about the value of self-regulated learning. Phenomenology is a branch of

philosophy aiming at describing and analysing the phenomena, the way things appear or look like. The basic purpose of phenomenology is thus to reduce individual experiences with a phenomenon to a description of the very nature of the thing. This study has some elements of a phenomenological study that enabled the researcher to explore a real-life situation, namely the daily experiences of teachers in their classrooms, and to develop a composite description of the essence of the individuals' experiences (Emiliussen, Engelsen, Christiansen, & Klausen, 2021, p. 1). The phenomenological study enabled the researchers to explore real-life situations, and the experiences teachers encounter in their daily teaching and learning in the classroom, and to develop a composite description of the essence of the individuals' experiences (Agbenyegah, 2022).

A purposive sample of fifteen teachers was selected from three primary schools in the Lejweleputswa District in the Free State. The purpose with the small sample was not to generalise the findings of the study, but to gain rich, detailed, and contextualised understanding of Intermediate-phase primary school teachers' knowledge of self-regulated learning, their beliefs about its value, and their perceptions of how they develop self-regulated learning in South African primary school classrooms. Participants were selected based on the criteria that they were qualified teachers, permanently employed at the selected schools, and teaching different subjects in the Intermediate Phase (Agbenyegah, 2022).

Data was gathered through single, individual, semi-structured interviews with participants. To analyse the data using inductive coding, we employed a thematic approach and content analysis. Content analysis is defined as a systematic, replicable technique for grouping many words of text into fewer categories based on explicit rules of coding (Maree, 2016). The audio recordings of the interviews were transcribed so that the information gathered from the participants could be available in writing to assist in the coding process. We read through the transcribed interviews many times, which made it easier and quicker to retrieve relevant data related to the thematic ideas we wanted to create. The data was coded by locating text segments and assigning a code label to them (Saldana, 2016). Categories of information were noted and identified so that relationships in the data could be examined for contradictions and similarities. We analysed one category at a time and focussed on the contents of each category intently. To interpret the results and draw meaning from them, we compared and contrasted, noted patterns and created themes from the raw data and clustered them. Legal authorities, including the Free State Provincial Department of Education and the participating school principals, granted permission to conduct the research following ethical approval from the university (NWU-01909-20-A2) under whose auspices the study was undertaken. All participants provided informed consent and participated voluntarily. All ethical standards were strictly adhered to throughout the study.

3. DISCUSSION OF FINDINGS

All participant responses were considered during the analysis process; however, only those verbatim quotes that most clearly captured the essence of each theme were included for illustrative purposes. To ensure anonymity codes were used to identify participant responses. P3S2 for example identifies participant 2 from school 3.

Based on the responses relating to participants' knowledge and beliefs of SRL one main theme, Knowledge and beliefs of SRL, was created.

Participants' knowledge and beliefs of SRL

The main theme and the five sub themes constructed give insight to participants' knowledge and beliefs of SRL. The five sub themes are: (1) Prior knowledge of the concept of self-regulated learning, (2) comprehension of the concept self-regulated learning, (3) the value of SRL for academic learning, (4) instruction to utilise and develop self-regulated learning, and (5) the roles of teachers to develop and enhance self-regulated learning.

Prior knowledge of the concept of self-regulated learning

Participants responded as followed when asked if they had practical or theoretical knowledge on how to develop SRL skills in learners: *There was no training that I received on self-regulated learning; it is the teacher who must take an initiative by learning more, going to the internet on what strategies to use when I teach learners (P5S2).*

Another two teachers said: *No, the curriculum we did that time was different from the one we are doing now but I must say we also like learners to work on their own, to be independent and not always do everything for them (P4S2).*

No, I was trained on how to teach learners using different teaching strategies and methods, but nothing on self-regulated learning (P2S2).

The sub-theme reveals that the teachers' (P3S2, P2S3, P1S2, P4S3, P4S1, P3S3, and P2S1) knowledge and perceptions of SRL are quite limited. Out of 15 participants, only four (P1S1, P3S1, P1S2, P2S2) had prior knowledge of SRL mostly obtained through workshops: *Yes, I came across this strategy during the workshops that I attended (P1S1).* This indicates that formal training on SRL is scarce among the teachers, which may hinder their ability to foster SRL skills in their learners effectively. It can be concluded that a significant number of participants (P1S1, P4S1, P3S1, P4S1, P5S2, P4S3) were either unaware of SRL or had vague, uncertain notions about it, or did not pay attention when the concept was discussed in their teacher training. This is how one responded: *No, I do not know anything about self-regulated learning or even heard about it (P4S1).* This lack of understanding and gap in awareness can negatively impact their instructional practices, as teachers who are not knowledgeable about SRL may struggle to identify and develop these skills in their learners (Zimmerman, 2000). Consequently, this sub-theme underscores the importance of professional development in SRL for teachers, as it is essential for creating a conducive learning environment that nurtures learners' SRL.

Comprehension of the concept self-regulated learning

The participants who demonstrated an understanding of SRL described it as a process or strategy that learners use when they learn. The following are how the participants explained their understanding of SRL: *Self-regulated learning is to have control, you take responsibility of your work, and you set goals (P1S3).* *Yes, teaching self-regulation in the classroom is important because the emotions and cognitive areas of the brain may not reach the full potential if children do not continually practice at young age. Self-regulated learning helps to support the children ability to handle their emotions and reactions to new situations (P2S3).* *Self-regulated learning starts from babies to toddlers, pre-school years, adulthood. It is lifelong learning whereby you are able to monitor the emotional state of learners, e.g. frustrations, whether they are coping or not (P3S1).* These participants have a growth mindset towards the development of SRL and will be more likely to develop supportive learning environments for SRL development (cf. Karlen et al., 2023).

The value of self-regulated learning for academic learning

The following are two examples of teachers' responses: *...if you can see the world outside now, needs people who are motivated and do things on their own (P3S2).* *Learners*

should be made more interested in what I'm teaching, they must be inquisitive, I must push them and give them ideas that there is more to what I'm teaching them (P5S2). The participants also indicated that teachers should play a crucial role in guiding learners properly and avoid frustrating learners: *Teachers should prepare their lessons because there are learners who are a step ahead and can embarrass them if they did not properly plan their lesson. Some learners can even correct teachers. Teachers should play a role to guide learners properly and avoid frustrating them (P5S1).*

According to the responses, teachers perceive SRL as valuable for academic achievement and developing confident, knowledgeable learners. They believe SRL enables learners to work independently and take ownership of their learning. Teachers also recognize their role in guiding learners properly, preparing lessons, and avoiding frustration, which can have a positive impact on learners' academic achievement and lifelong learning skills.

Instruction to utilise and develop self-regulated learning

The majority of teachers did not receive training on how to develop SRL skills in learners during their initial teacher training or subsequent workshops. *There was no training that I received on self-regulated learning; it is the teacher who must take an initiative by learning more, going to the internet on what strategies to use when I teach learners (P5S2).* Another one concurred: *No, I was trained on how to teach learners using different teaching strategies and methods, but nothing on self-regulated learning (P2S2).* Only two teachers (P1S3 and P1S1) reported receiving some information on SRL, and this was during their further studies or teaching certification programs. Teachers feel that they lack knowledge on how to develop SRL skills in learners and believe they need to take initiative to learn more, such as through online resources. The teachers' educational programs and training focused more on content-area knowledge and pedagogical methods rather than principles of learning, development, and motivation, which may have contributed to their lack of knowledge on SRL (Geduld, 2019).

Obstacles to positive teacher beliefs about self-regulated learning

This theme revealed the participants' responses of factors that negatively influence their perceptions of SRL. Six participants (P1S1, P2S1, P4S1, P5S1, P2S2, P5S3) indicated that time constraints are a challenge. P2S2 responded: *Time is a challenge because we are forced to cover the curriculum.*

The following verbatim quotes encapsulate their negative experiences: *I have never received any support or workshop on SRL; I do everything on my own (P2S3).* *The majority of learners in my class do not do their homework... (P2S2).*

Overcrowding in classes is a problem, my class has about 50 learners, and it is very difficult as a teacher to give all of them individual attention (P4S1).

Lack of resources, in terms of textbooks, posters, atlases, because I am also teaching Social Sciences, we don't have a globe to show learners the world (P5S3), and

I don't really involve parents because it's actually a waste of time for me because you call parents, sometimes they don't come, when they come if you tell them problems you have regarding their children, they will just say they will be involved but they don't (P4S1).

A lack of SRL training and professional development, challenging students, overcrowding, inadequate resources, and a lack of parental participation are some of the causes or barriers participants face daily in public schools. These highlighted challenges were repeated by most participants, making their sense of low self-efficacy to promote SRL visible. Without proper training, teachers may not have the necessary knowledge and skills to implement SRL strategies effectively, leading to a lack of confidence and negative beliefs about their ability to develop SRL skills in learners. When learners are not motivated to learn

or take responsibility for their own learning, it can be discouraging for teachers and make them question the effectiveness of SRL strategies. Overcrowded classrooms can make it challenging for teachers to provide individualized attention and support, which is essential for developing SRL skills, consequently, this may lead to frustration and negative beliefs about the feasibility of SRL in the common overcrowded public schools. Moreover, with heavy Curriculum Assessment Policy Statement (CAPS) curriculum demands and limited time, teachers may feel that they cannot devote sufficient time to developing SRL skills in learners, leading to negative beliefs about the prioritization of SRL. Limited resources can hinder teachers' ability to create engaging and effective learning environments, which are essential for promoting SRL skills. This can lead to negative beliefs about the feasibility of SRL in under-resourced public schools. Beyond these institutional constraints, teachers' perceptions of parental involvement further shape their beliefs about the viability of SRL, as perceptions of limited parental involvement may leave teachers feeling solely responsible for learners' development, thereby undermining confidence in SRL strategies that rely on parent-school collaboration.

4. FUTURE RESEARCH DIRECTIONS

The Lejweleputswa District in the Free State province is big and has primary schools situated in rural villages, farms, towns, and townships. A similar study could be conducted throughout the whole province to find out how teachers develop SRL in primary schools. The research could usefully be extended to Foundation Phase teachers, because they are the ones who should lay the foundation for SRL, and there is a need to find out how they develop learners' SRL. The research could also include subject advisors, who are the curriculum experts and who are expected to be knowledgeable on how to guide teachers on implementing the curriculum effectively.

5. CONCLUSION

The main aim of this chapter was to explore what Intermediate-phase primary school teachers know and believe about the value of self-regulated learning. This study has found that participants' perceptions of SRL are influenced by a dynamic interplay of epistemological beliefs, pedagogical training, self-efficacy beliefs, the perceived value of SRL, and contextual barriers in their teaching contexts. The findings help to explain why the underdeveloped epistemological beliefs about learning and the nature of SRL, poor instructional knowledge to promote SRL, and low self-efficacy beliefs in abilities to promote and nurture SRL remain a challenge in many schools. Teachers who demonstrate these characteristics have negative perceptions about the feasibility of developing and nurturing SRL in their learners.

The teachers who participated in this study may not have a deep understanding of SRL, but they have a positive perception of its potential benefits and recognize the importance of a supportive learning environment for its implementation. This suggests that teachers are open to learning more about SRL and are willing to adapt their teaching practices to promote SRL, given the necessary resources and support. Overall, teachers view themselves as facilitators of SRL, recognizing the importance of empowering learners to take charge of their own learning and development.

There is a clear need for targeted professional development on SRL for teachers to address these issues. In the absence of professional development, primary school teachers may remain unprepared to support their learners effectively, resulting in long-term

educational consequences, including learners being ill-equipped for future academic and workforce challenges, which can perpetuate reliance on external guidance. The lack of knowledge about SRL among teachers has negative implications for learners' adequate SRL skill development which are crucial for academic success. Teachers unfamiliar with SRL may also fail to implement effective SRL teaching strategies and conducive learning environments which can result in fewer opportunities for learners to practice self-regulation and fostering a passive learning environment. This knowledge gap can also reduce teachers' awareness of learners who struggle with SRL, which in turn can result in insufficient support that negatively affects learner engagement, motivation and academic performance, leaving learners unprepared and disempowered for taking responsibility for their learning and other critical lifelong learning skills.

6. CONTRIBUTION OF THE STUDY

This study makes theoretical, methodological, and practical contributions to self-regulated learning research. Theoretically, it strengthens understanding of how a selected group of South African Intermediate phase teachers' knowledge and beliefs shape the development of SRL in primary school contexts. Methodologically, this study demonstrates the value of qualitative, interpretivist inquiry for capturing teachers' lived experiences of SRL. Practically, the findings reveal critical gaps in teachers' SRL knowledge and training, highlighting the need for focused professional development and curriculum support to enable effective implementation in South African primary schools. It also captures how teachers in South African primary schools understand and enact SRL in practice amidst contextual constraints (such as curriculum demands, assessment pressures, and resource limitations) that shape teachers' ability to foster SRL in diverse South African classrooms. Moreover, the study offers evidence-based insights that can inform teacher professional development, initial teacher education, and curriculum support initiatives, particularly within the Intermediate Phase.

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AUTHORS' INFORMATION

Full name: Keneilwe Brigdetta Agbenyegah (Sephiri)

Institutional affiliation: Deputy Principal at Tsakani Primary School, Free State Province, South Africa

Institutional address: Tsakani Primary School, 11958 Matima Crescent, Oppenheimer Park, Welkom, 9453

Email address: keneilwesep@gmail.com

Short biographical sketch: Keneilwe Agbenyegah is currently a doctoral candidate in Curriculum Studies at the Central University of Technology, focusing on self-regulated learning in primary schools in the Lejweleputswa District, Free State. Her professional experience spans many years of teaching English, Natural Sciences and Mathematics at both high school and primary school levels. As a Deputy Principal, her duties include curriculum planning, implementation and instructional leadership. A core aspect of her role is that of a curriculum specialist ensuring effective curriculum delivery while strengthening teachers' and learners' self regulated learning skills to promote independent, reflective and lifelong learning.

Full name: Bernadette Winefrede Geduld

Institutional affiliation: Research Unit for Self-directed Learning, Faculty of Education, North West University, South Africa

Institutional address: North West University, Building C6, Hoffman Street, Potchefstroom, 2531

Email address: bernadette.geduld@nwu.ac.za

Short biographical sketch: Bernadette Geduld is an Associate Professor in the School of Professional Studies in Education (Curriculum Studies) within the Faculty of Education at the Potchefstroom Campus of the North-West University, South Africa. She serves as the sub-area leader for Cognition and Metacognition to Enhance Self-Directed Learning in the Research Unit for Self-Directed Learning. Professor Geduld is an established researcher, rated as a National Research Foundation (NRF) Category C2 scholar. She has presented her research at numerous national and international conferences and is recognised by academic peers across higher education institutions for her expertise in open distance learning, self-directed learning, self-regulated learning, and metacognition.