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Economic and Management Sciences Teachers' Experiences of Teaching Financial Literacy: Implications for Teacher Training

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Abstract. This paper reports on economic and management sciences (EMS) teachers' experiences of teaching the financial literacy component in this learning area. It also provides a holistic understanding of their challenges and professional development needs in this integrated field. A qualitative case study approach was used to allow for an in-depth understanding of EMS teachers' views and experiences. Data were collected through open-ended questionnaires and semi-structured interviews. Purposive sampling was used to select information-rich participants from selected government secondary schools in Gauteng province, South Africa. Participants in the study included grades 8 and 9 EMS teachers. A thematic analysis approach was used to analyze data collected from the open-ended questionnaires and interview responses. The findings show that, due to poor training, EMS teachers continue to experience challenges in integrating the financial literacy component. Consequently, teachers default to fragmented approaches to teaching EMS, which undermines government initiatives aimed at realizing social transformation objectives through the EMS curriculum. The study recommends an implicit approach to teacher development programs by incorporating EMS teachers' views, experiences, and specific needs as well as contexts. The research contributes to the literature on commerce education in South Africa by offering ways in which education can be transformative and how the quality of teaching financial literacy in EMS can improve.

Keywords: continuous professional teacher development (CPTD); economic and management sciences (EMS); financial literacy; teacher agency; teachers' experiences

1. Introduction

Curriculum review, as part of the larger transformation agenda in post-apartheid South Africa, was aimed at restructuring the flawed education system the country inherited. The apartheid era was marked by discriminatory policies aimed at creating particular identities for different racial groups to align with their societal roles as outlined by the government (Beets & le Grange, 2008). In particular, the

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education system was a primary tool in this social engineering effort. For Black South African learners, the curriculum was severely restricted, focusing on basic skills and elementary knowledge (Iyer, 2018). This approach was intentionally designed to limit critical thinking and cognitive development, effectively preparing Black South African learners for subordinate positions in society (Msila, 2007). Black South African learners were exposed to rudimentary topics related to commerce, which failed to develop their entrepreneurial and financial consciousness. Achieving financial literacy was thus essential, especially for Black people who were denied access to sources of financial skills and knowledge.

To redress the educational and societal injustices, policymakers believed that the integration of accounting and business economics would assist in overcoming historical injustices. Previously, these were offered as stand-alone subjects. The integration of accounting and business economics into economic and management sciences (EMS) had symbolic material significance in responding to the transformation agenda as well as the global demands of preparing learners for the world of work and entrepreneurialism (Chisholm, 2005). Moreover, the integration of accounting and business economics was meant to develop a holistic thinking and understanding of the world, thus advancing societal transformation (Carr, 2007). The South African government recognized the importance of financial literacy as a crucial element in the EMS curriculum. This emphasis on financial education is seen as essential for empowering South African citizens with the necessary knowledge, skills, and abilities to adapt and meaningfully contribute to society (Western Cape Education Department, 2000).

Integration of EMS increased the demand for teachers to have in-depth knowledge of the accounting, business studies, and economics curriculum as a whole (Moloi & Molise, 2021; Schreuder, 2009). The integrated nature of EMS as a subject requires teachers to have a deep understanding of the interconnections within the curriculum. Having such an understanding of the logical relations within the EMS curriculum will enable them to promote mastery of conceptual relationships. In this way, teachers can facilitate holistic and comprehensive learning, allowing learners to see the bigger picture rather than isolated concepts (Ngwenya & Nzuza, 2022; Schreuder, 2009).

However, most in-service EMS teachers did not have the knowledge required to effectively implement the integrated curriculum (Spaull, 2013). This challenge was further exacerbated by the fact that the majority of teachers were Black people who were trained during the apartheid era and lacked access to the accounting subject. This meant that in most schools, teachers could not teach all three focus areas in an impactful manner, and that could lead to epistemological access (Sibisi, 2019). This restructuring of the curriculum prompted the need to ensure that EMS teachers are appropriately qualified to teach and think about EMS in an integrated manner. Consequently, the Department of Education and several nongovernmental educational organizations (NGEOs) in South Africa offered courses in EMS to teachers to capacitate them in this learning area. Even though teachers attended numerous workshops as required by the Department of Basic Education (DBE), they still felt incapacitated to effectively teach EMS in an

integrated manner. In particular, teaching and integrating the financial literacy component is still a challenge for most teachers (Jonda & Modise, 2022; Ngwenya & Nzuza, 2022). This has compromised the quality of teaching in EMS, as reflected in learners' poor performance in Grade 9 (Fakude & Mdhlalose, 2021).

There seems to be limited school-based research on EMS, which is a relatively new subject, and in particular how EMS teachers make sense of and approach the teaching and learning of financial literacy in the integrated EMS curriculum. A few studies have primarily focused on the challenges that teachers face in teaching the financial literacy component (Fakude & Mdhlalose, 2021; Ngwenya & Nzuza, 2022; Sentsho & Mudau, 2023; Sibisi, 2019). However, the role of continuous professional teacher development (CPTD) in enhancing integrative knowledge for EMS teachers has received marginal attention.

Research Purpose

Against this backdrop, the study underscores the need to examine EMS teachers' experiences of teaching financial literacy and the implications thereof for teacher training programs in South Africa. This research is guided by the following questions:

- 1. What are the perceptions of teachers regarding their preparedness to teach EMS, considering their professional qualifications and experience?
- 2. How do teachers perceive the nature and relevance of EMS as a school subject?
- 3. What are the key challenges faced by teachers in teaching financial literacy specifically within the context of EMS?
- 4. How do teachers perceive the effectiveness of CPTD programs in enhancing their ability to teach financial literacy and EMS in general?

2. The Nature of the EMS Curriculum and the Importance of Financial Literacy

During South Africa's apartheid period, education policies and practices played a pivotal role in reinforcing racial and cultural divisions (Soudien & Baxen, 1997). Before educational reforms in 1998, commerce-related subjects such as accounting, business economics, typing, and economics were only offered as elective courses starting in grades 8 and 9. Learners who wished to pursue further education in commerce could enroll in technical colleges or universities after completing their secondary education. In this way, the system resulted in unequal access to economic education, particularly for individuals classified as Black under the apartheid regime. Consequently, these learners faced significant barriers to gaining economic knowledge and, by extension, economic empowerment (Schreuder, 2009).

EMS is offered in the General Education and Training (GET) band (grades 7 to 9) to provide learners with a foundational conceptual understanding of knowledge, skills, theory, and practice for the pursuit of commerce subjects in the Further Education and Training (FET) Phase (grades 10 to 12) (DBE, 2011). EMS comprises three focus areas that form the basis for subject selection in the commerce stream at the FET level. These are: financial literacy, which forms the basis for accounting;

economics, which forms the basis for economics; and entrepreneurship, which forms the basis for business studies. Emphasis was placed on financial literacy, with a higher assessment weighting of 40% compared to 30% each for economics and entrepreneurship (DBE, 2012). This is because achieving financial literacy was seen as essential to enhancing the financial capability of Black children so that they could escape intergenerational poverty emanating from the inequitable schooling system that characterized the apartheid era (Schreuder, 2009). However, despite the foundational value of commerce education, studies have shown that financial literacy is often neglected, which leads to the poor acquisition of foundational accounting concepts and, thus, poor preparation of learners for the FET Phase (Modise, 2016).

3. EMS Teacher Preparedness

Teachers' ability to respond to and implement policy is shaped by their past experiences as students in educational settings. This means that teachers' pedagogical choices will also be influenced by their own educational experiences. Integration in EMS was achieved through the clustering of the three subjects, which was believed to contribute to an enhanced learning experience that may lead to an enduring understanding of concepts. Effective implementation of an integrated curriculum such as EMS requires teachers who can foster cross-subject coherence (Niemelä, 2022). This skill can be acquired either through formal training or practical experience. However, there were no teachers in the educational system who had been trained or exposed to the teaching of EMS as an integrated subject (Schreuder, 2009; Spaull, 2013). Teachers were unexpectedly compelled to acquire new skills and develop the EMS curriculum for classroom implementation (Maistry, 2006). For the successful interpretation and delivery of EMS as an integrated subject, teachers relied heavily on government-sponsored training programs aimed at deepening their conceptual and pedagogical knowledge of the three focus areas.

Several studies have suggested that government initiatives through continuous CPTD programs have not been effective in capacitating teachers to interpret and implement EMS as an integrated subject (Dasoo & van der Merwe Muller, 2020; Molise, 2020; Molise et al., 2023). CPTD is a continuous process of learning and development for teachers to improve their content and pedagogical skills, considering contextual realities (Schlager & Fusco, 2003). CPTD can be organized through explicit methods, such as workshops and seminars, or implicit methods, which are more problem-based and informed by teachers' reflections (Dasoo & van der Merwe Muller, 2020). South Africa adopted the explicit CPTD model, which comprises workshops and seminars specific to each subject. The main aim of these workshops was to strengthen content and pedagogical knowledge for teachers to improve their practice and subsequently learner performance. Despite many achievements related to CPTD, there are significant challenges that still need to be addressed, as most EMS teachers continue to feel incapable of teaching EMS effectively because their content knowledge gaps in financial literacy are not adequately addressed (Molise, 2020). The limited ability to teach financial literacy implies that EMS teachers may face challenges in comprehensively addressing all three EMS focus areas, potentially leading to knowledge gaps.

4. Theoretical Rationale: Teacher Agency

In this paper, we attempt to show how possibilities for agency can be explored through the continuous professional development of teachers. *Teacher agency* is defined as the teacher's power and freedom in their profession, including various aspects of teaching and learning (Ahmad & Shah, 2022). In this study, we consider agency as not fixed but rather dictated by the context in which the individual operates. Archer (2003) argued that how people become agents depends on the environment, which comprises structure and culture. She emphasized the importance of agency as involving the intentional actions of individuals. Concerning the phenomenon of teacher agency, the value of this perspective is the realization that the manifestation of the agency of the teacher is usually related to the notions of competence and performance, often defined in relation to the knowledge and skills that teachers acquire initially through their training and subsequently through experience (Englund & Price, 2018; Vu, 2018).

From a social realist perspective, teacher competence is arguably more about interactions with various external factors than innate abilities (Archer, 2000, 2003; Wheelahan, 2007). Teachers' agency is thus influenced by multiple elements, including their identity and past experiences (Huang & Yip, 2021), local context constraints and resources (Biesta et al., 2019), professional development opportunities (Englund & Price, 2018; Vu, 2018), and broader societal events such as the COVID-19 pandemic (Thumvichit, 2021). Teachers must constantly navigate these factors to foster meaningful learning in their specific environments. While teacher agency is considered crucial for educational reform, teachers often find themselves in restrictive discursive spaces. These contexts, shaped by policies, resource availability, curricula, and performativity ideologies, frequently limit teachers' ability to contribute to significant change and valuable educational outcomes (Priestley et al., 2013).

To teach EMS more effectively, teachers need to have a deep conceptual understanding of the three integrated fields of study, namely accounting, business studies, and economics. This depth of understanding enables teachers to present these subjects as interconnected disciplines rather than isolated entities. Such a holistic pedagogical approach facilitates learners' grasp of the interrelationships and interconnected nature of the real world of commerce and finance. It is crucial to note, however, that expertise in one domain does not necessarily correlate with proficiency in another. Teachers lacking comprehensive knowledge in a particular area may struggle to impart conceptual depth to their students (Jonda & Modise, 2022). Despite the limited capacity of many EMS teachers to effectively cover all three learning areas, they are nonetheless expected to adapt to curricular modifications (Fakude, 2022; Modise, 2016). The contextual constraints within which these teachers operated significantly influenced their ability to exercise professional agency.

5. Methodology

The study employed a qualitative research approach to solicit information about the experiences of EMS teachers in teaching financial literacy and the subsequent implications for their professional development. This approach was deemed appropriate as it allowed us to explore the experiences that individuals have about a phenomenon (Mohajan, 2018). We utilized open-ended questionnaires to collect rich qualitative data, allowing participants to articulate and elucidate their perspectives without any limitations (Mohajan, 2018).

The questionnaires were distributed to participating teachers from selected government secondary schools in the Gauteng province, South Africa. Purposive sampling was employed to identify the target population, which comprised 50 inservice EMS teachers with a minimum of 3 years teaching experience. Participant selection was based on availability and willingness to engage in the study. Out of the 50 teachers who responded to the open-ended survey questionnaire, 8 were selected to participate in semi-structured interviews.

As noted by various scholars, sample size determination in qualitative studies is an iterative and context-dependent process (Francis et al., 2010; Namey et al., 2016). Such decisions are made during the analytical phase as researchers develop a comprehensive understanding of research themes, their interrelationships, and conceptual boundaries (Sim et al., 2018). Extant literature has suggested that a sample size ranging from 8 to 16 participants is sufficient to adequately address research questions in qualitative studies (Namey et al., 2016). In this investigation, eight EMS teachers were interviewed. This sample size was deemed adequate, as data saturation was achieved, with no new information emerging from subsequent interviews.

5.1 Data Collection

5.1.1 Open-ended survey questionnaire

A total of 50 open-ended questionnaires were distributed. However, only 30 were returned, of which 2 were not properly completed; thus, 28 questionnaires were used for analysis. For convenience, and also due to budgetary constraints, the open-ended questionnaire was used to gather initial data from a wider population of EMS teachers in the Johannesburg area. The questionnaire consisted of six open-ended questions relating to the teachers' experiences of teaching EMS (see Appendix 1). Questions were structured in a manner that allowed participants to reflect on their experiences in teaching financial literacy in EMS. Aspects identified from the open-ended survey questionnaire were further probed during the interviews.

5.1.2 Semi-structured interviews

Semi-structured interviews were conducted with 8 EMS teachers for between 20 and 30 minutes each. All interviews were conducted online via MS Teams as per the teachers' availability. An interview schedule (see Appendix 2) was used to guide and probe the conversations with the teachers. The interview schedule consisted of eight open-ended questions. The questions focused on teachers' views about teaching and learning EMS about (i) teacher professional development and experience in teaching financial literacy, (ii) the nature of the EMS subject, and (iii) continuous teacher professional development opportunities and challenges. We formulated the questions based on the aspects identified from the open-ended survey questionnaire as well as literature. Before the interviews,

a letter was sent to the participants to explain the purpose of the study. Furthermore, the purpose of the study was explained to each participant at the beginning of each interview. The interviews provided the teachers with an opportunity to elaborate on and clarify issues in teaching and learning financial literacy and EMS in general.

5.2 Data Analysis

To manage and organize the data for analysis, we utilized ATLAS.ti, a computerassisted qualitative data analysis software (CAQDAS) program. This tool proved valuable in documenting the cumulative steps of the analysis process, thereby creating an audit trail that enhanced the study's rigor and credibility. The study employed thematic content analysis, with explanations based on selected critical incidents across the data sources, including an open-ended survey questionnaire and semi-structured interviews. To provide rich narrative descriptions of EMS teachers' experiences and perspectives, we included verbatim excerpts from the data. The main goal was to identify patterns or themes in the data and interpret them meaningfully. The analysis process involved identifying patterns through the recurrent use of specific words and phrases, with more repetition indicating more stable patterns that represent participants' experiences. Similar codes were grouped into broader categories, and themes derived from a holistic and continuous review of the entire data corpus. The analysis process concluded when data saturation was reached, and no new codes emerged. To gain a nuanced understanding of EMS teacher competencies and practices, we adopted a social realist perspective. This approach allowed us to examine the knowledge and skills participants acquired through both training and experience and how these factors influenced their ability to exercise agency in effectively teaching financial literacy within the EMS curriculum.

5.3 Trustworthiness

We ensured trustworthiness through Lincoln and Guba's (1985) trustworthiness criteria (Figure 1). First, credibility relates to the truth of the data, which can be achieved through prolonged engagement and persistent observation (Lincoln & Guba, 1985; Polit & Beck, 2013). Face-to-face interviews provided reliable evidence (Saldaña, 2018), and member checks allowed participants to review verbatim transcriptions. Second, transferability refers to whether particular findings can be applied to other contexts (Polit & Beck, 2013). This was enhanced in this study by providing detailed descriptions of the research context (Polit & Beck, 2013). In addition, an audit trail provided contextual information, methodological decisions, and interpretive choices. Third, dependability relates to the consistency of the data across similar conditions (Polit & Beck, 2013). This was ensured through iterative analysis, re-examining findings, and continuous comparison with raw data (Patton, 2015). ATLAS.ti software was used to create a transparent audit trail and locate matching expressions across multiple participants. Lastly, confirmability refers to the degree to which the results can be replicated by other researchers (Polit & Beck, 2013). We applied data source triangulation techniques, including cross-checking data from semi-structured interviews against data from open-ended questionnaire responses and literature review findings. Researcher triangulation was achieved through collaborative discussions and consensus-based decision-making.

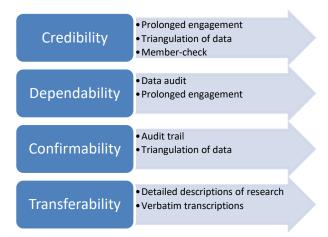


Figure 1: Summary of strategies to determine rigor

5.4 Ethics

Ethical approval was obtained from the university research ethics committee (clearance number SEM 2-2023-113). (The approval letter is available in Appendix 3.) In line with established ethical guidelines, we obtained written consent from all participating teachers. The participants were informed that their involvement was entirely voluntary and assured of their rights to privacy, anonymity, and confidentiality throughout the research process. To protect participants' privacy, we implemented several measures. All data collected were anonymized, and appropriate steps were taken to ensure its confidential storage and handling. Ethical principles were consistently upheld throughout the study, prioritizing the respect and protection of the participants' rights and personal information.

6. Findings

The socio-demographic data of the questionnaire respondents are presented in Table 1. The respondents had an average of 10.4 years of teaching experience, ranging from 2 to 35 years. In terms of their teaching qualifications (also see Table 2), 21% were holders of a Bachelor of Commerce (B.Com.) degree and a post-graduate certificate in education (PGCE). Furthermore, 32% were holders of a Bachelor of Education (B.Ed.) degree specializing in one or two of the following subject combinations: accounting, economics, business management, and business studies. A further 11% had diplomas in teaching, and 18% indicated having a PGCE certificate but did not specify their previous qualification. Eighteen percent did not indicate their qualifications; others cited that the only qualification they had received to enable them to teach EMS was by attending government intervention workshops. Of the 28 respondents, only 2 identified EMS as their teaching specialization.

Table 1: Questionnaire respondents' socio-demographic data

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ATLAS.ti doc	Participant	Years of experience	()nalitication				
number			P.C. + P.C.C.				
D 6	Teacher 1	7	B.Com. + PGCE				
D 7	Teacher 2	7	B.Ed. (EMS Methodology)				
D 8	Teacher 3	5	B.Ed. (Accounting & Economics) Diploma in Teaching				
D 9	Teacher 4	20	(Accounting & Business Studies)				
D 10	Teacher 5	8	B.Com. + PGCE				
D 12	Teacher 6	20	PGCE				
D 13	Teacher 7	26	B.Com. + PGCE				
D 14	Teacher 8	6	PGCE				
D 15	Teacher 9	3	B.Ed. Commerce				
D 16	Teacher 10	7	B.Ed. (Accounting & Business Studies)				
D 17	Teacher 11	9	GDE workshops				
D 18	Teacher 12	5	B.Ed.				
D 19	Teacher 13	14	Diploma in Teaching + Advanced Certificate in Economic Sciences				
D 20	Teacher 14	3	-				
D 21	Teacher 15	10	PGCE				
D 22	Teacher 16	2	B.Ed. (Business Management & Economics)				
D 23	Teacher 17	10	B.Ed. (Accounting & Business Studies)				
D 24	Teacher 18	35	Diploma in Teaching + Advanced Certificate in Economic Sciences				
D 25	Teacher 19	10	B.Ed. (Accounting)				
D 27	Teacher 20	4	PGCE				
D 29	Teacher 21	20	-				
D 32	Teacher 22	10	B.Ed. (Accounting & EMS)				
D 40	Teacher 23	9	B.Com. + PGCE				
D 41	Teacher 24	23	GDE workshops				
D 42	Teacher 25	7	B.Com. + PGCE				
D 46	Teacher 26	12	B.Com. + PGCE				
D 47	Teacher 27	9	PGCE				
D 49	Teacher 28	15	B.Com.				

Table 2: Distribution of respondents according to academic qualifications

Qualification/s	Frequency	Percentage
B.Com. + PGCE	6	21.0
Unspecified degree + PGCE	5	18.0
B.Ed.	9	32.0
Diploma +Advanced Certificate in Education (ACE)	3	11.0
Other	5	18.0
Total	28	100.0

6.1 Teachers' Preparedness in EMS

This theme refers to the teachers' views on their preparedness to teach EMS in relation to their professional qualifications and experience. The participants in this study had teaching experience ranging from 2 to 35 years. In terms of their teaching qualifications, the majority had a B.Com. degree and PGCE; others had a B.Ed. degree specializing in accounting and economics. The most experienced teachers had diplomas in teaching business studies and Afrikaans/accounting. None of the participants acknowledged EMS as their area of specialization. EMS specialization is not trivialized in teacher education programs; it is often seen as an add-on. The excerpts below from the questionnaire survey corroborate this point:

What kind of formal training have you received in order to teach EMS. Please explain fully?
I obtained a BED degree specializing in Accounting
and Business Studies, as part of my studies Talso had to do
Ems as a module in my second year.

Another participant added:

"It's a minor ... module because ... even my certificate ... says accounting and economics. So, it's just an additional module that we had to do as accounting students."

Findings from the survey questionnaire as well as the interviews show that for the majority of the in-service teachers, the only training they received to enable them to teach EMS was from the workshops organized by the DBE. While this may be expected of teachers who were trained in the previous dispensation, it was clear from the participants' feedback that even the newly appointed teachers could not identify themselves as having specialized in EMS.

In response to the question, "Which topics do you find challenging to teach in EMS?", financial literacy topics were listed, with *journals* being the most challenging.

30	ou inal s	(CRT, CPT) because of lack of learnice
I	have to	re-draw	the table on the board and
			. The allocated time for tims
15	aiready	not enoug	h.

"Journals are difficult to teach about. It is not a simple topic to teach learners. They find it hard to understand it in most cases. It requires various teaching strategies and explanations."

Findings show that even teachers who were qualified accounting teachers by virtue of their subject specialization in university still experienced challenges in integrating the financial literacy component in EMS.

6.2 Continuous Professional Development for EMS Teachers: Opportunities and Challenges

Teachers' views were varied as regards the effectiveness of CPTD in enhancing their competency in teaching financial literacy and EMS in general. Some teachers found them useful, whereas others did not:

"The workshops need to be more practical instead of showcasing slides all through, especially when it comes to financial literacy, so that we can practically show our learners how to do it, and they can also come into the school and give us an example of how to teach a certain skill to the learners ... Although it is informative, I feel like it is a waste of time."

The excerpt above shows that the CPTD for EMS was not effective. These programs appear to have a limited impact on teachers' capacity to translate their learning into improved classroom practices and enhanced student outcomes. A significant proportion of the participants reported experiencing social, cultural, and material constraints that impeded their ability to exercise professional agency. These constraints appear to hinder teachers' efforts to enhance the teaching and learning of financial literacy within the EMS curriculum.

"We need more practical workshops. Instead of showcasing slides all through, especially when it comes to financial literacy, they need to show us how to do it practically so we can show our learners how to do it. And the facilitators can also come into the school and give us an example of how to teach a certain skill to the learners given the limited resources that we have in schools."

The data suggest that teachers' voices, contexts, and teaching particularities were not included in training; thus, teacher agency is not developed. The participating EMS teachers perceived the workshops to be "one blanket that fits all", as indicated by one participant:

"When it comes to these workshops and all those other things, I feel like they should not use this one 'blanket fit all', because some teachers don't see the need to attend, because the topic being covered is what you already know and you want something different, but the facilitator can't change, because maybe there is Teacher XYZ who still need that help."

Most participants expressed concern about the fragmented nature of the workshops. One participant indicated that one workshop was divided into three separate sections, namely accounting, business studies, and economics. This approach did not help enhance teachers' understanding of EMS as an integrated subject.

"At the workshops, there will be three facilitators, and they don't work together. There is the accounting facilitator, there is the business facilitator, and there is the economics facilitator. That is our starting point for EMS problems. We keep telling the management that our subject facilitators are the problem. Teachers need a holistic understanding of EMS not as separate."

Unsurprisingly, this is the same approach that EMS teachers who participated in the investigation followed in their respective schools. It beats the purpose of why EMS was conceptualized as an integrated subject in the first place. This also points to a lack of teacher identity. Teachers cannot, then, identify as EMS teachers.

6.3 Challenges of Teaching Financial Literacy

Despite several initiatives to improve the teaching and learning of EMS, the findings reveal that the majority of the participating teachers lacked subject content knowledge in all three focus areas and were only comfortable teaching one of the three areas. This finding is not new and corroborates views expressed by other scholars (Modise, 2016; Schreuder, 2009; Spaull, 2013). This creates nervousness and a low level of self-efficiency among teachers, who in turn tend to avoid teaching some content.

"I have been teaching business studies and Afrikaans for over 30 years. This is my first year teaching EMS ... I do not feel competent ... financial literacy [gives me the runaround], because ... my last accounting was, like, in Grade 12, and there was no formal learning for accounting as a subject for Blacks. You know, I am coming from the old teaching colleges ... I have to go back and consult accounting books, consulting from colleagues, consulting experts in accounting to help me ... so it was, like, a little bit of fooling around and while my learners were learning."

The teachers revealed that there was a lack of coordinated support by the Department of Education for practicing teachers. The kind of support provided by the subject advisors, for example, was more of a tick-box administrative activity and not one that enhanced their professional development, subject knowledge, and pedagogical practices in handling the three focus areas in EMS.

"... but you know that support is more of a tick-box whereby when they (subject advisors) have the normal school visit, they'll say ... 'open the ATPs (annual teaching plans); you didn't teach accounting equations, why didn't you teach accounting?' It's not supporting us to know where [I am] struggling and how can I improve or do better."

The teachers were concerned with the EMS textbooks, especially the financial literacy content. The information provided in the textbooks was out of date and there were insufficient financial literacy practice activities. Insufficient practice activities put a strain on teachers and schools, which are already challenged with overcrowding and limited resources. Exacerbating these challenges were the lack of or delayed provision and/or updating of educational resources by governmental authorities. These systemic inefficiencies had a direct impact on teaching and learning and, ultimately, learners' academic performance.

"The textbook needs to be updated because a Grade 9 textbook still talks about cheques, which are outdated, and when we give our learners homework from a certain page only to find that page still talks about cheques ..."

"For accounting, we have a ledger book ... the government doesn't supply us with those anymore, making us print extra copies, because if you have to give your learners extra exercises or assessments or activities, you have to make a plan."

Poor curriculum sequencing and timetabling have an impact on the teaching of the subject. For most participants, the time allocated for EMS was not sufficient, given the nature of the subject. Specifically, they indicated that the financial literacy component required more practice and that one hour per week was just not enough. They had to sacrifice their own time for extra lessons.

6.4 The Nature and Importance of EMS as a School Subject

The participants held similar views as regards the importance of EMS in preparing learners for future career choices and life. Responses of the teachers show that they understood EMS as a "real life" subject that requires them to provide opportunities for learners to relate their learning to real-life experiences.

"The nature of EMS as a subject, it's a reality subject ... it's all about the economy of the country and I was explaining to them a mixed economic system that we are using in South Africa and was making relevant examples that they can relate."

More specifically, the teachers agreed that financial literacy is an important component of EMS as it provides foundational knowledge at the FET Phase for the commerce stream subjects and provides basic financial skills for learners who exit at the GET Phase:

"For me, ... financial literacy is part of the everyday life. Just having a bank account is already CRJ (cash receipts journal) and CPJ (cash payments journal), money coming in, money going out. ... So, the basic knowledge of Grade 8 and 9 is actually going to help to learn outside of school if they don't progress to FET and start working [and] open their own business at least. Not teaching financial literacy is actually unfair for the learners; we may rob them of their future."

The participating teachers understood that EMS is an integrated subject comprising accounting, business studies, and economics. However, they seemed to hold different views on how it should be taught to enhance learning in all three focus areas, as illustrated in the comments below, with the first teacher in support of fragmenting and the second in support of integration.

"... that is why we as teachers are saying separate the subject so that we can see and have a clear picture of what's happening. Yes, Teacher XYZ will not know how accounting went, but did XYZ know what is a pay slip or a deposit slip as a source document?"

"Three years ago, our school started separating financial literacy from economics and entrepreneurship, whereby one teacher would teach economy and entrepreneurship and another one would teach financial literacy. But it was not working; I think they should go back to one teacher teaching all three aspects of EMS so that learners can have a holistic understanding."

Even though most participants viewed EMS as a critical subject that should be taught to all learners as an integrated subject, they could not do so. The contextual challenges, coupled with insufficient subject knowledge, make it difficult for them to structure and sequence EMS content in an integrated manner. As financial literacy continued to be a challenge for most teachers, they opted to teach EMS in an isolated and fragmented manner, thus denying learners opportunities to develop a holistic understanding of the subject. In the excerpt below, the teacher resorted to collaborative teaching, where she requested assistance from accounting teachers to help teach financial literacy.

"In our school, as educators, we came up with a plan. The plan is to have two teachers. One will teach entrepreneurship and economy; the other teacher will come and teach only financial literacy so that learners can understand better."

While integrative co-teaching may be a possibility, it presents a challenge, especially where teachers lack a shared understanding of the subject matter.

"You will find two teachers in one class. One only concentrates on financial literacy; the other one concentrates on entrepreneurship and the economy. Okay, the learners get to pass, but learners don't see the connection between the two focus areas because they are working in isolation. Teachers need to work together to see how to connect the content."

The feedback from teachers who implemented co-teaching shows that it was not effective as it failed to provide learners with a holistic understanding of EMS.

7. Discussion

The formation of EMS as a school subject in South Africa was based on the desire to redress past injustices and provide learners with meaningful learning experiences that might lead to their emancipation and engender their social agency. The integration of accounting, economics, and business studies in the South African education system was seen as a necessary tool in achieving social, economic, and political stability and redressing past injustices. Adequate subject knowledge of all three areas is a prerequisite for the teaching and learning of EMS. This means that a lack thereof will have serious implications for the quality of education and learner achievement in EMS (Jonda & Modise, 2022). Since EMS is an integrated subject, teachers are thus obliged to teach all components effectively using the necessary techniques and approaches (Doyle & Bozzone, 2018). In addition, Moloi and Molise (2021) explained that it is important for teachers to teach EMS as an integrated subject so that learners can see the link between different learning areas. However, the findings show that most participating EMS teachers did not think about and teach EMS in an integrated manner. The findings

resonate with other findings which show that teachers find it difficult to improve their teaching strategies because they lack adequate training in developing content knowledge and skills in an integrated curriculum (Ferguson-Patrick et al., 2018). This contradicts the findings by Ngwenya and Nzuza (2022), who found that teachers emphasized the importance of teaching the subject in an integrated manner. For effective teaching of EMS, teachers need to have a deep understanding of EMS content knowledge and be able to teach in an integrated manner.

Among other factors, teachers' subject specialization plays a key role in their identity construction and should lie at the heart of EMS teacher training and development programs (Ngwenya, 2014). However, the findings indicate that the initial teacher training programs and CPTD initiatives were not effective in creating a sense of subject identity as an EMS teacher. Although most of the participants listed accounting, business studies, and economics as their areas of specialization, they did not identify as EMS teachers (Jonda & Modise, 2022). This supports the literature in this study that attributes the disconnect to the perception of EMS as a subset of either accounting, economics, or business studies, rather than a distinct field of study (Modise, 2016; Moloi & Molise, 2021). This perception perpetuates the notion that EMS is easy and that anyone with exposure to commercial subjects up to matric level, or who have at least specialized in one or two of the three components of EMS, or who were never exposed to any EMS knowledge in their schooling, can teach the subject (Jonda & Modise, 2022).

In addition, the findings reveal that the CPTD training workshops are often structured and conducted in a fragmented manner, which denies teachers the opportunity to develop integrative pedagogical content knowledge. This finding aligns with Jonda and Modise (2022), who argued that due to teachers' limited capabilities to teach EMS as an integrated subject, they resort to fragmenting the three focus areas. This fragmentation of EMS denies learners the opportunity to develop an awareness of the logical relations among accounting, business studies, and economics (Jonda & Modise, 2022). To effectively implement EMS as an integrated subject, teachers need to study the contents of the three focus areas in conjunction. This implies that teachers' understanding of their pedagogical content knowledge should not be limited to individual subjects but should also involve building bridges between subjects (Nzuza et al., 2022). Such an interdisciplinary approach is crucial for fostering a comprehensive understanding of EMS among learners.

This finding underscores the complex interplay between professional development initiatives and the contextual factors that influence their implementation. For many teachers, continuous professional development or professional learning is seen as a panacea for poor teacher-classroom performance and student achievement (Molise et al., 2023). The findings suggest that CPTD failed to include teachers' voices and contexts in a manner that can help create a sense of empowerment. Such discursive contexts limit teachers' ability to enact their agency in a manner that encourages teachers' meaningful engagement in their professional learning (Wheelahan, 2007). Even though

teachers participated in the professional development opportunities, they were unable to use the learning to improve their classroom practice and enhance student performance, especially in financial literacy. As argued by Archer (2003), teacher competency is not only influenced by a teacher's inner abilities but by their association with other agential factors. Social, cultural, and material constraints influenced the ability of teachers to enact their agency in the enhancement of the teaching and learning of financial literacy. This highlights the need for a more nuanced approach to teacher development that accounts for the multifaceted challenges they face in their professional environments.

8. Conclusions

This research attempted to address how EMS teachers make sense of and approach the teaching and learning of financial literacy, as well as their professional needs and interests in this integrated field. We used a social realist perspective to facilitate a nuanced understanding of the experiences of EMS teachers in teaching financial literacy. This theory helped us explore how teachers enact their agency to enable effective teaching and learning of financial literacy in EMS. We also found that, due to poor training on how to teach EMS, teachers could not integrate financial literacy components. As a result, EMS teachers resorted to using the pedagogies familiar to them. This meant fragmenting the EMS focus areas, which then hampers government efforts to achieve social transformation through the EMS curriculum. The argument presented in this paper is that although the agency is inherent, it can only emerge in particular enabling conditions. As such, CPTD should be reconceptualized, taking into consideration the agential spaces that may present possibilities to enable teachers to contribute toward the achievement of valuable educational outcomes in the EMS curriculum. We call for an implicit approach to teacher development programs by incorporating teachers' views, experiences, and specific needs and contexts. The study contributes to the existing body of literature by using a social realist perspective to enhance the quality of CPTD programs in South Africa.

9. Limitations

The research results may inform South African education policies in teaching and learning EMS. However, it is important to be careful in applying these findings to other contexts and countries. Given that the study adopted a qualitative research design with a small sample size from selected schools in the Gauteng province, the findings cannot be generalized to all schools in the province or the country. As such, further research is needed to build on this study on a larger scale, if time and resources allow.

10. Recommendations

The findings reported in this study illustrate the significance of teacher agency, which is integral to teaching and learning. Teacher development programs can play a major role in building and enhancing EMS teacher competencies and enabling them to effectively integrate the three focus areas. The findings illuminate the fact that the CPTD training programs fail to consider the experiential views and contexts of teachers. Understanding the experience of teachers and their perceptions about the nature of EMS is a prerequisite for

designing effective CPTD initiatives. We recommend that extensive research be undertaken before structuring CPTD.

In addition, we recommend a restructuring of the CPTD programs by ensuring that the training workshops are not fragmented but conducted in a manner that enhances EMS teachers' integrative pedagogical content knowledge. The fragmentation of the workshops denies teachers the opportunity to develop an awareness of the logical relations within the subject. For EMS teachers to develop a holistic understanding of EMS, the CPTD programs ought to be structured holistically and not fragmented as they currently are. The training should include demonstrations or activities that show how the three focus areas are interrelated or even build on one another, thus enhancing teachers' competencies and promoting comprehensive learning.

Given the persistent challenges in the existing intervention strategies by the government in the form of CPTD, the government should consider approaching higher education institutions that offer short-term learning programs. The University of Johannesburg offers one such short-term learning program. These learning programs are systematically designed to develop integrative pedagogical knowledge for EMS teachers that would include knowledge of curriculum integration and its purpose; knowledge of concepts of bridging different subjects; and knowledge of collaborative teaching by subject teachers.

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Appendix 1: Questionnaire: Financial Literacy in EMS

Thank you for agreeing to answer this questionnaire. It is completely anonymous and your responses will be used purely for research purposes. This questionnaire should not take you more than 20 min to answer.

How long have you been teaching EMS for? What kind of formal training have you received in order to teach EMS? Please explain fully. Which sections in financial literacy in EMS do you find most interesting to teach about? Why do you feel this way? Please explain in detail. Which sections in financial literacy in EMS do you find most difficult to teach about? Why do you feel this way? Please explain in detail. If you received no formal training how do you manage the teaching of financial literacy in the EMS section? Please explain fully. How do you think a Grade 10 Accounting teacher must bridge the gap between the work on financial literacy in EMS and Accounting in Grade 10? Please explain fully.

THANK YOU.

Appendix 2: Interview Schedule

Introduction letter

We would like to invite you to be part of a study: "The role of agency and professional development in enhancing financial literacy for economics and management sciences (EMS) teachers". We would like to arrange an interview with you as an EMS teacher.

Please read the information below regarding the study and please feel free to ask any questions on aspects that you might find unclear, before you agree to participate in the study.

The details of the study are as follows:

Purpose of the study: To investigate the role of agency and professional development in enhancing financial literacies for economics and management sciences (EMS) teachers.

Voluntarily participation: Your participation is voluntary, and you will be allowed to withdraw from participating at any moment without having to give a reason. It is also not compulsory to answer all questions and you will not be penalised in any way if you decide to withdraw.

Statement of confidentiality: Your identity and that of your school will be confidential and will be anonymously treated. The data obtained from the study will be safely and securely kept. No personal information will be revealed. The study will be conducted within the framework and policy of the University of Johannesburg.

The Interview schedule: The interviews will be conducted via MS teams, scheduled for between 30 minutes to 45 minutes The interview appointment will be made after school hours.

Advantages: This study aims to improve teaching and learning of EMS as a school subject for both the teacher and learner. While answering the interview questions and questionnaires new information might be detected regarding the teaching of EMS which might lead to improving your teaching experience of the subject. The findings of the study will be published by means of academic articles which might influence future curriculum designers to take the findings into account.

If you agree to participate in this study I kindly request that you complete the consent form attached.

Our sincere gratitude for your effort and time. We will share my findings with you as soon as it is available.

INTERVIEW QUESTIONS-

- 1. How many years of teaching experience do you have with teaching EMS?
- 2. What kind of formal training have you received in order to teach EM?. Please explain fully.
- 3. Which sections in financial literacy in EMS do you find most challenging to teach? Why do you feel this way? Please explain in detail.
- 4. If you received no formal training how do/did you manage to teach financial literacy in the EMS section? Please explain fully.
- 5. How can EMS teachers become change agents toward making the financial literacy components more accessible, impactful, and easier for them to teach? Probing question: How can EMS teachers improve their understanding of financial literacy?
- 6. Why do you think it is important for schools to teach financial literacy? Please explain.
- 7. What support is there for EMS teachers to teach the financial literacy section effectively? Probing question: What happens if there is no support?
- 8. What possible solutions can be considered to address these challenges?

Appendix 3: Ethics Clearance

20NHREC Registration Number REC-110613-036



ETHICS CLEARANCE

19 October 2023

Dear Dr. Nazreen Dasoo Dr. Hellen Agumba

Ethical Clearance Number: SEM 2-2023-113

Topic: Teacher agency and professional development in improving financial literacy in Economic and Management Sciences

Ethical clearance for this study is granted subject to the following conditions:

- If there are major revisions to the research proposal based on recommendations from the Faculty Higher Degrees Committee, a new application for ethical clearance must be submitted.
- If the research question changes significantly so as to alter the nature of the study, it remains the duty of the student/researcher to submit a new application.
- It remains the student's/researcher's responsibility to ensure that all ethical forms and documents related to the research are kept in a safe and secure facility and are available on demand.
- Please quote the reference number above in all future communications and documents.

The Faculty of Education Research Ethics Committee has decided to: Approve

ı		
ı	Х	Grant ethical clearance for the proposed research.
		Grant ethical clearance for the proposed research. Provisionally grant ethical clearance for the proposed research.
		Recommend revision and resubmission of the ethical clearance documents.
	Kindl	y be informed that this ethical clearance is only valid for three years.

randly be informed that this ethical electronics is only valid for three year

Sincerely,

Prof A Carolin

Prof Andy Carolin

Chair: FACULTY OF EDUCATION RESEARCH ETHICS COMMITTEE