

**Investigating a tripartite collaboration between  
accounting firms, teachers and prospective accounting  
learners for growing the accountancy pipeline: a case study  
from Makhanda**



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I hereby declare that I have read and understood the regulations governing the submission of Master of Commerce dissertations, including those relating to length and plagiarism, as contained in the rules of the University, and that this dissertation conforms to those regulations.

**SUPERVISOR: Associate Professor Taryn Miller**

**June 2025**

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Date: 19 June 2025

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## **Abstract**

The accounting profession is experiencing a concerning decline in the number of people joining the profession. This is evidenced by decreasing enrolments in entrance examinations, smaller classes in university lecture theatres and the discontinuation of accounting classes in many high schools. Yet, the significance of this profession cannot be overstated in its role in fostering a robust local economy and providing its members access to a quality of life which surpasses that of the average individual. This study is qualitative in nature and follows a two-phase approach, firstly, using semi-structured interviews to collect data from a sample of twenty learners and six schools from four quintile three schools in Makhanda. The second phase required semi-structured interviews with participants from four accounting firms using the analysed data from phase 1 as a base. The theory of social justice is used as a lens to answer the following research question: How can the accounting profession, prospective accounting learners and their teachers collaborate to grow the pipeline of prospective accountants? Among others, the study finds that learners and firms can collaborate through school prize giving, formalised school visits and tailored career fairs. Teachers and firms can collaborate through the development of teaching and learning material and through firms acting as advisors when needed. The study is unique in its documentation of solutions that may assist in increasing the pipeline of prospective accountants. The findings of the study may be useful to academics and professionals concerned with the declining pipeline into the profession and those responsible for promoting the profession.

Keywords: accounting firms, accounting profession, career guidance, collaboration, declining pipeline, learners, teachers.

## Contents

Acknowledgements .....	iii
Abstract .....	iv
Contents .....	v
List of Tables .....	viii
List of Figures .....	viii
Acronyms and Abbreviations .....	ix
CHAPTER 1: INTRODUCTION .....	1
CHAPTER 2: LITERATURE REVIEW .....	6
2.1 JOINING THE ACCOUNTING PROFESSION .....	8
2.2 THE CASE FOR MATHEMATICS AND ACCOUNTING .....	11
2.3 THE PREVALENCE OF INADEQUATE TEACHING PRACTICES .....	14
2.4 HINDRANCES TO PURSUING ACCOUNTING BY PROSPECTIVE ACCOUNTANTS .....	16
2.5 THEORETICAL FRAMEWORK .....	18
2.6 RECOMMENDATIONS FROM REVIEW OF LITERATURE .....	21
CHAPTER 3: METHODOLOGY .....	23
3.1 RESEARCH DESIGN .....	23
3.2 RESEARCH METHOD .....	23
3.3 SAMPLING AND PARTICIPANTS .....	28
3.4 ANALYSIS OF RESULTS .....	29
3.5 ROLE OF THE RESEARCHER .....	30

3.6 ETHICAL CONSIDERATIONS .....	31
CHAPTER 4: FINDINGS ANALYSIS AND DISCUSSION .....	33
4.1 COLLABORATION BETWEEN ACCOUNTING FIRMS AND LEARNERS	35
4.1.1 Identified Challenges.....	36
4.1.2 Proposed Solutions .....	39
4.2 COLLABORATION BETWEEN ACCOUNTING FIRMS AND TEACHERS	45
4.2.1 Identified Challenges.....	45
4.2.2 Proposed Solutions .....	50
4.3 DISCUSSION OF THE LIMITATIONS OF THE PROPOSED SOLUTIONS	52
4.3.1 Passivism.....	53
4.3.2 Financial Constraints.....	54
4.3.3 Time Constraints.....	55
4.3.4 Immaturity of Grade Nine Learners .....	56
4.3.5 The Declining Attractiveness of the Profession .....	57
4.4 DISCUSSION OF THE WAY FORWARD .....	58
4.4.1 Project Co-ordination and Collective Action .....	59
4.4.2 Concentrated Effort.....	60
4.4.3 Strengthening Existing Relationships.....	61

4.5 THE SOCIAL JUSTICE THEORY .....	62
CHAPTER 5: CONCLUSION .....	64
5.1 PREAMBLE.....	64
5.2 SUMMARY OF FINDINGS.....	65
5.3 SIGNIFICANCE OF THE STUDY.....	67
5.4 LIMITATIONS OF THE STUDY.....	68
5.5 AREAS FOR FUTURE RESEARCH .....	68
REFERENCES.....	69
APPENDICES .....	78
Appendix A: Phase 1_ Interview questions for semi-structured interviews.....	78
Appendix B: Phase 1 Preliminary Findings Report.....	82
Appendix C: Phase 2_ Interview questions for semi-structured interviews with firms .....	87

## **List of Tables**

Table 1: Phase one participants .....	25
Table 2: Phase two participants .....	27
Table 3: Coding results per participant group .....	34

## **List of Figures**

Figure 1: A tripartite collaboration vision .....	4
Figure 2: Coding results per participant group .....	34
Figure 3: Challenges faced by prospective accounting learners and proposed solutions .....	35
Figure 4: Learners' career choices word cloud .....	36
Figure 5: Challenges faced by teachers of prospective accounting learners and proposed solutions.....	46
Figure 6: Limitations to the proposed solutions and strategies to overcome the limitations.....	53
Figure 7: Moving forward despite the limitations .....	59
Figure 8: A tripartite collaboration per research findings.....	66

## **Acronyms and Abbreviations**

APC	Assessment of Professional Competence
CA(SA)	South African Chartered Accountant
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
ECDoE	Eastern Cape Department of Education
EMS	Economics and Management Sciences
FET	Further Education and Training
GET	General Education and Training
IAC	Initial Assessment of Competence
IFAC	International Federation of Accountants
ITC	Initial Test of Competence
NSC	National Senior Certificate
PDG	Previously Disadvantaged Group
SAICA	South African Institute of Chartered Accountants
SETA	Sector Education and Training Authorities
UCT	University of Cape Town

## CHAPTER 1: INTRODUCTION

The accounting profession is one of the key components of building and sustaining a robust and reputable economy, in South Africa and globally (Lassou et al., 2021; Nwosu & Matashu, 2022; Oben & van Rooyen, 2022). Nevertheless, the profession finds itself in a crisis due to a declining number of skilled members joining the profession as evidenced by the International Federation of Accountants (IFAC) recording a 4.9% decline in 2022 relating to the number of new undergraduate enrolments in accounting degrees, marking the most substantial decline in half a century (Blood & Yong, 2024). This trend has been noted in other developing countries such as Vietnam and Malaysia as well as in developed countries such as the United States of America (USA) and Sweden (Aziz et al., 2024; Ho et al., 2025; Karlsson & Noela, 2022; Reinstein & Kaszak, 2024). South Africa has encountered this trend directly as the number of learners undertaking the National Senior Certificate (NSC) Accounting examination declined by almost 40% between 2016 to 2019 (Mkhize et al., 2022). These statistics reflect a concerning future for the accounting profession if left unaddressed. The evolving role of professional accountants has assisted economies worldwide to navigate extraordinary challenges including the financial crisis of 2008 as well as the Covid-19 pandemic (Ahrens & Ferry, 2021; Kalaitzake, 2019). Even in times of rapid technological changes, businesses rely on accountants to lead them through the immediate effects of the changes and also develop long-term solutions (Barbera et al., 2020; Ho et al., 2025). Thus, the evolving role of professional accountants reinforces their significance and accentuates the need for strategies aimed at increasing the pipeline of prospective accountants as a matter of urgency (Mkhize et al., 2022).

Carpenter & Roos (2020) warn that the South African accounting profession requires racial transformation. Nonetheless, South Africa's racially discriminatory past means that the challenge of a declining pipeline of professional accountants is fundamentally entrenched in previously disadvantaged communities (Coetzee et al., 2019). This assertion is substantiated by the decline in learners enrolling for accounting at high schools in previously disadvantaged schools (Nwosu & Matashu, 2022). The decline in

the number of learners enrolling for accounting is due to several issues including an inadequate public education system that produces learners with limited literacy skills, poor and uneducated parents who are unable to contribute meaningfully to the learning process and the lack of career guidance to learners at the appropriate grades (Bryant et al., 2019; Oben & van Rooyen, 2022; Ogbonnaya & Awuah, 2019). Therefore, investigating a decline in prospective accounting learners from previously disadvantaged communities will be the focus of the study. Locally, studies have been undertaken to investigate learner's intentions to pursue accounting studies further, the impact of human resources on learner's success in accounting as well as the impact of the curriculum on students pursuing and succeeding in accounting (T. R. Mkhize et al., 2022; Nwosu & Matashu, 2022; Oben & van Rooyen, 2022). Globally, studies have been undertaken to investigate factors contributing to the decline in new members joining the profession globally and their effects on personal well-being and quality of work (Ahn et al., 2024; Burke & Polimeni, 2023; Reinstein & Kaszak, 2024). Studies investigating the solutions to the declining pipeline of accountants in other countries have started to emerge (Aziz et al., 2024; Ho et al., 2025; Mardi & Handarini, 2025). However, studies investigating a potential solution to the declining pipeline of prospective accountants in South Africa, particularly focused on previously disadvantaged communities remain notably sparse, the study seeks to heed the call by Mkhize et al. (2022) to address the challenge of a declining pipeline of prospective accountants as a matter of urgency. This call is similar to that raised in other countries battling the decline of prospective accountants (Barbera et al., 2020; Ho et al., 2025; Karlsson & Noela, 2022). Furthermore, this study also aligns with the recommendations of a USA-based study by Reinstein and Kaszak (2024) who suggest that concerned stakeholders should focus, in the context of South Africa, on previously disadvantaged groups which have unmet accounting needs.

Anchored in Fraser's (2008) theory of social justice, the study investigates a tripartite collaboration between grade nine learners in previously disadvantaged schools, their teachers and firms within the accounting profession to increase the pipeline of prospective accounting learners. The qualitative study uses semi-structured interviews to understand the challenges faced by learners and their teachers. Furthermore, the interviews are used

to solicit solutions that may result in more learners joining the pool of prospective accountants through the appropriate subject choice and career selection. By focusing on previously disadvantaged communities, the study aspires to bridge the gap between learners from previously disadvantaged communities and their counterparts in more affluent communities (Ndlovu & Simba, 2021). This focus heeds the call to racially transform the accounting profession in South Africa (Carpenter & Roos, 2020). Additionally, by directing attention towards grade nine learners, the study acknowledges the assertion by Oben and van Rooyen (2022) which posits that, to address the challenge of a declining pipeline of learners joining the profession, concerned parties should focus on younger learners who have yet to make subject and career decisions. Considering the aforementioned context, the foundation for the problem statement, research question, thesis statement, and research objectives of this study have been established as follows:

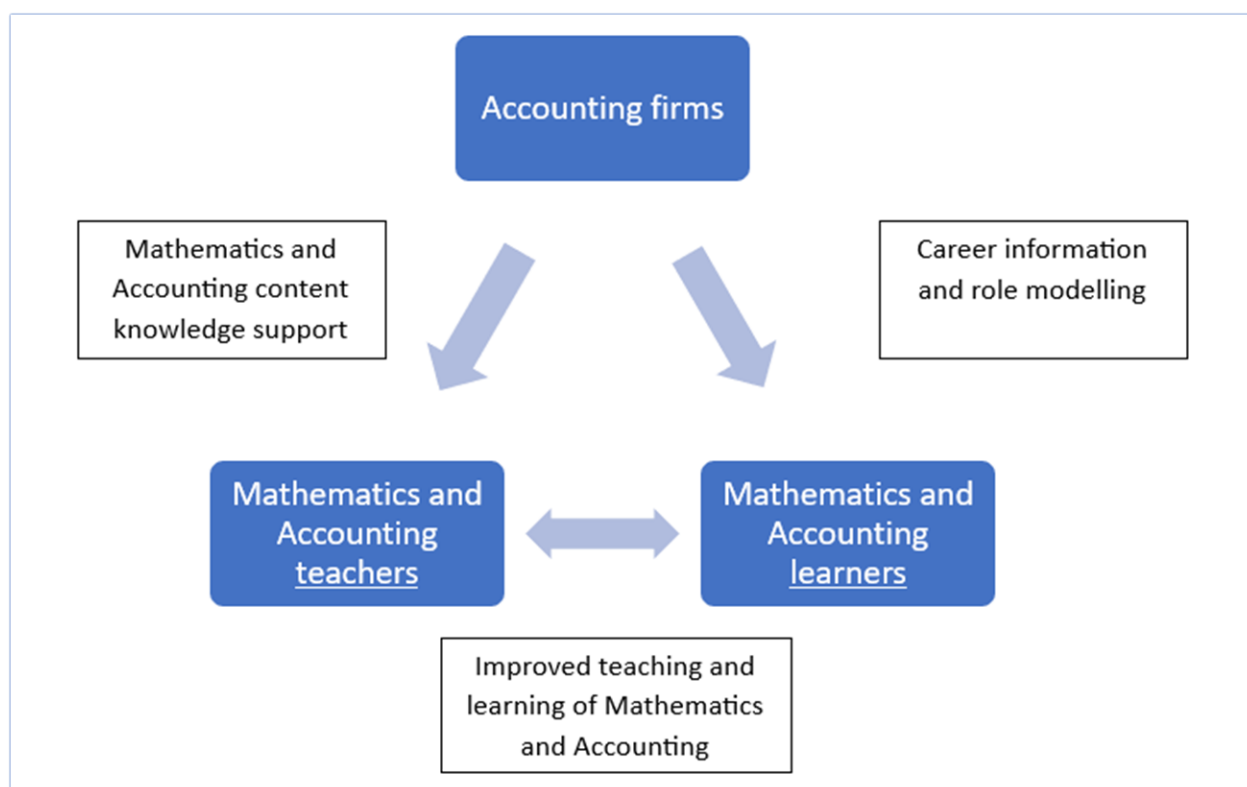
**Problem statement:** There is a declining pipeline of prospective accountants particularly in poor socio-economic areas where there are challenges relating to teaching and learning in mathematics and accounting. For learners, these challenges are compounded by their socio-economic environment.

**Research Question:** How can the accounting profession, prospective accounting learners and their teachers collaborate to grow the pipeline of prospective accountants?

**Thesis statement:** There is an opportunity for the accounting profession to support prospective accounting learners through role modelling and sharing information about the profession as well as their teachers of accounting and mathematics through support with technical knowledge to increase the pool of prospective accountants.

**Research objectives:** The objective of the study is to investigate how the accounting profession could encourage learners to take up mathematics and accounting to increase the learners' career options and grow the pipeline of prospective accountants. The second objective is to investigate how the accounting profession could better support accounting and mathematics teachers from poor socio-economic schools with an

understanding of subject content knowledge. An illustration of the perceived collaboration is presented in Figure 1 below.



**Figure 1: A tripartite collaboration vision**

The data collection phase adopted a two-phase approach which entailed interviewing teachers individually and learners in focus group settings as the first phase. The data which emanated from these interviews was transcribed, coded and analysed, the result of which was a preliminary findings report. This report formed a foundation for individual interviews with accounting firms which was the second phase of the data collection. All data was then transcribed, coded and analysed through an iterative process.

The findings of the study reveal that the major challenges that may be preventing learners from joining the pool of prospective accountants include the lack of career guidance, the invisibility of the accounting profession and the learner's self-efficacy, among others. The challenge of inadequate teaching and learning resources plagued teachers the most. The study further finds that accounting firms are already experiencing the effects of the

declining pipeline of members entering the accounting profession. Resultantly, accounting firms were forthcoming with solutions which include tailored career fairs, job shadowing opportunities and formalised school visits. From a teacher collaboration perspective, some of the solutions include expanding existing educator development programs and assisting teachers with the development of teaching and learning resources. The enthusiasm with which solutions were proposed demonstrates the commitment of accounting firms to increase the pool of prospective accounting learners.

This study contributes to the existing body of literature by documenting various initiatives that can be implemented to expand the pipeline of future accountants. This contribution is particularly significant, as prior research has primarily focused on identifying the problem and its consequences, without offering solutions (Ahn et al., 2024; Burke & Polimeni, 2023). While the study reaffirms many of the challenges present within the public schooling system, it also provides novel insights into potential strategies for addressing these obstacles, along with the limitations that must be taken into account prior to their implementation. The findings of this research are expected to be of particular relevance to stakeholders responsible for promoting the accounting profession, including academic institutions and organisations that employ accountants, all of whom are invested in addressing the declining pipeline of prospective accounting professionals.

The structure of the remainder of this paper is as follows: Chapter 2 will present and review the relevant literature relating to the declining pipeline of prospective accountants to provide a contextual foundation for the study and also outline the theoretical framework underpinning the research. This will be followed by Chapter 3, which is the methodology chapter. Chapter 3, will detail the research methods employed in conducting the study. Thereafter, Chapter 4, being the findings chapter, will discuss the challenges and proposed solutions to achieving a tripartite collaboration. The findings chapter also outlines the limitations of the proposed solutions, and ways in which these limitations may be overcome and then concludes with a discussion of the findings in relation to the theoretical framework. Finally, the conclusion in Chapter 5 will highlight the significance of the study, acknowledge its limitations, and suggest potential avenues for future research.

## CHAPTER 2: LITERATURE REVIEW

The number of first-time candidates sitting for the South African Institute of Chartered Accountants (SAICA) Initial Test of Competence (ITC<sup>1</sup>) in January 2013 was 2198 (SAICA, 2018), this number peaked to 2821 in April 2021 and has since been on a downward trend reaching 2071 in January 2024 (SAICA, 2024). SAICA is the leading accountancy body in South Africa and CA(SA)s have earned the top position in a professional trust survey by Edelman (SAICA, 2025a). The ITC (From 2025, is the Initial Assessment of Competence (IAC)) is the first of two qualifying exams for candidates to be admitted as SAICA members using the Chartered Accountant South Africa CA(SA) designation<sup>2</sup> (SAICA, 2024). The statistics presented above reflect a plateau in new entrants and negative growth that is incapable of meeting the current demand for accountants (Blood & Yong, 2024). This decline is expected to worsen if drastic measures are not taken to correct this (T. R. Mkhize et al., 2022). This decline is not just a South African problem but a global problem as the demand for accountants is expected to increase, in spite of the technological advancements many may be weary of (Ho et al., 2025; Karlsson & Noela, 2022).

The exclusion of black Africans from real economic participation during the apartheid era is an overarching factor in the shortage of accounting professionals' crisis in South Africa (Coetzee et al., 2019). This is similar to other developing countries such as Malaysia and Vietnam, which have multiple ethnicities and suffered some form of colonialism resulting in native ethnicities being less privileged to access opportunities such as those found in the accounting profession (Aziz et al., 2024). Locally, the number of black candidates sitting for the ITC examination in 2013 was 1142 peaking at 2722 in April 2021 and has since been on a downward trend reaching 1793 in January 2024 (SAICA, 2018, 2024). Extant literature demonstrates that the legacy of apartheid has resulted in a host of problems at the Department of Basic Education (DBE) level (Bryant et al., 2019) and at

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<sup>1</sup> Now known as the Initial Assessment of Competence (IAC).

<sup>2</sup> Throughout the study, the term 'accounting professionals' is used with reference to members of SAICA using the CA(SA) designation.

the university level (Shamsoodien & Carpenter, 2021). Black learners and learners from poor socio-economic environments are particularly at the forefront of these challenges as, compared to their more affluent white counterparts, are unable to cushion themselves financially from the effects of a malfunctioning DBE (Bryant et al., 2019). Challenges faced by the education system ultimately have a significant impact on the economy as that is where the future talent of the country is developed. While it is a common understanding that the faults of the inherited education system cannot be corrected instantly (de Clercq, 2020), and the macro challenges are not unique to accounting education (Bryant et al., 2019), there is an urgent need for continued research in this area to resolve the current and future skills shortage in the accounting profession.

When addressing learning challenges in the education system, researchers Spaul and Kotze (2015) convincingly argue the importance of addressing challenges early on before it is more costly and spreads to other areas. It is for this reason that this literature review chapter will focus on the challenges experienced at a high-school level by prospective accounting learners, particularly in grade nine. Initially, this literature review will outline the challenges facing prospective accounting learners within the public school system, particularly in poor socio-economic contexts. Thereafter, the focus of the literature review will be to identify whether a gap exists for professional accounting firms to interact directly with high school learners to firstly, increase their awareness of the accounting profession and provide general career guidance. Secondly, to act as role models that prospective accountants can relate to and finally, to boost the learners self-efficacy. Finally, this literature review will identify whether a gap exists for professional accounting firms to interact directly with mathematics and accounting teachers in grade nine to enhance their knowledge of accounting which can equip them to provide more meaningful context for their learners while providing general support and raising awareness of the accounting profession.

In conducting this literature review, the main scholars primarily relied upon include Spaul (2015) and Van Der Berg et al. (2015), due to their contributions to the research on socio-economic policy. Major reliance was also placed on Roodt (2018) through his

contributions to reports by the South African Institute of Race and scholars Oben and Van Rooyen (2022). While many authors and sources are cited in this literature review, these authors were of fundamental importance to achieving the objectives of this literature review.

## **2.1 JOINING THE ACCOUNTING PROFESSION**

In South Africa, the decision to become an accountant can be made as early as grade nine, once learners have been introduced to accounting through economics and management sciences (EMS) which is offered up until grade nine. To pursue a career in accounting, learners must choose mathematics rather than mathematical literacy<sup>3</sup> as one of their subjects from grades 10 through to 12 (SAICA, 2023). After completing grade 12 with the required pass grades, including mathematics and english, learners can enrol for an undergraduate degree, followed by a postgraduate diploma in accounting. Both higher education qualifications must be completed at one of the SAICA-endorsed universities (SAICA, 2024). This is known as the academic program. The completion of the academic program is followed by the ITC exam written at the start of a 36-month professional training program. This is followed by the Assessment of Professional Competence (APC), being the final exam written 20 months into the professional training program. Once all professional competencies have been obtained through the professional training program and both exams passed, a candidate is eligible to register as a member of SAICA and use the CA(SA) designation (SAICA, 2024).

While there is no perfect education system (Hendriks & Dunn, 2021), the South African education system has a multitude of challenges far beyond its counterparts in other developing countries and these challenges begin as early as pre-school (Spaull & Kotze, 2015). International benchmark tests have continuously revealed that although the situation is improving, many South African children in grade 4 still cannot read for meaning

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<sup>3</sup> Mathematics is a subject which requires rigorous logical thinking to solve abstract problems. Mathematical understanding allows one to understand the world and use that understanding to solve daily problems. Mathematical literacy, introduced as an alternative subject to mathematics at the Further education and Training (FET) phase, aims to develop learners' awareness of the role of mathematics, and its application in daily situations as opposed to abstract concepts (Venkat, 2007).

and some are behind with their mathematics competencies by as much as three grades (Spaull & Kotze, 2015). Whereas the DBE has implemented multiple interventions to respond to these challenges, many have not made a significant impact on improving the literacy and numeracy of learners. Many learners are still progressing to the next grade despite lacking appropriate literacy and numeracy skills. It is government policy to promote learners who fall slightly short of missing the passing requirements to the next grade. A learner's marks may be adjusted by as much as 5% to allow them to progress to the next grade (DBE, 2024). Furthermore, it was found that the learning gaps can widen by up to four grades by the time a learner reaches grade nine (Spaull & Kotze, 2015). These promoted learners are then forced into a state of constantly catching up (Hendriks & Dunn, 2021) and the resulting cognitive pressure can be insurmountable leading to drop-out later in their academic career (Spaull, 2015). Many learners who make it to grade 12 and beyond are essentially "functionally illiterate" (Roodt, 2018) and can go as far as university level but still struggle to decode basic university-level texts. The challenge of illiteracy is fundamental and must always be considered when conducting learning-related research, as literacy forms the foundation for all other forms of learning within the education environment (Roodt, 2018).

These levels of illiteracy and innumeracy are however not evenly distributed amongst schools. The largest gaps are found in the lower quintile non-fee-paying public schools which service mostly black African children from poor socio-economic backgrounds (Ogbonnaya & Awuah, 2019; Roodt, 2018; Spaull, 2015). These schools have a higher number of learners in absolute terms and the challenges they face mean their learners are at the highest risk of being left behind from participating in the economy through professions such as accountancy (Ogbonnaya & Awuah, 2019). As such, interventions to address the declining number of entrants in the accounting profession are the most necessary in these areas (Reinstein & Kaszak, 2024). Therefore, Learners from poor socio-economic schools will be the focus of this literature review.

Amongst other challenges facing the South African education system and preventing quality learning is the undue influence of trade unions. Trade unions exist to protect the

rights of teachers, but in so doing, must not infringe on the rights of learners (Roodt, 2018). Trade unions in South Africa are infamous for prolonged strikes, which lead to a loss of teaching and learning time, which is rarely ever recovered, this directly infringes on learners' right to a quality education (Williams et al., 2022). Trade unions are also heavily involved in the hiring of teachers, often employing cadre deployment policies rather than experience and qualifications (Van Der Berg et al., 2015). The involvement of trade unions in the teacher hiring process strips away the school leadership's executive powers and results in the employment of unsuitable teachers (Van Der Berg et al., 2015). This is another method of effectively perpetuating a poor-quality education system.

Learning impediments in public schools are also largely a factor of the socio-economic environment the school is situated (Bryant et al., 2019). Poor parents who do not have a university or a quality high school education are rarely able to assist their children academically and financially (Bryant et al., 2019). Children from dysfunctional or child-headed families have no sense of accountability regarding their schoolwork and attendance. When these impediments result in dropouts and poor performance, they further entrench the socio-economic ills of that society and perpetuate poverty (Spaull, 2015).

These impediments in learning affect many learners in lower quintile and non-fee paying public schools (Roodt, 2018). Learners grappling with these issues are already at a disadvantage when compared to their counterparts in higher quintile and fee-paying public schools as well as private schools (Roodt, 2018). Regardless of which career paths these learners choose the road ahead will likely be difficult. The pervasive challenges and inequality within the South African school system evidence the need for interventions in poor socio-economic schools where it appears the status quo will continue to trap learners in poverty (Spaull, 2015). Furthermore, it is also evident why a learner who is already facing obstacles would avoid the additional challenge of electing accounting as a career, a path which involves rigorous training as outlined above. However, this tendency to self-eliminate from career paths perceived to be challenging perpetuates the cycle of learners

missing out on the valuable skills obtained from mathematics and accounting and ultimately limiting their career options (Friedman & Laurison, 2020).

## **2.2 THE CASE FOR MATHEMATICS AND ACCOUNTING**

Grade nine is critical in the South African education system as it marks the end of the General Education and Training (GET) phase. Grade nine learners are expected to make career choices and choose the subjects relevant to their desired careers in the Further Education and Training (FET) phase (grades 10-12). The choices made by learners at this stage can be limiting in terms of which career paths they ultimately follow (Oben & van Rooyen, 2022). The complexity of career decisions and the potential lack of career guidance may be the cause of the phenomenon identified by Shepherd and Van Der Berg (2020) of large numbers of learners switching to mathematical literacy rather than mathematics. Accordingly, a concerted effort must be made by all stakeholders of the education system to support learners in this grade to make informed decisions when making subject choices. This is especially important for learners in township and rural schools where career counselling is not easily accessible and learners have limited exposure to professionals and a professional environment (Keevy et al., 2023; Oben & van Rooyen, 2022). Furthermore, career guidance at this stage would result in learners being aware of the skills required in the economy and which skills they should seek to attain to meet the needs of the market while placing themselves in fields with higher employment opportunities (Oben & van Rooyen, 2022).

Prospective accounting professionals must do mathematics and not maths literacy in grade 12 and although not compulsory, it is desirable that learners also do accounting. Not only is mathematics at grade 12 a university entrance requirement (Papageorgiou & Carpenter, 2019), there is also a substantial amount of literature confirming the positive relationship between mathematics performance in grade 12 and academic success at university (Baard et al., 2010; Bosman & Schulze, 2018; Roodt, 2018). While these researchers demonstrate that mathematics is a predictor of university access and success, Carpenter and Roos (2020) contend that it is only an indicator of access, but not the outcome, being graduation. However, Williams et al. (2022) put forward that

mathematics performance in high school plays a significant role in completing an accounting qualification at university. Roodt (2018) supports this finding by going as far as adding that good performance in mathematics, resulting in access to university, may provide a learner with an opportunity to exit poverty and ultimately enter the middle class. Therefore, mathematics is a key entrance requirement for prospective accountants to join the accounting profession as well as many other sought-after careers. It is therefore concerning that the number of learners switching to mathematical literacy is growing significantly each year.

Unlike mathematics, which is a key requirement for entry into an accounting qualification programme at university, accounting is not a university entrance requirement. However, several studies have been undertaken to identify the correlation between high school accounting and academic success in an accounting degree at university. Scholars Van Rensburg and Haiden (1998) identified positive correlations between grade 12 accounting and success in a university first-year course, despite the difference being marginal. The results of this study were later confirmed by scholars Papageorgiou and Carpenter (2019). Williams et al. (2022) conducted a similar study and extended the findings above by asserting that both mathematics and accounting had significant positive correlations to academic success as measured through on-time degree completion.

The study by Williams et al. (2022) further adds to literature by evidencing that learners who studied accounting at school are more likely to study accounting in their tertiary studies when compared to those who did not study accounting at school. This finding confirms that of Oben and van Rooyen's (2022) who found that many learners have selected careers by the end of grade nine already. Therefore, despite accounting in grade 12 not being a university requirement for entry into most accounting qualification programs, it is a good indicator of learners' career aspirations. Consequently, scholars seeking to address the skills shortage in the accounting profession should study the reasons for the decline of learners taking both mathematics and accounting in grade 12, rather than the decline in mathematics alone.

Both mathematics and accounting are part of the 11 subjects identified as gateway subjects by the DBE (2023). Despite the strong evidence for learners to select mathematics when making their subject choices in grade nine, learners are switching to mathematical literacy at alarming rates (Shepherd & Van Der Berg, 2020). The same observation can also be made about accounting. The number of learners who sat for the accounting National Senior Certificate (NSC) exam decreased by as much as 40% between 2016 and 2019 (T. R. Mkhize et al., 2022) and by 2022 accounting had the smallest number of learners sitting for the NSC exam of all the 11 gateway subjects (DBE, 2023). Learners who study accounting at school are an indicator of learners with an interest in further pursuing a career in accounting. Therefore, this decline in the number of learners taking accounting at grade 12 signals that the accounting profession is increasingly becoming unattractive (Oben & van Rooyen, 2022). Given that there is already a skills shortage in the accounting profession, the profession cannot afford this diminishing appeal as that would further deepen the shortage, placing those already in the profession under immense pressure which would contribute to further unattractiveness and ultimately perpetuate the cycle of insufficient members joining the profession.

In light of a compelling argument for grade nine learners to select mathematics rather than mathematical literacy in the FET phase, another significant issue is that learners in poor public schools face unique challenges that will disadvantage them regardless of their chosen career path. It is within the context of both issues that this literature review examines in greater depth the issues faced by those learners who have selected mathematics and accounting after grade nine. These issues may result in learners dropping out of the subject before reaching grade 12 and may convey an implicit message to those considering taking mathematics and accounting to reconsider their choice.

## 2.3 THE PREVALENCE OF INADEQUATE TEACHING PRACTICES

“The quality of an education system cannot exceed the quality of its teachers” (Van Der Berg et al., 2015). Poor-quality teachers were identified as a binding constraint to education. This assertion was further confirmed by scholars Bantwini (2019); Zuze and Juan (2020) as well as Fadiji and Reddy (2021) that public schools struggle to attract and retain qualified and experienced teachers due to the locations where schools are positioned. Nwosu and Matashu (2022) articulate that failure to appoint quality teachers results in the reinforcement of sub-par education, entrapping poor children, in poor schools further into the cycle of poverty.

A study by Modise and Letlhonyo (2020) revealed that the accounting jargon used in accounting textbooks was perceived as difficult for both learners and teachers. This observation is not surprising when considered in light of Roodt’s (2018) findings which indicated a deterioration in teachers’ critical thinking capabilities, alongside the fact that many learners in the South African education system are functionally illiterate. This means that some teachers are incapable of facilitating the interaction between prescribed textbooks and the learners (Modise & Letlhonyo, 2020). As a result, teachers often spend their time either defining or translating concepts to the mother tongue rather than teaching. While translating difficult concepts into the mother tongue may assist in achieving essential understanding (Dukhan et al., 2016), it is problematic as translations are not available during homework and assessments (Modise & Letlhonyo, 2020). The translation process also consumes valuable teaching time that could be spent contextualizing and decoding the substance of the accounting transactions. This language barrier gives strength to the perception that the accounting subject is difficult, hence, learners who struggle to understand accounting at the GET phase through EMS may be less inclined to pursue it in the FET phase or their higher education studies.

The study by Williams et. al (2022) found that in a grade 10 accounting class, both teachers and learners did not have the requisite accounting knowledge for the grade. Letlhonyo and Modise (2020) also had similar findings at a grade nine level. Furthermore,

this study also revealed that teachers will not teach what they do not feel confident in. At a grade nine level, where EMS teachers must teach concepts linked to business studies, economics and accounting, accounting is usually the area of weakness and the first to be pushed aside due to insufficient teaching time (Letlonyo & Modise, 2020). The inability to cover the required content in the allocated time resulting in lost opportunities to learn is evidence of weak teaching practices (Van Der Berg et al., 2015).

Based on the literature engaged above, it is evident that the prevalence of inadequate teaching practices is a fundamental hindrance to quality education. Accordingly, improving the quality of teachers and teaching should be the focal point of resolving the education crisis (Spaull & Kotze, 2015). The appointment of quality teachers with appropriate teaching qualifications and a strong understanding of mathematics and accounting, particularly at grade nine level is key to ensure that teachers adequately prepare learners for the next stage of their studies (Nwosu & Matashu, 2022). School leadership also has a responsibility to create and maintain a positive environment that is conducive to teaching and learning to attract and retain quality mathematics and accounting teachers (Bantwini, 2019).

Literature makes a strong case for the development of teachers' pedagogical skill and subject content knowledge (Bantwini, 2019; T. R. Mkhize et al., 2022; Spaull, 2015). Modise and Letlhonyo (2020) go on to further suggest that teachers should be encouraged to attend workshops and training sessions where they can develop their teaching strategies and share knowledge. Mkhize et al. (2022) propose that multilingualism be embraced to enhance learners' understanding; however, this approach poses challenges since it has limited value during formal assessments. Bosman and Schulze (2018) propose that lessons are tailored to individual learning styles, however, considering that diverse learners have different learning styles alongside large class sizes in lower-quintile public schools, this suggestion may be difficult to adopt, even for seasoned teachers.

The reviewed literature points to two problems faced by prospective accountants in relation to poor-quality teachers. Firstly, they are taught by teachers who lack the pedagogical skills to teach mathematics and accounting. Secondly, they are taught by teachers who lack subject content knowledge, which is problematic as one cannot transfer knowledge which they themselves do not possess. However, the suggestions provided by various authors relate to the former problem. Scholars have made several suggestions to improve teacher's pedagogical skills in teaching mathematics and accounting. However, very limited solutions have been made to address the challenge of inappropriate subject content knowledge. This is the gap that this study seeks to address.

#### **2.4 HINDRANCES TO PURSUING ACCOUNTING BY PROSPECTIVE ACCOUNTANTS**

Outside the classroom environment, learners with aspirations to join the accounting profession face challenges that make it difficult to commit to their selected career choice. Oben and Van Rooyen (2022) conducted a study researching learner aspirations and intentions to pursue a career in accounting. Their study revealed misconceptions, poor visibility of accounting firms and professionals and lack of role models were among the leading factors considered by learners when evaluating a career in accounting. Finally, they also found a significant positive relationship between learners' efficacy and selecting a career in accounting (Oben & Van Rooyen 2022).

Oben and Van Rooyen's (2022) study found that many learners had incorrect perceptions about the accounting field, such as that the profession is unethical, has low employment rates and is boring. These perceptions may be influenced by the media content that learners consume, coupled with the limited availability of material produced by professional accounting firms which accurately represent the realities of the accounting profession (Oben & Van Rooyen, 2022). Whereas SAICA was known by many learners in the study by Oben and Van Rooyen (2022), school learners had little knowledge about other professional bodies or accounting firms. Currently, it appears that the visibility of the profession appears to be predominantly through SAICA, which is undoubtedly insufficient

for learners to appreciate the value and depth of the profession. As such, there is a gap for accounting firms and professionals to raise awareness at a more contextual level.

Poor communities where most public schools are located, often lack role models in the accounting profession, unless a learner knows someone in the family who is an accountant. Oben and van Rooyen (2022) found that learners who have a family member in accounting, are also likely to join the profession. Bryant et al. (2019) demonstrated that when learners had access to successful people with similar backgrounds, they used this as motivation, and this contributed to their beliefs about their abilities to also be successful. These studies highlight the critical influence of role models on accounting career choices and suggest that misconceptions about the profession can be addressed through personal interactions, enabling individuals to gain accurate insights into the field. Therefore, this is another opportunity for accounting professionals to act as role models to young learners from poor socio-economic environments through collaboration with schools and conscious efforts to positively influence learners about the accounting profession and making informed career choices.

In addition to Bryant et al.'s (2019) observations that learner beliefs regarding their ability to be successful are a significant determinant of whether they will pursue a career in accounting and whether they will be successful in university when pursuing an accounting qualification. Fadiji and Reddy (2021) found a significant positive relationship between a learner's self-efficacy and their performance in mathematics, while Shamsoodien and Carpenter (2021) found a positive relationship between self-efficacy and academic success. Oben and Van Rooyen (2022) also found that learners with high self-efficacy were more likely to pursue a career in accounting. Learners' awareness of the rigorous process required to qualify as a CA(SA) may enable them to evaluate it as a viable career option based on their confidence in their ability to endure and succeed in the qualification process. The CA(SA) qualification process can be intimidating and may very easily wane off learners with low levels of self-efficacy. Therefore, learners must be motivated to believe in their abilities. Teachers, parents and accounting professionals may be able to positively contribute towards improving learners' self-efficacy. The self-efficacy of

learners from poor socio-economic environments is often related to the perception of being cared for (Bryant et al., 2019) and any efforts by accounting firms to influence learners' career choices could be viewed as an act of care and may significantly improve learners' self-efficacy and ultimately interest in the accounting profession.

Providing learners in lower-quintile public schools with access to professional accounting firms and accountants can address multiple needs. Firms can offer accurate information about the accounting profession, while professional accountants can serve as role models, inspiring and motivating learners regarding the journey to qualification. By exposing learners to the profession, they are being equipped with factual insights and sound career guidance which they do not currently have access to (Keevy et al., 2023). This could lead to more informed career decisions, potentially encouraging learners to pursue careers in accounting.

## **2.5 THEORETICAL FRAMEWORK**

This study was premised on Fraser's (2008) Theory of social justice as proposed by Tikly (2011), Tikly and Barret (2011) and Subreenduth (2013). From an educational perspective, the theory of social justice recognises the merits and shortcomings of two approaches: the human capital and human rights (Tikly & Barrett, 2011). The human capital approach views education as a tool of increasing GDP growth and the argument that investment in quality education is driven by its correlation to GDP growth (Tikly, 2011). However, this approach does not provide a framework for achieving quality education but rather is used to inform the education policies of various interventions and organisations (Tikly & Barrett, 2011). On the other hand, the human rights approach is focused on the right to education and rights through education (Tikly, 2011). This approach is learner-focused and at its best requires teaching that is responsive to individual learner needs (Tikly, 2011). Using these two approaches as a foundation, the social justice theory was established.

The social justice theory per Fraser (2008) entails three aspects: redistribution, recognition and access through participation. The first aspect, the redistribution of resources to Previously Disadvantaged Groups (PDGs), is derived from the human capital approach, as the motivation to redistribute quality education is its positive impact on the economy. Consistent with the performance of high schools in Makhanda, Subreenduth (2013) found that schools which were designed for “non-whites” during apartheid, and therefore allocated insufficient resources, are still performing poorly even today. This demonstrates the need for redistribution of resources to schools which were previously disadvantaged and continue to be disadvantaged. Three decades post-apartheid, South Africa is still grappling with dismantling the structures inherited from the apartheid system, which excluded certain groups from obtaining quality education. The social justice theory may be an appropriate lens to understand why certain groups are still excluded from obtaining a quality education and how barriers to accessing quality education can be removed (Schwartz et al., 2019).

The second aspect is the recognition of the claims of PDGs. This aspect is derived from the human rights approach. Subreenduth (2013) argues that due to South Africa adopting a neoliberalism approach that prizes globalisation, the rights of PDGs continue to be ignored. The current education policies work in favour of those who benefited prior to democracy, and the claims of poor-quality education by PDGs remain unrecognised by the current education system.

The third and final element relates to access to quality education through participation. The aspect of participation refers to learners’ rights to voice their views about what quality education entails, and how it should be carried out (Tikly & Barret, 2011). Thus, education policies should be formed through collaboration with affected stakeholders rather than enforced without consultation. This final aspect is Fraser’s (2008) contribution and a key distinguisher of the advancement of the social justice theory from the human capital and human rights approach.

Whereas Nancy Fraser's understanding of justice is rooted in Western norms authors Tikly (2011), Tikly and Barret (2011) and Subreenduth (2013) make a convincing argument for the expansion of Frasers (2008) theory of social justice to suit the education landscape of a developing country. In this expanded version, contextualisation is a significant aspect. Bantwini (2019) and Musara et al. (2021) argue that different cultural and situational aspects impact how social justice is understood in different societies. In post-apartheid South Africa, participation by learners and teachers from PDG's allows the social justice theory to be contextualised to facilitate the investigation of how quality education can be obtained by learners from PDGs. A key challenge with the theory of social justice is that it is rooted in history and politics which make its application outside of these disciplines complex to a certain extent (Musara et al., 2021). However it is these characteristics that make it relevant for the study as the phenomenon investigated by the study is largely influenced by political history, which disadvantaged certain groups in the country and the consequences of that political history are still evident in the schooling system today.

For purposes of addressing the research problem, the participants comprise teachers and learners, who have a deep awareness of the challenges inhibiting quality education, and the consequential impact on learners' ability to access professions such as accountancy. The inclusion of these participants in this study is aligned with the theoretical framework, as they have a valid lived experiences of poor educational resources. The objective of the study has a distributive justice element as it seeks to dismantle the structures that prevent these learners from accessing resources and, ultimately, careers such as accountancy. The distribution of resources to achieve quality education should be made by all parties interested in economic growth (Tikly, 2011; Tikly and Barret, 2011; Subreenduth, 2013), such as accounting firms, amongst others. Finally, the inclusion of various stakeholders, including accounting firms, which are the final group of participants, seeks to achieve participation by the most affected parties in the study. Given that all three aspects of the social justice theory are considered in the selection of participants and design of the study, it is deemed an appropriate lens through which to conduct this study.

## **2.6 RECOMMENDATIONS FROM REVIEW OF LITERATURE**

This literature review has identified two gaps necessitating further research. Firstly, the review identified that various challenges are faced by learners within poor socio-economic contexts which disincentives them from pursuing a career in accounting. These challenges include, amongst others, lack of career guidance, lack of role models, misconceptions about the accounting profession and low levels of self-efficacy. The review identified that there is a gap for accounting firms to be role models within these contexts in order to clarify any misconceptions about the profession and improving learners' self-efficacy which is much needed for success in the accounting profession. To remediate the issue affecting learners outside the classroom, literature has provided some solutions which may be tailored to address the needs identified above. Carpenter and Roos (2021) assert that intervention programmes are useful for learners, While Keevy et al. (2023) emphasize that rural learners benefit more from such interventions. This confirms the recommendation made by Spaul (2015) that the DBE should consider interventions such as afterschool programmes to remediate the mounting learning deficits within the South African education system. The use of interventions such as afterschool programmes can benefit learners by improving their learning abilities by up to a year (Mclean & Van Der Berg, 2017). Within the South African context where many grade nine learners are behind by up to four years in their learning, such interventions are undoubtedly making a valuable impact to the society at large.

Secondly, this literature review identified that while mathematics and accounting teachers in poor socio-economic environments lacked pedagogical skills as well as subject content knowledge, there is ample literature suggesting how to improve the pedagogical skills of teachers while there is scant literature with suggestions for improving teacher's subject content knowledge of mathematics and accounting. Consequently, a gap exists in the literature concerning strategies to address deficiencies in teachers' subject content knowledge. In light of the identified gaps based on this literature review, the objectives of the study are:

- To investigate how the accounting profession could encourage learners to take up mathematics and accounting to increase the learners' career options and grow the pipeline of prospective accountants.
- To investigate how the accounting profession could better support accounting and mathematics teachers from poor socio-economic schools with an understanding of subject content knowledge

It is envisioned that the outcomes of the study will assist the profession to encourage more grade nine learners to select mathematics and accounting to access more careers including a career in the accounting profession. It is also envisioned that the study will present ways in which the teachers of these learners can be supported to improve their teaching practice.

## **CHAPTER 3: METHODOLOGY**

This chapter begins by discussing the research design and method. Then, it delves into a discussion of the sampling process, participant selection, the process of analysing results, the role of the researcher in the study and then ends with a brief discussion of the ethical considerations.

### **3.1 RESEARCH DESIGN**

This study adopted a qualitative approach within the interpretive paradigm. Qualitative research allows a study to obtain an understanding of the research problem while preserving its complexity (de Villiers et al., 2019). The research problem in this study is complex as it requires careful analysis of lived experiences from learners, teachers and accounting firms (Johnson et al., 2020). The phenomenon of a decline in the accounting profession pipeline requires an understanding of human behaviours and perspectives, necessitating the use of qualitative methods in studying the causes as recommended by scholars Tumen Akyldiz & Ahmed (2021). Therefore, the preservation of the complexity associated with human behaviour and perspectives was paramount to understanding and addressing the research problem, particularly because the three stakeholder groups in this research had at times, different and competing needs (de Villiers et al., 2019). As such, interpretations of each stakeholder in their unique context allowed the researcher to answer the research question.

### **3.2 RESEARCH METHOD**

Data was collected through two separate phases of semi-structured interviews. Interviews are one of the most predominant tools of data collection in qualitative studies due to their naturalistic approach of allowing a researcher to obtain information from participants without removing them from their natural environment (Golafshani, 2003; Jain, 2021). Semi-structured interviews were deemed to be the most appropriate method to collect data as they allowed the researcher to gain deep insights from each participant (Burkard

& Knox, 2014). Furthermore, they may be superior to other tools of data collection due to their ability to bring into light new and unexpected information that may be useful in understanding the research problem (Adeoye-Olatunde & Olenik, 2021; Jain, 2021).

The first phase of interviews was with school learners and teachers, and was conducted on a school-by-school basis, at four different schools in Makhanda. At each school, focus group interviews were conducted with grade nine learners first, followed by separate individual interviews with the maths and EMS teachers. With relevance to the grade nine learners, focus group interviews were considered to be an efficient method of extracting meaningful information, relative to individual interviews. This is because learners, learn and experience the school environment together and are therefore expected to share similar lived experiences, which makes a focus group a more efficient tool of obtaining information from this group of participants (Tumen Akyldiz & Ahmed, 2021). Through the use of focus group interviews, it was anticipated that learners may feel more at ease communicating with each other in the presence of the researcher as opposed to communicating with the researcher alone, and may be able to validate each other's experiences and foster openness with the researcher (Burkard & Knox, 2014; Tumen Akyldiz & Ahmed, 2021). However, focus groups also bring the risk of group think and more vocal participants overshadowing less vocal participants (Knott et al., 2022). The researcher responded to this challenge by asking individual follow-up questions as well as specifically asking the less vocal participants for their views on the matter being discussed.

Teachers were interviewed individually, and as with all other participants, the privacy of the discussions was assured. Individual interviews were, for most schools the only option as there would be one teacher teaching the subject for the entire grade. Therefore, that teacher would be the only available participant in their school for this group. Individual interviews with teacher were also deemed appropriate as the teacher delivers each lesson as an individual and an individual interview would allow the teacher to open up to their researcher about their teaching practice. Teachers opened up to the researcher about different challenges and answered the interview question in ways that appeared to

be honest, sincere and with concern for their learner’s education. The researcher noted these observations due to the semi-structured nature of the interviews which allowed the researcher to stay focused on the research objectives while having the flexibility to probe further into new information brought by the teachers (Adeoye-Olatunde & Olenik, 2021).

The purpose of the interview questions, which have been included in [appendix A](#) was to gather data about the unique challenges facing learners and teachers as well as how they foresee a collaboration with accounting firms to resolve these challenges. The interview questions were developed with particular reference to the literature findings and the objectives of the literature review, which informed the objectives of this study. The interview questions start with specific questions to get the participants to join the conversation, and then more abstract questions follow (Knott et al., 2022). Data collected from teachers and learner interviews was transcribed, coded, analysed and then collated into a preliminary findings report, which is included in [appendix B](#), before proceeding to the second phase. Table 1 below summarises participant details in phase one of the study.

**Table 1: Phase one participants**

Phase one participants		Identifier
School 1	Four learners-focus group (All female)	FG 1 learner
School 2	Six learners- focus group (All female)	FG 2 learner
	EMS teacher (Female)	EMS Teacher 1
School 3	Mathematics teacher (Female)	Math Teacher 1
	Seven learners- focus group (Mixed genders)	FG 3 learner
School 4	EMS teacher (Female)	EMS Teacher 2
	Mathematics teacher (Female)	Math Teacher 2
School 4	Three learners- focus group (Mixed genders)	FG 4 learner
	EMS teacher (Female)	EMS Teacher 3
	Mathematics teacher (Male)	Math Teacher 3

The second phase of interviews comprised of semi-structured individual interviews with representatives from four organisations within the accounting profession, including a professional accounting body. The participant from the accounting body organisation is responsible for promoting the profession to school learners in the Eastern Cape, and the rest of the phase two participants are directly involved in the recruitment of young talent in their firms.

The purpose of the phase two interview questions, which are included in [appendix C](#) was to obtain an understanding of the skills shortage faced by accounting firms in the Eastern Cape, followed by a discussion of the results obtained from the schools. The final objective of these interviews was to establish how the accounting firms foresee a collaboration with grade nine learners and their teachers which could result in an increase of prospective accounting learners. In this phase, interviews were held individually and conducted online using digital platforms. Individual interviews allowed each participant to freely share the organisation's efforts, beliefs and approach towards the problem under investigation. Due to the firms being based in cities outside of Makhanda but within the Eastern Cape, conducting interviews online was identified as an effective and efficient tool for collecting data. This method was seen as the default method by all phase two participants which confirms that online interviews have gained prominence post the Covid-19 era (Knott et al., 2022; Oliffe et al., 2021). The use of online interviews allowed the researcher to extend the participants to the greater Eastern Cape rather than confining the pool to Makhanda firms only. Valuable insights were gained from these interviews as participants remained comfortable in their natural environment while engaging on a key issue which affected their firm, as such the use of online interviewing techniques did not undermine the quality of the research methods used in the study (Oliffe et al., 2021).

Table 2 below provides a summary of phase two participant details. The phase one preliminary findings report was shared with these participants prior to all interviews. The preliminary report served as an anchor point for the phase two interviews as learners and teachers had expressed how they foresee a collaboration with accounting firms. This

approach is congruent with the study by Adeoye-Olatunde & Olenik (2021) which notes that qualitative research is an iterative process where data analysis and collection can take place at the same time and influence each other. Furthermore, the approach where one data set builds on another has been used in prior studies such as the study by Hancock et al. (2021).

**Table 2: Phase two participants**

<b>Phase two participants</b>	
Firm 1	Nation building project manager: Professional accounting body Eastern Cape-based
Firm 2	Audit & talent manager: Auditing firm in Public Sector Eastern Cape-based
Firm 3	Recruitment manager: Auditing firm in Private Sector National recruitment manager: Not based in the Eastern Cape
Firm 4	Recruitment manager: Auditing firm in Private Sector Eastern Cape-based

In both phases, the nature of the interviews was semi-structured, where the themes of the discussion and key questions were determined upfront but still allowed the researcher an opportunity to probe further as and when necessary, to gain deeper insights that result in meaningful responses to the research question (Adeoye-Olatunde & Olenik, 2021; Burkard & Knox, 2014; Jain, 2021). Phase one interviews were conducted face-to-face to allow the researcher to build a relationship with the participants. Through face-to-face interviews, the researcher was able to assess the environment of each school and participant and respond appropriately to the environment by tailoring certain questions. Phase two interviews were conducted digitally using video conferencing applications which allowed both researcher and participant to place their cameras on and see each other for a portion or the full interview. In both phases, the manner of the interviews allowed the researcher to observe both verbal and non-verbal communication to improve communication during the interview (Burkard & Knox, 2014).

### 3.3 SAMPLING AND PARTICIPANTS

The study was conducted in the town of Makhanda where the researcher is based. Makhanda, previously known as Grahamstown, is located in the Eastern Cape of South Africa. The Eastern Cape was ranked as the most unequal province in South Africa with the poverty gap at 31.6% and the rate of unemployment at a staggering 38.3% in 2020 (Hoefnagels et al., 2022). Despite the high levels of poverty, Makhanda achieved a grade 12 pass rate of 85% in 2022 (Amner, 2023) and has been referred to as the “Educational hub” in the province (Nomsenge, 2019), This makes Makhanda a peculiar area that is stricken by poverty and inequality but beaming with hope, as the community has worked together to achieve excellent grade 12 results recently, which are significantly higher than the ceiling of 50% experienced prior to 2016 (Mwedzi, 2024) The positive grade 12 outcomes, despite the prevalent poverty and inequality in the town, make Makhanda an interesting town with the potential to break the generational cycle of poor education.

The sampling method applied was purposive sampling, which allowed the researcher to select only those participants best suited to address the research problem (Johnson et al., 2020). The high levels of inequality in Makhanda are spatially visible even in the education sector. The east side of Makhanda, is home to only quintile level 3 schools, which are also no fee paying schools. This side of the town is predominantly inhabited by non-whites and is generally in a poor socio-economic state (Nomsenge, 2019). In contrast, the west side of Makhanda is home to private schools which are some of the most expensive schools in the country and quintile 5 ranked public schools. The west side is an area previously restricted to white people (Hoefnagels et al., 2022). The study therefore focused on participants from the lowest-ranked public schools located on the east side of the town, in line with the selected theory of social justice which emphasises redistribution, recognition and access through participation. The east side of the town has six public high schools all of which are ranked as quintile 3 schools. All six high schools were in the scope of the study and data was collected on a school by school basis until data saturation was reached during interviews with the fourth school (de Villiers et al., 2019). In a study by Ogonnaya and Uwuah (2019) grade 12 learners in schools ranked

quintile 3 were found to be the lowest achievers at all cognitive levels of Bloom's taxonomy<sup>4</sup>. This confirms the need for research to improve the quality of education in this category of schools.

An invitation to participate in the study was sent to accounting firms based in Makhanda as well as medium and large firms in Eastern Cape at large. Makhanda only has small firms which mostly serve businesses in Makhanda whereas the firms contacted in the greater Eastern Cape service clients nationally. Only one firm in Makhanda responded to the invite and was not able to participate due to time constraints. The accounting firms which ultimately participated in the study are two large accounting firms with an international presence a national public accounting firm as well as a national accounting body. These are large organisations in the accounting field and employ a significant number of accounting professionals in the Eastern Cape and nationally. Furthermore, their diversity allows the study to obtain different perspectives on the current and future shortage of accounting professionals.

### **3.4 ANALYSIS OF RESULTS**

All interviews were recorded, transcribed then analysed using Atlas.ti, a qualitative content analysis software. The data was coded through an iterative thematic analysis process to identify the key themes (Skjott Linneberg & Korsgaard, 2019). The data was initially coded using an inductive approach and then grouped into themes informed by the two research objectives (Braun & Clarke, 2012). The data was coded in groups per the nature of the research participants. The transcripts of interviews with mathematics teachers were coded first, followed by all transcripts of interviews with EMS teachers and lastly, the transcripts of the learner focus group interviews were coded.

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<sup>4</sup> Bloom's Taxonomy is a hierarchal model for the cognitive domain which classifies the cognitive processes required to respond to questions appropriately based on the level of complexity (Bloom, 1956).

The coding process involved examining the interview transcripts in detail to identify key issues and then labelling those words with short phrase that summarises the contents. Thereafter all these short phrases were also examined for consistency and their relevance to the research questions. During this process, various codes were established including those which contained new information, not expected from the research questions and codes discarded due to lack of relevance to the research questions. Some codes had higher frequency depending on the participant group which showed the depth which that issue was discussed in those groups. Using this systematic approach of coding per participant group allowed the researcher to identify any themes that may have been missed in individual transcripts and also made evident the dominant themes of each interview. This process also allowed the researcher to differentiate what is important to the study and what is not (Braun & Clarke, 2012).

The semi-structured interview design allowed each interview discussion to delve deeper into various themes based on the responses of the participants, this allowed meaningful qualitative data to emerge and answer the research questions (Adeoye-Olatunde & Olenik, 2021; Braun & Clarke, 2012). A short preliminary report was prepared based on the themes emerging from Phase one interviews. This report was used as the point of departure for phase two interviews together with the developed interview questions. Phase two interviews were then transcribed, coded and analysed using the same method described above. During the final stage of analysing the data, the visualisation tools found in the Atlas.ti software allowed the researcher to draw visualisations that further clarified the interconnectedness of issues identified and the pertinent findings from the study (Bower et al., 2022).

### **3.5 ROLE OF THE RESEARCHER**

In any interpretive study, where the intention is to create knowledge through the interaction of multiple parties with sometimes different realities (de Villiers et al., 2019), the role of the researcher and the researcher's biases may influence the study (Johnsons et al., 2020). De Villiers et al. (2019) advises that a researcher be transparent about their

thoughts, support them with theory and contrast them against other views. This concept confirms the study by Golafshani (2003) that in qualitative research, the researcher is the tool that determines the validity and reliability of the study, and as such openness regarding the researchers position and research methods applied are important. The researcher is an academic at a university located in Makhanda. The researcher was previously employed by accounting firms similar to those who participated in the study. The researcher was schooled in the Western Cape in a quintile 4 school, which is not dissimilar to those included in this study. These experiences of the researcher listed above contributed to the rationale for the study.

Despite clearly disclosing the researcher's position, an unconscious bias may still be present in the collection and analysis of data. The researcher was deliberate in reflecting on their thoughts in the thesis statement (Johnsons et al., 2020). The thesis statement has been supported by literature and can be challenged by any person with reasonable knowledge within the education and accounting fields (Hofstee, 2006). The use of triangulation through different groups of participants, which were teachers, learners and accounting firms, together with the use of different data collection tools varying from individual interviews to focus group interviews added to the validity of the data collection and analysis process. Furthermore, the systematic manner in which the data was coded and analysed, as described above assisted the researcher in achieving objectivity and validity (de Villiers et al., 2019).

### **3.6 ETHICAL CONSIDERATIONS**

The study was approved by the Commerce Research Ethics Committee of the University of Cape Town (UCT) before the commencement of data collection. Due to the study involving school learners, further approval was obtained from the Eastern Cape Department of Education (ECDoE). The purpose of the study was explained to all participants and consent obtained before any interviews were conducted. Minors participating in the study signed assent forms and consent from their guardians were also obtained. The confidentiality of the interviews was explained at the start of each interview

as well as the option to leave should participants feel the need to do so. Confidentiality of the participants has been maintained in the thesis through the use of pseudonyms. The data has been kept confidential and secure in a password protected cloud space.

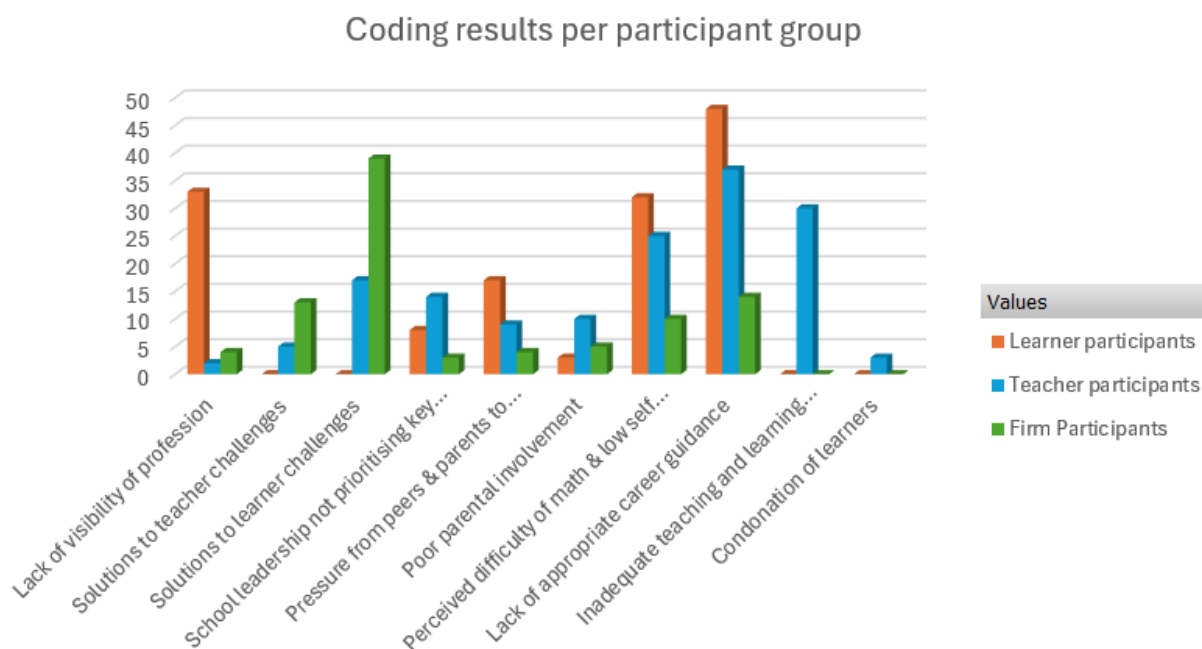
## CHAPTER 4: FINDINGS ANALYSIS AND DISCUSSION

In this chapter, the outcomes of the study will be analysed and interpreted. The results have been categorised according to the two research objectives outlined in the study. Section 4.1 and 4.2 delve into each research objective where the findings that align with the literature are examined, along with the insights and solutions pertinent to the research problem that emerged from the participants' responses. This is succeeded by a discussion of the limitations that may hinder the execution of these suggested solutions in sections 4.3. Additionally, the chapter presents a pathway to tackle these obstacles in section 4.4 and ultimately reflects on the research findings through the perspective of social justice theory, which serves as the chosen theoretical framework for the study in section 4.5.

The summary of the major code groups emerging from the data, relevant to answering the research question are presented in Table 3. The frequency of each code group has been presented per participant group and the code groups are discussed systematically in sections 4.1 to 4.3. Similarly, figure 2 below also presents a visual representation of the code groups per participant group. Figure 2 is useful in highlighting the most prevalent matter for each participant group. Notably, the lack of appropriate career guidance was the most pressing matter for learners, while teachers were deeply concerned with the lack of adequate teaching and learning resources. Encouragingly, the development of solutions to challenges faced by learners informed the major part of the discussions with firm participants, highlighting their willingness to partake in the perceived tripartite collaboration.

**Table 3: Coding results per participant group**

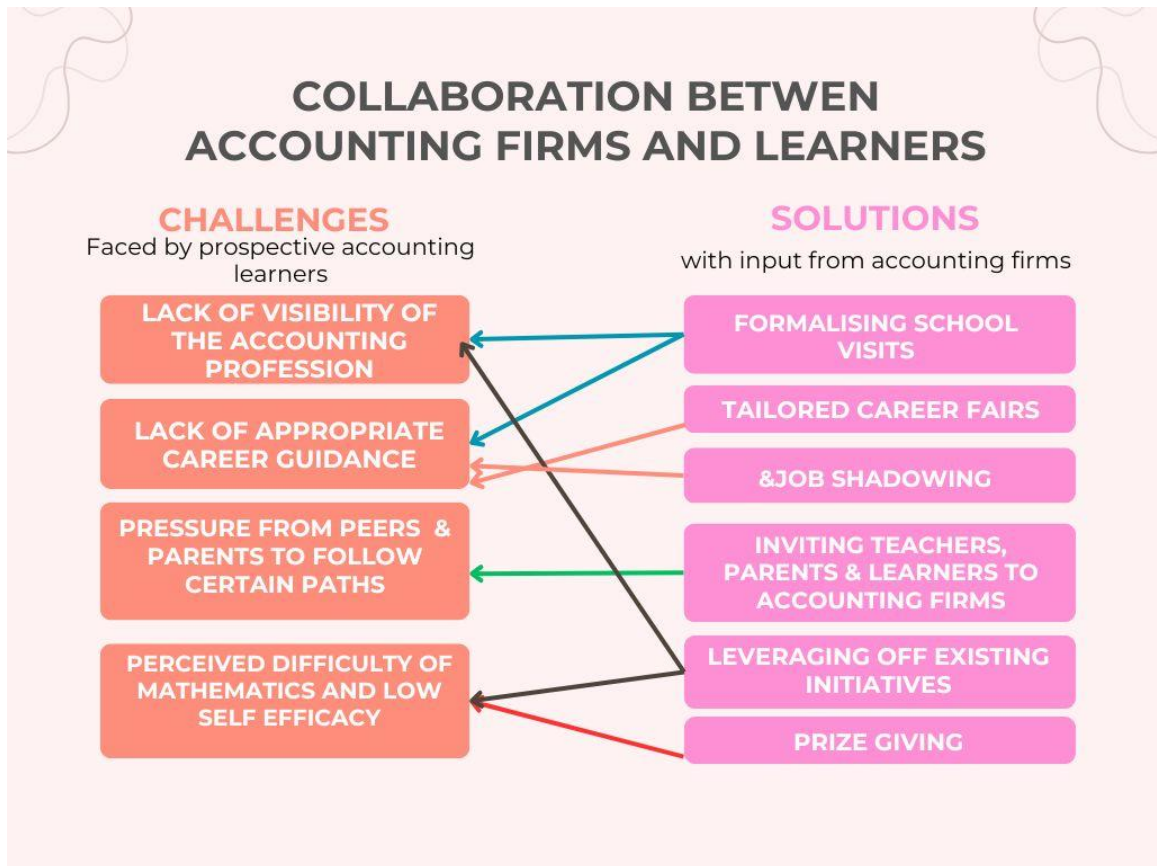
Coding groups	Learner participants	Teacher participants	Firm Participants	Total
Lack of visibility of the profession	33	2	4	<b>39</b>
Lack of appropriate career guidance	48	37	14	<b>99</b>
Perceived difficulty of math & low self-efficacy	32	25	10	<b>67</b>
Pressure from peers & parents to follow certain paths	17	9	4	<b>30</b>
Proposed solutions to learner challenges	0	17	39	<b>56</b>
School leadership not prioritising key subjects	8	14	3	<b>25</b>
Poor parental involvement	3	10	5	<b>18</b>
Inadequate teaching and learning resources	0	30	0	<b>30</b>
Condonation of learners	0	3	0	<b>3</b>
Proposed solutions to teacher challenges	0	5	13	<b>18</b>
Limitations to proposed solutions	2	2	29	<b>34</b>
<b>Totals</b>	<b>143</b>	<b>155</b>	<b>121</b>	<b>419</b>



**Figure 2: Coding results per participant group**

## 4.1 COLLABORATION BETWEEN ACCOUNTING FIRMS AND LEARNERS

Prospective accounting learners in lower quintile schools face a host of challenges which prevent them from advancing academically to fields such as accounting. Figure 3 below is a summary of the findings which reflect the challenges experienced by prospective accounting students. The figure also presents solutions to these challenges emanating from discussions with the prospective accounting learners, their teachers and representatives from the accounting profession. Section 4.1.1 will discuss the challenges in-depth, and the solutions are discussed in section 4.1.2.



**Figure 3: Challenges faced by prospective accounting learners and proposed solutions**



Notably, accounting was contemplated as an option by merely two out of twenty learners, a number that is substantially overshadowed by the medical profession, which attracted the interest of eight out of twenty learners contemplating a career in the field. The learners interviewed indicated that they did not know anyone in the field of accounting whom they could look up to as a role model or to find out more information about the profession. Beyond the knowledge that accountants deal with numbers and money, learners had no further understanding of what an accountant does and as a result could not choose a profession they have no knowledge about. These results are consistent with previous research by Oben and Van Rooyen (2022) relating to learners having no exposure to the accounting profession.

#### **4.1.1.2. Lack of appropriate career guidance**

The data revealed that parents, peers, teachers, the subject choices offered by schools and the media all have an influence on learners career choices. This became evident when one of the learners was asked what influenced their career decisions and the response below was provided:

*“I watch action movies so let’s say there has been a shootout then there always has to be a doctor. Now you have to have an operation”* Learner in FG1

Despite learners having access to the internet through their smartphones, many do not use their smartphones to research possible careers and require appropriate guidance to enable them to do so. Many learners rely on the schools to guide them as they prepare to choose subjects. However, participants noted that schools have given minimal input in providing the required career guidance. Individual teachers have sought to guide learners; however, their advice is not always well received as teachers can appear to be undermining the choices made by learners. Fadiji and Reddy (2021) found that non-cognitive factors such as motivation and influencing learners to aspire to higher education had a positive relationship in learners’ efficacy. However, the schools investigated in the study have employed little means of guiding and motivating learners to aspire to higher education and beyond.

#### **4.1.1.3. Perceived difficulty of maths and low self-efficacy**

All mathematics teachers interviewed in the study reported that learners perceive maths to be difficult and therefore many of them do not pursue it further due to this perception. In the absence of informed career choices, learners may end up choosing subjects based on their perceptions of what is difficult and what is not. However, 50% of the learners interviewed showed interest in the medical and accounting fields, which require them to pursue mathematics further. Interests in fields requiring mathematics is an indicator that learners believe they can do mathematics and ultimately gain entry into their desired professions. However, the number of learners doing Mathematics in grade 12 indicates that many switch to mathematical literacy before reaching grade 12 (Shepherd & Van Der Berg, 2020). The teachers interviewed confirmed this practice and indicated that it disadvantages learners further as they also miss out on the fundamentals in the subject of mathematical literacy, as is evident from the following quote:

*“For an example our pure maths class is more than that of maths literacy.... Grade 10 is more than maths literacy. As we progress with the terms then you see maths literacy numbers of learners increase as learner change to it...those who change mid-term don't get revision. They change from pure maths to maths literacy and fail because they don't have foundation of the subject” Math Teacher 2*

It is evident that learners lose their self-efficacy as they progress and the lack of any pursuits to motivate learners results in their losing confidence as they face more difficult tasks in pure maths in higher grades. This negative relationship between learner's self-efficacy and attrition rates in mathematics classes aligns with the study by Fadiji and Reddy (2021) who contend that educational interventions ought to be effectively directed towards influencing learners' beliefs about how far they can go in their education pursuits.

#### **4.1.1.4. Pressure from peers and parents to follow a particular path**

Parents and peers play a big role in career decisions, whether they realise it, or not. The involvement of parental guidance in the process of decision-making regarding career

paths and academic subject selections is of considerable significance; nonetheless, it seems that parents frequently lack the requisite knowledge to effectively support their children in these critical choices (Bryant et al., 2019). For example, the extract below demonstrates a parent's approach to career advice:

*“I would say that what I'm considering for a career. She [my mother] feels like I must choose something that I will study now and within two years or four years I'm done. She wants something that will be quick for me”* Learner in FG 2

In this extract, the learner articulates their parent's main consideration about career selection, and although this perspective may seemingly be in the best interests of the child, making career decisions solely based on the duration required to attain the relevant qualifications may not be the best approach to career decision-making. Making informed decisions about subject choices and careers is particularly important as it has long-term consequences which could limit or enrich the learner's future career paths (DBE, 2023). All the findings reported in this section confirm that career choices and therefore subject selections in township schools are a challenging task (Oben & Rooyen, 2022). Learners will continue making inappropriate and uninformed subject choices if there is no remedial action taken (Mkhize et al., 2022). For the accounting profession, this could mean a further shrinkage in the pipeline of prospective accounting learners and professionals.

#### **4.1.2 Proposed Solutions**

The section below discusses the solutions brought forward by research participants, predominantly by representatives from accounting firms which are major employers of accountants in the profession. All representatives from accounting firms affirmed the existence of a talent deficit and acknowledged the increasing challenges associated with the recruitment of qualified individuals; consequently, all firms interviewed have embarked on preliminary efforts to formulate interventions and solutions to increase the pipeline of talent joining the accounting profession. The solutions identified below were articulated with enthusiasm, with some having already been implemented while others remain in the

process of obtaining approval from the boards and strategic committees of the respective firms.

#### ***4.1.2.1 Leveraging off existing initiatives***

Leveraging pre-existing initiatives may facilitate the urgent resolution of the issues described in the section above and could prove to be more efficient than creating new programs. SAICA currently administers two initiatives that have the potential for expansion in this context. Firstly, SAICA has organized an EMS quiz competition for learners at the seventh and ninth grade across several provinces within the country. The objective of this EMS quiz is to enhance the numeracy competencies of learners and to motivate them to pursue mathematics beyond grade nine (SAICA, 2024). This initiative holds significant importance, as mathematics constitutes a fundamental requirement for admission into Chartered Accountancy programs and, in many universities, even general accounting qualifications (Papageorgiou & Carpenter, 2019).

It is recommended that this initiative be broadened to encompass all nine provinces, thereby reaching a more diverse cohort of learners and effectively augmenting the pool of future accountants. As SAICA conducts this EMS quiz, it concurrently presents an opportunity for the organisation to share with learners what they and the accounting profession is about. A Malaysian study also found that competitions by accounting firms also had a significant impact in increasing learners awareness of the profession and simultaneously boosted their self-confidence (Mardi & Handarini, 2025). These efforts would heed the call by Oben and Van Rooyen (2022) that professional bodies should focus on younger learners to increase the number of people joining the profession. Furthermore, initiatives of this nature tend to bolster learners' perceptions of their capabilities (Bryant et al., 2019), which may consequently lead to an increased number of learners opting for mathematics, ultimately increasing the pool of prospective accounting professionals. Representatives from accounting firms admitted that the profession could do more in showcasing their businesses and the profession in general to learners in grade nine. One existing initiative which could be used better to increase visibility to learners is

the SAICA top 35 under 35 competition. One of the firm participants expressed the following regarding this competition:

*“The trainee trailblazers and the SAICA top 35 under 35...So I think also, where you have a diverse group of people doing different things within the accountancy field, I think that's also a great opportunity for us to maybe leverage off of that and really promote that off of social media platforms or TVs... So yeah, I think it's definitely a place where we are not capitalizing enough on for sure” Firm 1*

The description above is in relation to the second initiative from SAICA, being the top 35 under 35 competition. This competition is accessible to emerging (CAs) who are demonstrating exceptional proficiency across diverse sectors and enterprises (SAICA, 2024). The individuals who reach the final stages of this competition exemplify the extensive opportunities that the CA designation affords, and they may effectively illustrate to learners the vast array of career pathways available to CAs and the numerous sectors in which one can establish a professional identity within the accounting field. Considering that career opportunities significantly influence learner motivation (Ho et al., 2025; Oben & van Rooyen, 2022; Sampaio et al., 2024), this competition serves as an exemplary platform to highlight career trajectories within the accounting field. Moreover, the diverse backgrounds of certain finalists may indicate that achieving success is feasible, irrespective of the socio-economic conditions surrounding a person's educational experience, thereby potentially serving as an inspirational catalyst for learners from underprivileged socio-economic backgrounds to pursue a career in the accounting profession.

#### **4.1.2.2 Tailored Career Fairs**

Career fairs are one of the most prevalent methods of disseminating career knowledge information to school learners. Participants from firms indicated that they regularly attend these career fairs and utilise them as platforms to convey information regarding the accounting profession. Nonetheless, a significant concern arises, akin to the aforementioned, in that these career fairs are predominantly aimed at grade 11 and 12

learners who have already made their subject choices. This observation by firm participants confirms the findings of Oben and Van Rooyen (2022) that learners make their career decisions before they reach grade 12. Given the widespread popularity of these career fairs, a proposal has emerged advocating for a collective initiative among accounting professionals to organise an accounting career fair specifically aimed at grade nine learners across various towns and cities in the country. This initiative would be different from existing career fairs as it would necessitate collaboration among accounting firms to present diverse facets of the profession through varied formats. Presently, career fairs at the high school level are general and representatives from any organisation may be invited, however, an accounting-specific career fair would provide learners with an opportunity to gain a comprehensive understanding of different aspects of the accounting profession, thereby dispelling any myths.

#### ***4.1.2.3 Job shadowing***

Some firms have facilitated “job-shadowing” opportunities for learners. Job shadowing entails a learner being allocated to a company employee and spending the day with that employee in their normal course of employment. This approach allows learners to acquire a direct understanding of an accounting professional’s day and is thus useful in illustrating the realities of the accounting profession to the learners. Nevertheless, this method is not frequently employed as it primarily relies on the initiative of the learners to solicit the firms for such experiences. The proposal to enhance the impact of this initiative would involve a systematic organisation by the firms themselves.

A firm participant suggested that job shadowing could be augmented through collaboration among firms, which could invite local schools to recommend their highest-achieving grade nine learners for a day of exposure. Various firms or offices could implement this program on staggered days. Alternatively, organizations could establish job shadowing positions over school holidays and invite learners to submit applications for consideration. This method would serve to elevate the prestige of the job-shadowing experience among prospective accounting learners, while the application process could

enable firms to identify learners who demonstrate a sincere interest in gaining further insights into the profession (Detgen et al., 2021)

#### ***4.1.2.4 Invitation-only nights: learners, parents and teachers***

Another strategy that was proposed for accounting firms to increase the pipeline of prospective accountants is to invite exemplary or top-achieving grade nine learners along with their parents and teachers to experience their office environment. This initiative could manifest as a formal lecture-style presentation directed at learners, parents, and teachers concerning various aspects of the accounting profession and the requisite qualification processes, subsequently succeeded by a networking opportunity. During this interval, learners may be inspired to seek bursaries within the organisation and may engage with the firm's trainees and receive their personal accounts regarding their CA journey. An event of this kind conveys to learners that they are esteemed and that there exists a belief in their potential, which is crucial for enhancing a learner's self-efficacy (Bryant et al., 2019). Scholars Aziz et al. (2024) and Keevy et al. (2023) also found that under-privileged learners benefit significantly from events of this nature as it is often one of very few reliable sources to gather career information. Furthermore, extending invitations to parents for such an event is critical, as this study has demonstrated that parents often lack adequate knowledge about available career pathways, thereby rendering them ill-prepared to serve as effective career advisors for their children. Lastly, the dissemination of information to teachers, who spend substantial time interacting with learners plays a pivotal role in increasing the pool of prospective accountants. Equipped teachers can relay this knowledge back to their respective schools and may even motivate other learners who did not access this opportunity to consider a career within the accounting field.

#### ***4.1.2.5 Formalising school visits***

All the firm representatives interviewed have had direct interactions with school learners in the form of school visits. These school visits serve as platforms for the dissemination of information about careers, wherein representatives from accounting firms engage with learners to inspire them while explaining the qualification pathway to becoming a chartered accountant. This method of intervention is frequently employed but lacks

structure and is predominantly aimed at grade 11 and 12 learners, which as per Oben & van Rooyen (2022) is likely too late. As one of the research participants expressed:

*“I was part of the team that went with trainees to schools to tell them about the career. My biggest concern was we did it too late. We did it in grade 11.” Firm 3*

This concern by a firm representative echoes Oben and van Rooyen’s (2022) findings that most learners have already decided on a career before they reach grade 12. Although school visits by firms play a crucial role in enhancing awareness regarding the profession, many firms are increasingly recognising the necessity for learners to receive guidance and information at an earlier stage, thereby enabling them to make informed decisions regarding subject selections. Guidance or any other interventions are required early on to ensure effectiveness (Spaull & Kotze, 2015), that is, to achieve the intended objective of assisting learners in making suitable subject choices.

#### **4.1.2.6 Prizegiving**

Motivation is an important factor in increasing learners' efficacy and making decisions about the future (Fadiji & Reddy, 2021; Mardi & Handarini, 2025). The provision of sponsorship for awards and the engagement of speakers at award ceremonies have been proposed as a viable strategy which firms can use to assist schools to motivate learners. Where possible, the speakers could be trainee accountants, who may resonate more with high school learners. The prizes could be in monetary value, gifts and branded company items, such branded products would not only enhance the visibility of the firm among high school learners but could also serve as a lasting reminder of the firm, its values, and potential career opportunities within the profession. Motivated learners are more inclined to invest more effort into their studies, increasing their beliefs about their abilities and increasing the chances of choosing sought-after careers such as the accounting profession (Shamsoodien & Carpenter, 2021). For a prominent accounting firm, the cost of sponsoring a school prize-giving may be negligible, but to the recipients, it is a recognition of their hard work and dedication and can contribute further to the learner’s efficacy.

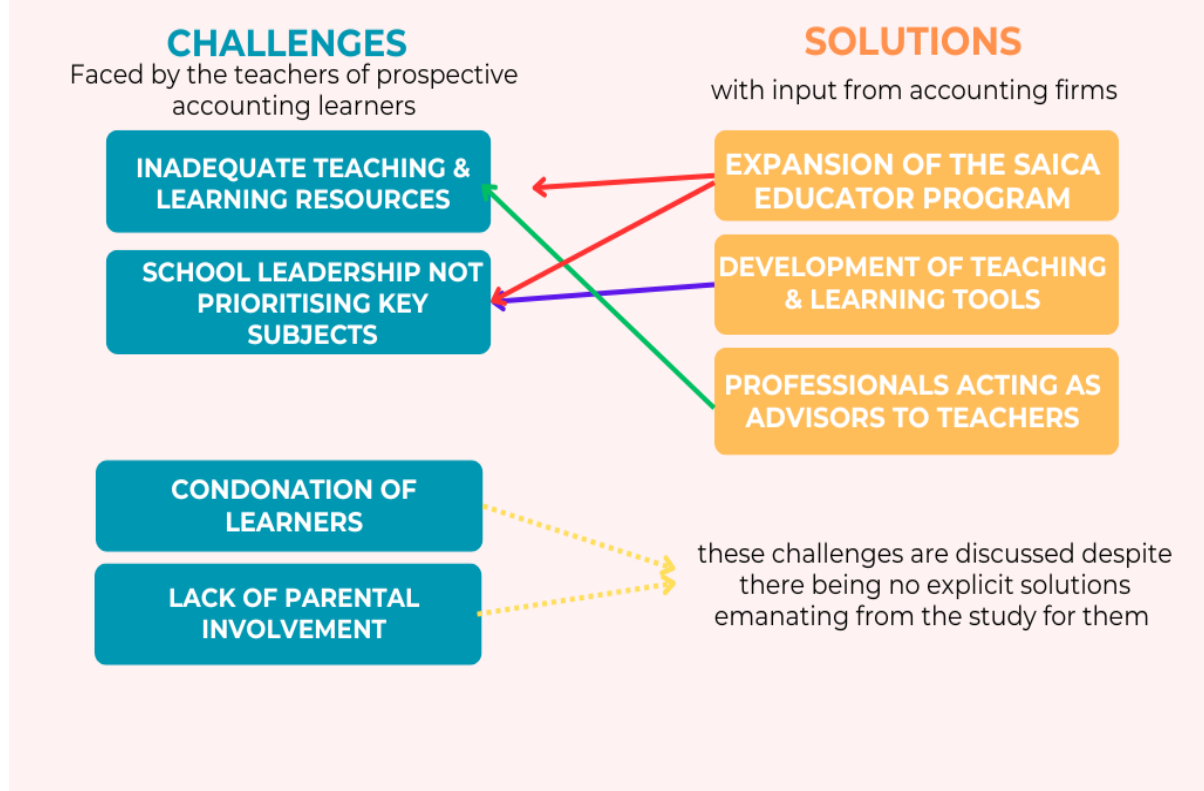
## **4.2 COLLABORATION BETWEEN ACCOUNTING FIRMS AND TEACHERS**

Teachers spend a substantial amount of time with learners and are well-positioned to offer career guidance if they are appropriately equipped. Moreover, many learners regard their teachers as exemplary figures (Bryant et al., 2019). It is therefore crucial that teachers are seen and treated as key stakeholders in the endeavour to increase the pipeline of prospective accountants. Teachers who participated in the study articulated multiple challenges including the lack of teaching and learning resources, poor parental involvement, the condonation of learners as well as the issue of school leadership phasing out certain subjects. Scholars, Bryant et al., (2019) and Hendricks and Dunn (2021) have discussed the effects of poor parental involvement on academic success, while Van Der Berg et al. (2015), Spaul (2015) and Fadji and Reddy (2021) have documented the teaching and learning challenges in poor socio-economic schools including the lack of appropriate teaching and learning resources. Section 4.2 will discuss the challenges expressed by teachers and the various ways in which the profession can collaborate with teachers to alleviate the issues, specifically those issues concerning the selection of mathematics and accounting.

### ***4.2.1 Identified Challenges***

Poor parental involvement, the condonation of learners to higher grades without having met the requirements, inadequate resources to facilitate quality teaching and learning as well as the misaligned priorities of school leadership are the most prevalent concerns raised by teachers of prospective accounting learners. Figure 5 below is a summary of these challenges, as well as possible solutions which emanated from discussions with both teachers and representatives from the accounting firms. The presented data shows that there are many challenges in the learning environments faced by teachers and learners in lower-quintile schools. However, the accounting profession may not always be equipped to resolve all challenges faced in the learning environment and the solutions discussed here are reflective of this limitation (Zuze & Juan, 2020).

# COLLABORATION BETWEEN ACCOUNTING FIRMS AND TEACHERS



**Figure 5: Challenges faced by teachers of prospective accounting learners and proposed solutions.**

## ***4.2.1.1 Poor parental involvement***

Parental involvement is lacking in less affluent homes despite it being key to achieving quality education (Bryant et al., 2019), This was the case in the study as all mathematics teachers interviewed expressed concerns regarding inadequate parental involvement to the degree that some teachers feel apprehensive about giving learners homework as the learners will not receive the appropriate assistance at home. These learners are in a position where they cannot rely on their parents for assistance with homework or guidance with subject choice selection as the parents are not educated and have

insufficient knowledge of relevant and sought-after career pathways. The excerpt below is from a teacher on the lack of parent involvement:

*“Parents are not involved at all in their children's education. Even when you request the parent to come to school they don't come. I have parents that I requested to spare some time and come to school and to this day they have not come. They don't even attend parents meeting but they come for report cards. Parents are not involved in their children's education, very few are paying attention. You can tell when a child has support or not. Some come to school dirty. So as a teacher you can see when a child is not monitored well.”* EMS Teacher 3

In Vietnam, the contrary is true as the study by Ho et al. (2025) found that parental influence positively influenced career decisions by learners. This is likely due to the strong community culture in Vietnam where parents invest significantly in learners future due to the belief that it will benefit the community. This finding of limited parental support is consistent with Hendricks and Dunn (2021) that the lack of parental involvement is negatively linked with performance at school. This is concerning as far as accounting and mathematics education are concerned. Both subjects are perceived as difficult and pursued by those learners with high self-efficacy (Fadiji & Reddy, 2021). Learners who do not receive support at home are unlikely to maintain the high levels of self-efficacy required to pursue a career in accounting. As such, initiatives aimed at increasing the pipeline of prospective accounts cannot ignore parents as they play a vital role in learners' education.

#### **4.2.1.2 Condonation of learners**

The condonation of learners' marks was also a common concern, particularly because in addition to the general condonation, there is now a specific mathematics condonation in the Eastern Cape. General condonation is when a learner's marks are adjusted by 5% to enable them to progress to the next grade (DBE, 2024). The ECDoE introduced mathematics condonation to alleviate the continuing effects of learners' schooling interrupted by Covid-19. The effect of mathematics condonation is that if a learner has

met all minimum requirements to progress to the next grade, except for maths, then that learner's mathematics mark may be condoned, provided they obtained at least 25% (ECDoE, 2023). For maths teachers, it means teaching learners with a poor mathematics foundation as they move from grade to grade without the necessary understanding. The gaps which they have in mathematics during the grade seven to nine phase where this condonation applies only grows and by the time they reach grade 10, they do not have a reasonable chance of success in mathematics should they select it as a subject. This finding confirms that of Hendricks and Dunn (2021), that learners end up being in a constant state of “catching up” as they are condoned from grade to grade without meeting the promotion requirements.

#### **4.2.1.3 Inadequate teaching and learning resources**

The lack of teaching and learning resources is arguably the most prevalent issue recorded within public schools, particularly those situated within the lower quintiles. Akin to the schools included in this study, even in Swaziland teachers reported struggling with resources in public schools, particularly textbooks (M. V. Mkhize et al., 2022). The quotation below is that of a teacher sharing their frustrations of teaching without appropriate and sufficient learning resources:

*“I'm struggling with resources. I don't even have textbooks. I can't give them individually to take home they have to share in class. I have about four classes but I'm only using 20 textbooks.” EMS Teacher 3*

The lack of financial resources culminates in high teacher-learner ratios, the absence of classroom support for teachers, and a lack of funds necessary for the procurement of educational aids that would significantly enrich the learning experience of learners. From the necessity of sharing textbooks during the EMS curriculum to the sharing of protractors and calculators in mathematics classes, teachers in underprivileged socio-economic schools encounter an array of challenges; these adversities render the processes of teaching and learning inefficient, especially in subjects that are typically regarded as complex, such as mathematics and accounting. The frustration of the EMS teacher

shared above is a reflection of an issue faced by many lower-quintile schools throughout the country and is a confirmation of findings from multiple studies including Hendricks and Dunn (2021), Spaul (2015), and Fadji and Reddy (2021).

#### **4.2.1.4 School leadership not prioritising key subjects**

Of the four schools interviewed, only one school was planning to continue offering accounting in the foreseeable future, which leaves learners with limited choices on what subjects they can do. Whereas the decline in the number of learners taking mathematics and accounting has been reported widely (T. R. Mkhize et al., 2022; Nwosu & Matashu, 2022; Shepherd & Van Der Berg, 2020), the data suggests that there may be no strategic plan in place to encourage more learners to select mathematics and accounting beyond grade nine. On the contrary, schools such as those in this study have inadvertently exacerbated the decline by phasing out certain subjects and allocating subjects into streams such that learners are forced to either do mathematics with subjects they do not like, or abandon mathematics in favour of their favourite subjects that are not pegged to mathematics. The quotation below reflects the frustrations of learners resulting from their school's leadership decision to discontinue accounting.

*“Learner 1: Some of us do want to study accounting and we thought of doing a petition for it and have all the learners who want to do accounting to sign it. We wanted to include the parents to sign then we take it to the principal's office.*

*Learner 2: The teachers said that accounting has fewer learners who would like to do it.*

*Learner 1: That was last year. We want to do it [Accounting] now and they are not giving us a chance to do it. There are grade 8 and grade 9 learners combined that want to do accounting but they can't because it's no longer offered. Those that had already chosen it were allowed to continue with it but those who want to start it can't.”* Learners in FG2

The learners in this school will be subject to the practice of school leadership not prioritising key subjects, thus not doing accounting is not a choice for them. The study

found that mathematics is often pegged to certain streams, and as learners may also end up not selecting maths due to the streams it is pegged to. This practice of discontinuing the accounting subject is consistent with findings of Mkhize et al. (2022), that learners enrolling for accounting continue to decline.

#### ***4.2.2 Proposed Solutions***

The challenges discussed above are frequently found in schools located in poor socio-economic contexts (Hendricks & Dunn, 2021). Many of these, present significant barriers to effective teaching and learning and often extend beyond the capacity of accounting firms to resolve (Zuze & Juan, 2020). These challenges deprive young individuals of opportunities for a brighter future, including limiting access to high-demand careers like accounting. Despite these constraints, this section will delve into the recommendations aimed at addressing these issues in areas where the accounting profession can contribute, to increase the pipeline of prospective accountants.

##### ***4.2.2.1 Expansion of the SAICA Educator program***

SAICA currently administers educator development programs which is an initiative specifically designed for grade 10 to 12 teachers (SAICA, 2022). SAICA establishes these educational programs in collaboration with the DBE across some provinces. It is the responsibility of the DBE within each province to identify problem areas in mathematics, physical science, and accounting, subsequently requesting SAICA to conduct teacher workshops to remedy these problem areas. The role of SAICA is to provide the participating teachers with a more profound comprehension of the content, and strategies for effectively conveying these challenging parts of the curriculum (SAICA, 2024). Participants in this initiative are also afforded insight into SAICA's vision.

One of the proposed solutions emerging from the data is the expansion of this program to include grade eight and nine teachers. By providing support to mathematics and EMS teachers at this foundational level, it is anticipated that teachers will be better equipped to teach these subjects such that their learners develop an enhanced understanding at an earlier stage. An earlier understanding of mathematics and EMS could foster learners

confidence to pursue these subjects beyond grade nine. Additionally, this initiative could be broadened to include all the nine provinces of South Africa, thereby amplifying its reach to a greater number of teachers and significantly impacting a larger pool of learners.

#### ***4.2.2.2 Development of teaching and learning tools***

The lack of teaching and learning resources was cited as the most prevalent challenge to teachers in the study, naturally, teachers have therefore articulated a request for support with the development of appropriate teaching and learning resources to the greatest extent feasible. Digital learning tools for mathematics, visual learning aids such as classroom posters and examples of source documents used in accounting records for EMS are examples of teaching and learning resources that may alleviate the educational challenges encountered within schools. Prior studies confirm that the availability of appropriate teaching and learning resources are instrumental for achievement in mathematics (Bosman & Schulze, 2018; Fadiji & Reddy, 2021). Additionally, International studies advise that schools should collaborate with firms in designing curricula and learning material for more contextual learning and increased professional engagement (Aziz et al., 2024; Karlsson & Noela, 2022).

Firm participants warned that the implementation of digital learning tools may have a high cost attached to it but a degree of creativity, a commitment of time, and basic stationery supplies may be all that is required in the development of educational resources. Trainee accountants within the profession may serve a valuable role by assisting educators and learners in the development of instructional materials. Participants added that this initiative could be realized during the 67 minutes which many organisations allocate for Mandela Day or at a mutually convenient time for both the educational institutions and the businesses involved. While this would not be sufficient to compensate for a shortage of textbooks and supplementary resources, it would serve to lighten the load and introduce an engaging element to the learning process, which could potentially enhance learner engagement in the subject matter and encourage the continued pursuit of these subjects beyond grade nine.

#### **4.2.2.3 Professionals acting as advisors to teachers**












Teachers in the study reported that the extensive expertise that professionals in accounting firms possess may prove to be invaluable, particularly with supporting EMS teachers in their efforts to navigate through the intricate changes in the accounting and EMS curriculum. The accounting standards and regulatory environment relevant in the accounting profession are in a state of perpetual evolution and the DBE consistently revises the curriculum to reflect these emerging changes (Dikgale & Chauke, 2024). Despite showing an appreciation for the expertise of accounting professionals, the teachers interviewed in the study surprisingly expressed a sense of comfort regarding their understanding of the Accounting and EMS subject matter, contrary to the study by Nwosu and Matashu (2022) which found deficiencies in the teacher's content knowledge of accounting, and Dikgale and Chauke (2024) who found that teachers had limited confidence in implementing new curricula. Nevertheless, the teachers expressed desirability for access to professionals with comprehensive insights into recent developments in the field who could assist them with contextual knowledge, enhance their understanding beyond that acquired through the DBE's workshops, and serve as a platform for dialogue while adapting to these changes. Establishing a collaborative relationship of this nature between teachers and accounting professionals could significantly bolster the teachers' confidence in imparting the new concepts, which would invariably yield a beneficial effect on their learners' academic success (Dikgale & Chauke, 2024).

### **4.3 DISCUSSION OF THE LIMITATIONS OF THE PROPOSED SOLUTIONS**

The proposed solutions discussed above emanated from the interview discussions with learners and teachers, and also firm representatives passionate about addressing the current talent shortage and the declining pipeline of talent in the accounting profession. Nevertheless, these solutions are largely speculative, as they are devoid of concrete direction and may ultimately prove to be unsustainable. Consequently, it is essential that in the establishment of a tripartite collaboration, firms should carefully evaluate initiatives

and only adopt those that align with their operational context. Figure 7 below, depicts the challenges which may be experienced in executing the solutions proposed as well as the researcher’s evaluation of how these challenges may be overcome. The following section will examine the constraints to be considered associated with the aforementioned proposals and the strategies to overcome them will be discussed in section 4.4.

**LIMITATIONS TO THE PERCEIVED COLLABORATIONS AS WELL AS SOLUTIONS TO OVERCOME THE LIMITATIONS**

<b>LIMITATIONS</b>  <b>SOLUTIONS</b> 	PASSIVISM OF ACCOUNTING FIRMS	DECLINING ATTRACTIVENESS OF ACCOUNTING FIRMS	FINANCIAL CONSTRAINTS	SCHEDULING/ TIME CONSTRAINTS	IMMATURITY OF GRADE 9
PROJECT CO-ORDINATION & COLLECTIVE ACTION					
CONCENTRATED EFFORTS					
STRENGTHENING EXISTING RELATIONSHIPS					

**Figure 6: Limitations to the proposed solutions and strategies to overcome the limitations.**

**4.3.1 Passivism**

The findings from the study evidence that firms are now aware of the current talent shortage and declining pipeline of prospective accountants, which is partly influenced by the poor visibility of the profession to school learners (Oben & van Rooyen, 2022). However, the profession’s efforts to address this issue have thus far, largely been reactive rather than strategic as evidenced by the following extract where a firm representative shows that the firm usually attends and sponsors career fairs but at the request of the organiser, not through the firm’s own initiatives.

*“In the initiatives that we get invited in for the high scholars. We always make sure that we contribute something. Last year in the very same [Private organiser] initiative, we bought study guides, Maths and English study guides ...[They] usually tell us, [They] brief us that this is what [They] would really like you to sponsor for this particular one and then we try to give as much as we can... But currently... what we are doing about the high schools? I think where the major challenge is, the fact that we wait for the high schools to invite us unlike the universities...where we request to have a talk or go to do something” Firm 2*

In the extract above, the positive attitude and willingness to share the firm’s resources for the benefit of learners is clear, however, the reactive approach is also evident. A similar sentiment emerges from the extract below, where another firm participant shares a reactive approach regarding how their firm facilitates job shadowing for learners.

*“Interviewer: And then, on these programs where you take the [learners] in for a day, is it [the firm] that has a partnership with that school? How does it work?  
Participant: No, we don’t have a partnership with any school. The learners come to us and they ask [for job shadowing opportunities]” Firm 4*

Both extract demonstrate the accounting firms’ willingness to collaborate with school learners and community partners, however, the firms have not been proactive and often relied on others within the community to ask for their input. Nevertheless, to effectively resolve the challenge of a declining pipeline of professional accountants, the profession must take a leadership role, with firms adopting a clear mandate to actively promote awareness of the profession and increase their visibility among learners (Karlsson & Noela, 2022).

#### **4.3.2 Financial Constraints**

Another challenge identified by accounting firms is the constraint of financial resources required to implement the proposed initiatives. Several of the suggested strategies

involve significant financial investment. For projects where the impact cannot be readily quantified or measured in the short term, obtaining funding may prove challenging, given the firms' competing priorities. To address this, firms must adopt a strategic approach, carefully selecting initiatives that align with their budgetary constraints while maximising their potential to encourage learners to choose mathematics and accounting as subjects beyond grade nine and to provide meaningful support to teachers.

#### **4.3.3 Time Constraints**

The availability of time to implement these initiatives constitutes a significant challenge. The accounting profession is currently confronting the ramifications of a diminishing talent pipeline, with the existing workforce grappling to accommodate the escalating workload, which has culminated in suboptimal work quality (Ahn et al., 2024; Khavis et al., 2022). This highlights the immediate and tangible impact of the decreasing number of individuals entering the accounting profession. In a parallel context, teachers, particularly those in lower-quintile public schools, face substantial time pressure and often report the inability to fully complete the curriculum (Hendriks & Dunn, 2021; Modise & Letlhonyo, 2020). Teacher's workloads are further exacerbated by human resource factors which hinder the hiring of additional and suitably qualified staff (Nwosu & Matashu, 2022). These limitations accentuate the pressing necessity to address the educational challenges that impede the public education system and, by extension, the accounting profession. Included below is an extract of teacher lamenting their current situation in relation to time constraints.

*“For an example, I say to them I teach 100% with no free period every day. I have my maths projects that I have been doing for 10 years. I said I can't teach 100% and it's all crucial subjects. I teach mathematics foundation phase (grades 8-9) in high school and have to bridge the gap from primary. That's why I'm doing my projects so that those whom I think are sharp can be aided with more knowledge, now I cannot because I'm only free on Monday afternoons only. All other days I am busy from 7:30 to 16:30. It's not that I can't leave early but I've got this passion of making this mathematics method work” Math Teacher 1*

The excerpt above reflects a teacher's account of their demanding schedule, which includes teaching for four full days and one half-day each week, leaving minimal time for preparation and assessment tasks. Despite these constraints, the teacher has managed to sustain an external mathematics project driven by their dedication to fostering improvement and excellence in mathematics among learners. This indicates that collaborative efforts between accounting firms and teachers must be strategically planned, focusing on initiatives that will deliver maximum benefits while requiring minimal time investment. Learners in the Makhanda community are fortunate to benefit from their proximity to Rhodes University, which has implemented numerous community engagement projects with local schools. As such, many learners in the Makhanda community are already participating in tutoring, reading, or mentorship programs facilitated by Rhodes University and other non-profit organizations in the town (Nomsenge, 2019). Consequently, the timing and coordination of initiatives involving learners must also be carefully considered to ensure alignment with existing commitments.

#### **4.3.4 Immaturity of Grade Nine Learners**

The study emphasises the importance of the accounting profession playing an active role in encouraging grade nine learners to continue with mathematics and accounting beyond grade nine as any interventions should be done early on to realise their effectiveness (Spaul & Kotze, 2015). However, there is concern by firm participants that learners in grade nine may sometimes lack the maturity to make career decisions, which is why the current initiatives and interventions by firms are typically directed at higher grades, such as grades 11 and 12. However, for the same reason, Oben and van Rooyen (2022) argue that learners require substantial guidance in making career decisions as on their own, career decision-making is a significant task, furthermore the decisions made by learners relating to subject choices may be irreversible in later grades (Shepherd & Van Der Berg, 2020).

All firm representatives interviewed in this study indicated that their current initiatives to promote the profession and provide career guidance were predominantly targeted at

higher grades. One firm was explicitly advised by schools to focus their efforts on older learners in higher grades, citing the perceived immaturity of grade nine learners. Despite concerns about their maturity, grade nine learners face a critical decision relating to subject choices that will have significant implications for their academic and career paths (Oben & van Rooyen, 2022). This finding confirms that of Oben and van Rooyen (2022) that learners in low-quintile schools lack appropriate career guidance and have limited access to reliable resources when making career decisions. Based on the views of the participants, firms may anticipate some resistance from schools, as schools tend to prioritise career-related initiatives for senior grades. Despite the perceived immaturity of grade nine learners, addressing the career awareness gap at this level could prove pivotal in shaping the future pipeline for the profession.

#### **4.3.5 The Declining Attractiveness of the Profession**

The following extract reflects the damaging views of the profession and the tendency of accountants to be overworked due to the current shortage of accountants:

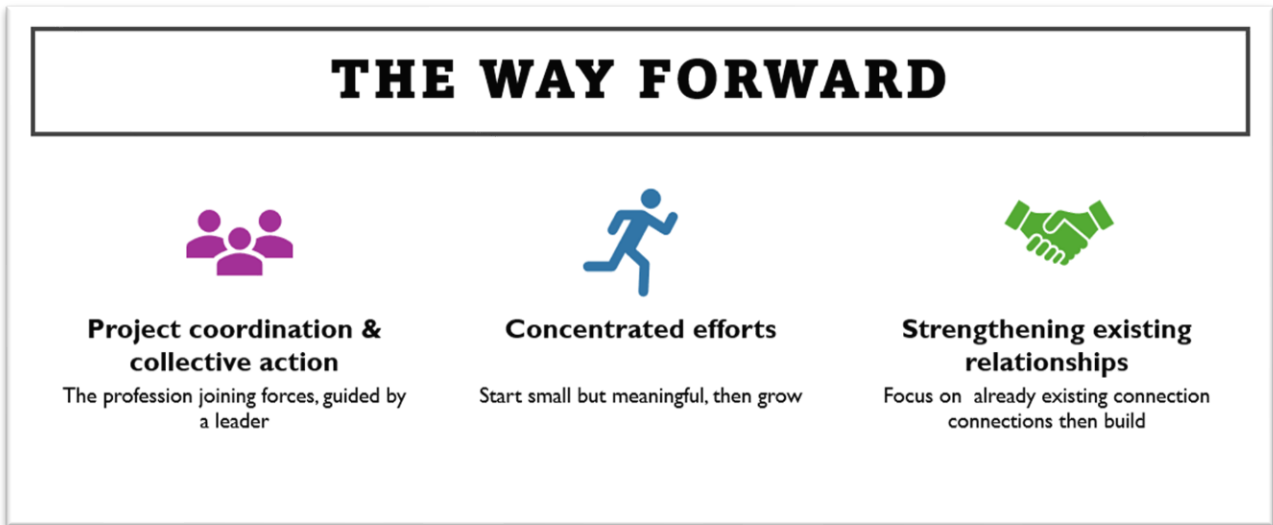
*“I think that profession was made to look difficult from the onset... And then you find those learners that are in the know... maybe they really know somebody in this profession. They have friends. They have family members that they'll be like, what? I would rather not [join the accounting profession] because I have my mom who's never with us because of this profession. I have this person who's working around the clock because of this profession, that's not a life that I'm made for. So, I think that's the difficulty that comes with the profession.” Firm 2*

The accounting profession in South Africa has experienced reputational damage, despite earning the top position in a global trustworthiness survey conducted by Edelman (SAICA, 2025a). This is due to the shortage which has begun to take effect. Accountants are working longer hours. Although the longer hours are to maintain the integrity of their work and profession, they have impacted on the well-being of many accountants (Khavis et al., 2022). To scholars, this kind of work ethic may be seen as undesirable as the younger generations prize work-life balance over other elements offered by the profession (Khavis

et al., 2022). Given that the accounting profession competes with other fields such as medicine, law and engineering, the financial compensation may be deemed inadequate for the time investment required by the profession.

#### **4.4 DISCUSSION OF THE WAY FORWARD**

The findings above firstly confirm the many challenges faced by schools in poor socio-economic environments as well as the shortage of new talent joining the accounting profession. Challenges relating to inadequate teaching practices and non-existent career guidance for learners in grade nine make it difficult for learners to make the appropriate subject choices that are aligned with their passions and the needs of the country. Secondly, the findings reflect that whereas the accounting profession has had numerous career guidance interventions at the higher grades, the profession is starting to appreciate the value of aiming interventions at the grade nine level as that is where a bigger impact and difference can be made in the lives of young scholars. This section presents the researcher's evaluation of how the proposed interventions can be best executed, given limitations which have already been discussed. In this section, the researcher recommends ways to minimise the impact of the outlined limitations while maximising the benefits of the proposals made. Figure 7 below is a visual representation of the high-level considerations that must be made to counter the limitations raised in developing successful collaborations between learners, their teachers and accounting firms.



**Figure 7: Moving forward despite the limitations**

**4.4.1 Project Co-ordination and Collective Action**

Given that all the interviewed accounting firms articulated that they are experiencing challenges with attracting talent, and have also expressed eagerness to address the issue of a declining pipeline of prospective accountants, firms within the profession are encouraged to unite and commence collective action. The establishment of a project coordinator, or a working group encompassing representatives from different firms, schools and other relevant stakeholders may be what is required to guarantee the effective implementation of the proposed initiatives. Many firms have reported encountering obstacles in accessing schools at appropriate times and through the proper channels. Furthermore, firms have expressed a willingness to consider numerous proposals; however, they necessitate that both learners and schools adopt a proactive stance. Finally, given the apprehensions articulated regarding the potential immaturity of grade nine learners, as well as the overwhelming teaching responsibilities faced by their teachers, the formation of a singular working group may be effective at directing the appropriate learners to suitable firms, at optimal times.

One way in which the profession has excelled at project coordination to achieve a specific objective by using Thuthuka to achieve racial transformation. Thuthuka is a non-profit company whose mandate is to promote transformation in the accounting profession

(SAICA, 2025b). Throughout its existence, this organisation has achieved incredible success through funding the university experience of deserving black scholars on their journey to becoming accountants. The organisation is comprised of a talented team purely dedicated to achieving its mandate. A similar organisation or working group may be necessary to achieve the mandate of encouraging learners from poor socio-economic environments to take maths up until grade 12 to expand their career opportunities and increase the pool of prospective accountants.

To effectively implement the proposed initiatives, accounting firms should adopt a collaborative approach, working collectively as a unit. This cooperation should encompass both the workload and financial responsibilities associated with the execution of these initiatives. By fostering collaboration, firms can ensure that efforts are well-coordinated, avoiding the duplication of activities and capitalising on all available opportunities to maximise impact. Pooling resources and sharing financial responsibilities would enable the profession to undertake initiatives on a larger scale, reaching a broader spectrum of learners and communities. Moreover, such a collaborative approach would encourage firms to view one another as allies rather than competitors in the shared objective of attracting new talent to the accounting profession. When all firms actively participate and contribute, the resulting collective benefit would enhance the reputation and sustainability of the profession as a whole. This unified strategy would not only strengthen individual efforts but also help to position the profession as an accessible career choice for prospective accounting learners.

#### ***4.4.2 Concentrated Effort***

To address potential inefficiencies associated with supporting multiple schools simultaneously, individual offices within accounting firms could adopt a more focused approach by committing to one or more schools at a time. This targeted strategy would allow firms to concentrate their efforts and resources, implementing one or more of the previously discussed initiatives within their selected schools. Such an approach provides an opportunity to pilot these initiatives, enabling firms to assess their effectiveness and refine them to ensure they are both impactful and mutually beneficial for the schools and

the firms themselves. Adopting a school also facilitates the establishment of a sustained and meaningful relationship between the firm and the school. This fosters trust and demonstrates the firm's genuine commitment to the long-term development and success of the school, going beyond superficial engagement that might otherwise be perceived as self-serving. A firm's continued involvement in the school could serve to address specific needs, provide tailored support, and create a foundation for lasting in learner's success.

Once a firm has established a well-functioning relationship and implemented a sustainable system within the school whereby the initiatives can be independently maintained by the school with minimal external input the firm could transition to supporting another school in a different area. This cyclical approach allows for the replication of successful strategies in new contexts, gradually expanding the reach and impact of the initiatives. By systematically extending this model, firms can contribute to a broader improvement in educational opportunities, ultimately enhancing the pipeline of prospective accounting learners.

#### ***4.4.3 Strengthening Existing Relationships***

There are numerous partnerships within the profession as well as through firms in the profession with other organisations such as the DBE, the Department of Higher Education and training (DHET) and the various Sector Education and Training Authorities (SETAs). These relationships are used on an ad-hoc basis. For these relationships to achieve a tangible set of objectives, there should be more deliberate interactions from the firm with the partners, the objectives of the relationships should be formalised and embedded in the ethos of the working group discussed further above. By incorporating the objectives of different partnerships into the working group, the partnerships are protected from loss through firm resignations, this ensures continuity of initiatives beyond individuals.

This section did not introduce new ideas; rather, it offered ways to enhance the effectiveness of the strategies identified in this study in addressing the declining pipeline of prospective accountants. The following section will evaluate the findings of the study

with specific reference to the theory of social justice, the theoretical framework selected for the study.

#### **4.5 THE SOCIAL JUSTICE THEORY**

This section will briefly evaluate the findings of the study within the context of the selected theory of social justice (Fraser, 2008). The social justice theory per Fraser (2008) entails three aspects, redistribution, recognition and access through participation.

For reflective purposes, the study first evaluates the aspect of recognition, which relates to the recognition of the claims of PDGs (Fraser, 2008). Subreenduth (2013) argues that due to South Africa adopting a neoliberalism approach that prizes globalisation, the rights of PDGs continue to be ignored. The study found numerous challenges facing teachers and learners in lower-quintile no-fee public schools. These challenges which include no career and subject selection guidance, poor parental involvement, inadequate teaching and learning resources as well as school leadership not prioritising key subjects, are a testament that the rights of teachers and learners in these schools continue to be ignored. This is particularly concerning as these findings are not novel, but rather a confirmation of prior studies. For example, Oben and van Rooyen (2022) found that career choices were a challenging task for learners in township schools. Hendricks and Dunn (2021) found that the lack of parental involvement in township schools negatively influenced grade 12 performance in accounting and Fadiji & Reddy (2021) found that school resources were positively related to mathematics achievement. By recognising that the claims of PDGs continue to be ignored, redistribution can commence.

Additionally, the study evaluates the redistribution of resources to PDGs (Fraser, 2008). By investigating a tripartite collaboration between accounting firms with resources and learners and teachers from lower-quintile no-fee schools with scant resources, the study implicitly calls for redistribution. The initiatives that were outlined further above in this chapter, including tailored career fairs, job shadowing opportunities, development of learning aids and the sponsoring of school prize giving's to name a few, are ways in which

the accounting profession is willing to redistribute its resources to schools. These resources are financial, intellectual and time, all of which are proposed to be redistributed to learners and teachers for the enhancement of their quality of education to increase the pipeline of prospective accountants.

Finally, the study evaluates the last aspect of this theory, which is access through participation. Access through participation refers to learners' rights to voice their views about what quality education entails, and how it should be carried out (Tikly & Barret, 2011). For this purpose, the study's design necessitated data collection through a two-phase process. The first phase focused on obtaining views from learners and teachers in lower-quintile no-fee schools about the quality of their education and learners career prospects. This facilitated the airing of views by those whose rights have been ignored and require a redistribution of resources. Through the study's design, learners and teachers voiced their opinions on their challenges and how a tripartite collaboration between them and accounting firms could benefit them. Additionally, by calling for collective action and a multi-stakeholder working group in the evaluation of findings, the researcher seeks to maintain the voice of PDGs and therefore, encourage continued participation as the proposed solutions are implemented.

## **CHAPTER 5: CONCLUSION**

This final chapter begins with a preamble, emphasising the motive and objective of the study. Afterward, the summary of the findings are presented, the significance of the study and the limitations of the study are also discussed. Lastly, the chapter concludes by proposing areas for further research.

### **5.1 PREAMBLE**

The talent shortage and declining pipeline of prospective accountants in the accounting profession has been widely documented in media nationally and internationally. However, this issue is only starting to receive attention in academic literature (Ahn et al., 2024; Burke & Polimeni, 2023; Reinstein & Kaszak, 2024). Existing literature laments that the declining pipeline, evidenced through smaller class sizes in matric, reduced enrolments in university accounting programmes and lower ITC numbers, will only worsen if not urgently addressed (Mkhize et al., 2022; Oben & van Rooyen, 2022). This decline is taking place amidst the accounting profession being a key pillar of a strong economy alongside the country's accountants being highly rated in an international professional trust survey (Lassou et al., 2021; Edelman, 2023). Considering the above, the study sought to simultaneously investigate the reasons for the decline and a tripartite collaboration between school learners, their teachers and accounting firms to remediate it. The two-phase qualitative study was designed and undertaken using the social justice theory (Fraser, 2008) with a focus on lower-quintile no-fee schools. Semi-structured interviews were held with grade nine learners, who are yet to make their subject choice selections and their teachers of mathematics and EMS. Thereafter, representatives from accounting firms were provided preliminary findings from the first phase and then interviewed. The objective of the interviews were to answer the following question

- How can the accounting profession, prospective accounting learners and their teachers collaborate to grow the pipeline of prospective accountants?

The summary of findings relating to this research question are presented in the following section.

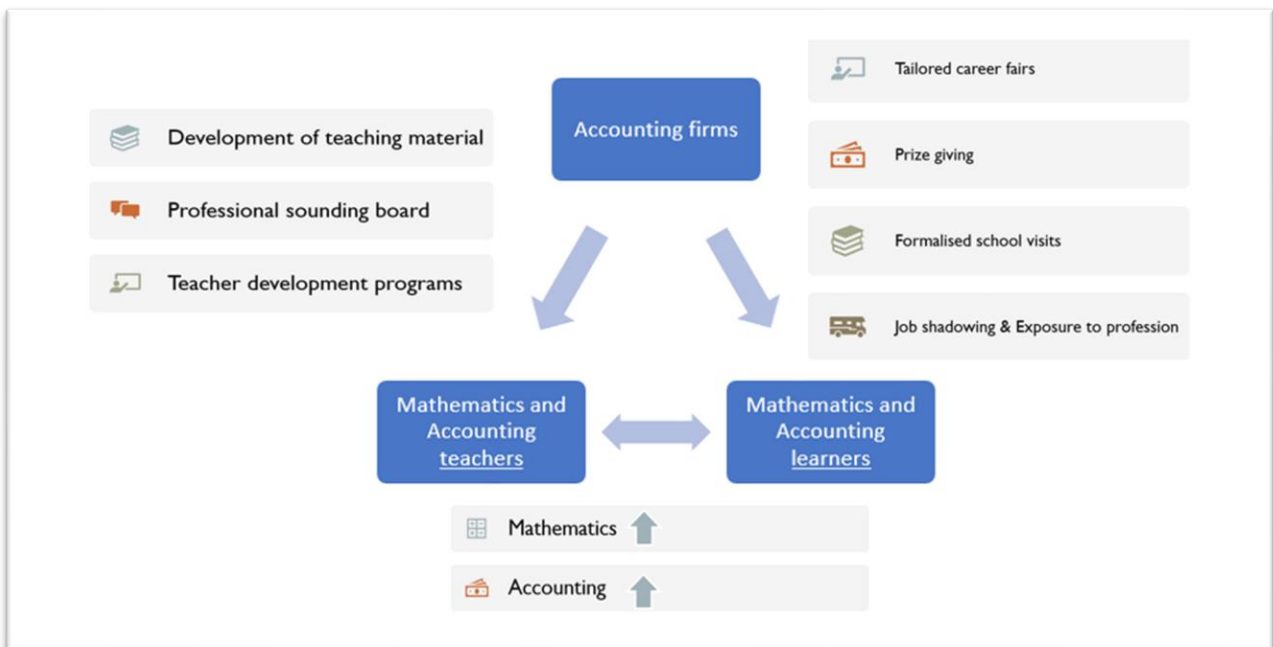
## 5.2 SUMMARY OF FINDINGS

Findings emanating from the study can be grouped into two broad categories: challenges identified within the school environment, and proposed solutions. Firstly, the study finds various challenges within the environment of lower quintile no-fee schools which contribute to fewer learners from these schools joining the accounting profession. Many of these challenges are a confirmation of existing literature. With relevance to the grade nine learners, the study found that the accounting profession is not visible to high school learners, career selection is a difficult task for which there is no appropriate guidance, learners face pressure from their parents and friends when making career decisions and lastly, accounting is perceived as a difficult subject leading to poor uptake. With relevance to their teachers, the study found that there is poor parental involvement which inhibits quality education and the condonation of learners and newly introduced maths condonation has a negative effect on teaching. The most prevalent challenges for teachers was the severe lack of teaching and learning resources as well as the apparent lack of prioritisation of key subjects like mathematics by the school leadership.

Secondly, the study presents various ways in which the accounting profession can collaborate with learners in lower-quintile schools and their teachers. The limits of the solutions presented are discussed and mitigation strategies are also discussed. The solutions which emanated from the interviews were wide and many. To counteract poor visibility, the profession could leverage existing SAICA initiatives including the top 35 under 35 competition to showcase the career paths within the profession, as well as the grade nine SAICA EMS quiz and the Educator programs. For career guidance, firms can develop a tailored accounting career fair, hold structured and more frequent school visits and could expose learners to the profession through job shadowing opportunities. The firms could sponsor prize-giving's at schools and can invite top achieving learners, their parents and teachers for exclusive information sessions. Finally, the firm could use its staff in the development of learning aids to mediate the teaching and learning resource

shortage and could build professional relationships with teachers which could be supportive in navigating complex accounting changes in the curriculum.

Figure 8 below presents the final tripartite collaboration vision based on the findings of the study. The literature review of this study culminated in the formulation of the research question which was “How can a tripartite collaboration between accounting firms, grade nine learners and their teachers be formed to increase the pool of prospective accounting learners” This research question was followed by Figure 1 which presented a visual of the perceived collaboration. Figure 8, presented in this conclusion chapter, is an evolution of Figure 1 as it now includes answers to the research question.



**Figure 8: A tripartite collaboration per research findings**

The limitations arising from the proposed solutions include financial and time constraints, the perceived immaturity of grade nine learners and the current attractiveness of the profession. For effective implementation of the above solutions, notwithstanding the outlined limitations, it was advised that the profession lead the collaboration by acting as a unit in the form of a working group, combining their efforts and treating each other as

allies rather than competitors. It is also advised that the efforts are concentrated in the form of adopting a school to establish meaningful relationships and ascertain impactful interventions. Finally, the profession should strengthen relationships which can be useful in the management of resources.

### **5.3 SIGNIFICANCE OF THE STUDY**

The objective of the study was to evaluate how a tripartite collaboration can be established between firms, learners and their teachers. Firms were forthcoming and suggested several ways which they can use their resources to collaborate with schools. The study confirms the findings of Hendriks and Dunn (2021) that there is a growing concern for the declining pipeline of prospective accountants as evidenced by participants' views. Bryant et al. (2019) argument that the legacy of apartheid is still prevalent as schools in previously disadvantaged communities continue to face challenges with adequate teaching and learning resources. Finally, the study confirms the findings of Oben and van Rooyen (2022) that learners in previously disadvantaged communities find career decisions as a significant task for which they do not receive appropriate guidance. The study found teachers to be confident in their content knowledge which is in contrast with the findings of Nwosu and Matashu (2022) that found deficiencies in teachers' content knowledge and competence.

The study adds to literature as it is unique in its documentation of the strategies that accounting firms could adopt to collaborate with lower-quintile no-fee school learners and their teachers to increase the pool of prospective accountants. The firm-learner strategies emerging from the study include leveraging off existing initiatives in the profession, the use of tailored career fairs, Job shadowing opportunities. formalisation of school visits, prize giving and inviting learners, their teachers and parents to experience accounting firms. The firm-teacher strategies emerging from the study include the expansion of the existing SAICA educator development programs, the development of teaching and learning materials, and professionals offering their expertise to teachers. The study also adds to literature by the documenting the limitations of the emerging strategies and the

approaches that may be adopted to overcome these challenges to execute a sustainable firm-teacher-learner collaboration which may increase the pipeline of prospective accountants.

#### **5.4 LIMITATIONS OF THE STUDY**

The study has two main limitations. Firstly, the study is based in Makhanda, a small town whose economy is characterised by education and tourism. Due to the unique characteristics of the town, the results of the study may have limited transferability. However, the commonalities with Oben and van Rooyen (2022) suggests otherwise. Secondly, the study was intended to include all seven non-fee paying high schools in Makhanda. This was not achieved and only four schools were included. Limiting the study to four schools was due to concerns of research fatigue amongst learners and teachers of local schools due to their close proximity to a public university located in the area, which often conducts research in the same vicinity as well as not being able to interview all subject teachers of grade nine EMS and Maths at each school. This limitation may render the results of the study incomplete as the views of these important stakeholders have been omitted from the study.

#### **5.5 AREAS FOR FUTURE RESEARCH**

Future research can replicate this study in more affluent upper quintile and private schools, where there are different challenges in the learning environment. Secondly, future research can investigate the effectiveness of multi-stakeholder collaborations proposed in this study. Future studies could also extend the study to incorporate universities, and how they can be leveraged to increase the pipeline of prospective accountants.

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## APPENDICES

### Appendix A: Phase 1\_ Interview questions for semi-structured interviews

Interview questions for grade 9 learners	Relevance to study and link to supporting literature
1. What is your average mark for Math and Economics & Management Sciences?	Opening question  Knott et al., 2022
2. Do you think Math is a useful subject, why?	Problem statement: a declining pipeline of prospective accountants :Maths  (Shepherd & Van Der Berg, 2020)
3. Do you think you will select Math or Math literacy as one of your grade 10 subjects, Why?	
4. Do you find EMS to be a useful subject, why?	Problem statement: a declining pipeline of prospective accountants: Accounting  (Mkhize et al., 2022)
5. Do you think you will select Accounting as one of your grade 10 subjects, Why?	
6. Have you thought about what career you like?	Confirming Literature: Career selection & Guidance  (Oben & Van Rooyen, 2022)
7. Do you know what subjects are required and where to study for this career interest?	
8. What career guidance have you received to decide on your subject choices for grade 10?	

9. Do you think you know enough about choosing careers and available careers?	
10. Have you heard about chartered accountants, expand?	Confirming literature: Awareness on the Accounting Profession  (Bryant et al., 2019)
11. What do you think chartered accountants do?	
12. Do you think having access to chartered accountants would help you understand accounting better?	Research objective 1: How can the accounting profession encourage learners to take up mathematics and accounting
13. What questions would you ask a young accountant about the accounting career?	

<b>Interview questions for grade 9 EMS teacher(s)</b>	<b>Relevance to study and link to supporting literature</b>
1. Tell me about your journey to teaching grade 9 EMS.	Teacher qualifications and experience (Nwosu & Matashu., 2022)
2. How do your learners find the accounting aspect of EMS?	Learner perception on accounting (Modise & Letlhonyo., 2020)
3. How do you find teaching the accounting aspect of EMS?	Teacher practices in accounting (Williams et. al., 2022)
4. What do you think would make it easier for learners to understand the accounting aspect better?	Research Objective 1: How can the accounting profession encourage learners to take up mathematics and accounting to increase the learners' career options and grow the pipeline of prospective accountants

<p>5. What do you think would make teaching accounting more effective?</p>	<p>Research Objective 2: How can the accounting profession better support</p>
<p>6. Do you think having access to accountants could be beneficial for your teaching practice and your learners, if yes, how?</p>	<p>accounting and mathematics teachers from poor socio-economic schools with an understanding of subject content knowledge.</p>
<p>7. What are you doing to encourage learners to select accounting or commercial subjects 10?</p>	<p>Adding to Literature: Career selection &amp; Guidance</p>
<p>8. Does the school or teachers provide any career guidance to learners to assist them with subject choice selection?</p>	<p>(Oben &amp; Van Rooyen, 2022 &amp; Bantwini, 2019)</p>

Interview questions for grade 9 mathematics teacher(s)	Relevance to study and link to supporting literature
1. Tell me about your journey to teaching grade 9 Math.	Teacher qualifications and experience (Nwosu & Matashu., 2022)
2. What challenges do learners face in studying math?	Teaching and learning challenges (Mkhize et al., 2022)
3. What do you think would make math fun and better to understand for learners?	Teacher practices (Bosman & Schulze, 2018 and Bantwini, 2019)
4. What do you think would make teaching math more effective and interactive?	Research Objective 2: How can the accounting profession better support accounting and mathematics teachers from poor socio-economic schools with an understanding of subject content knowledge.
5. Do you think professionals (i.e. accountants) showing learners the use of math in the working world would make it more interesting?	
6. Do you think having access to these professionals could be beneficial for your teaching practice and your learners, if yes, how?	
7. Do you think learners are aware of career choices when deciding to choose math/ math literacy for grade 10?	Adding to Literature: Career selection & Guidance  (Oben & Van Rooyen, 2022 & Bantwini, 2019)
8. How do you advise your learners, in deciding to select math or math literacy for grade 10?	
9. What are you doing to encourage more learners to select math rather than math literacy?	
10. Does the school or teachers provide any career guidance to learners to assist them with subject choice selection?	

## **Appendix B: Phase 1 Preliminary Findings Report**

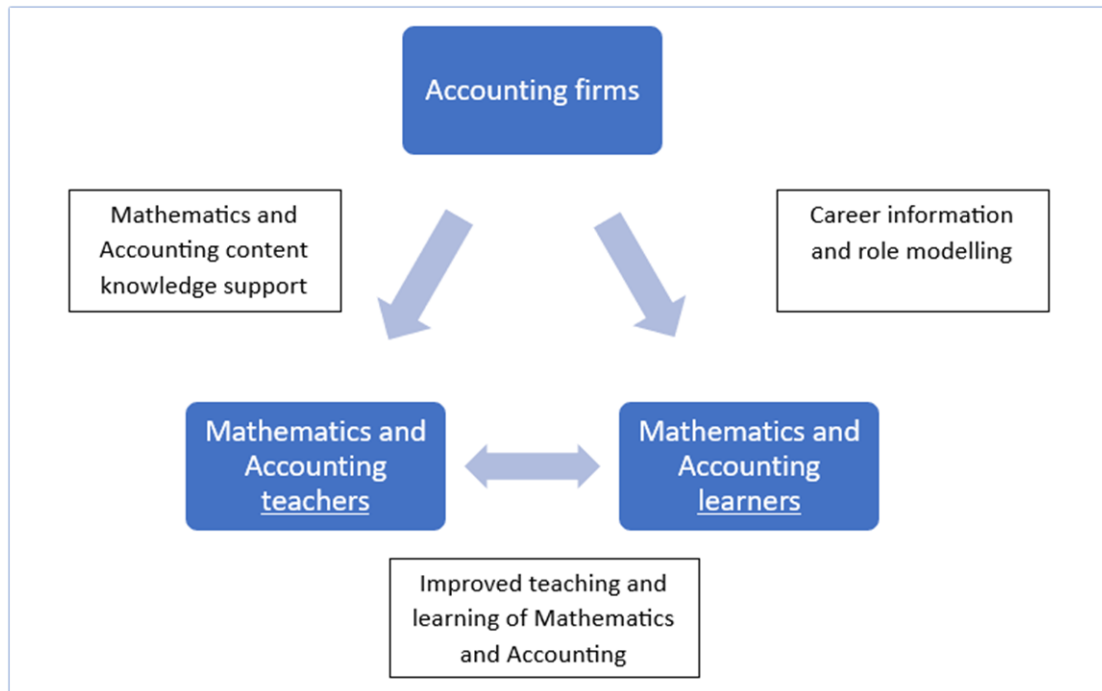
### **Investigating a tripartite collaboration between accounting firms, teachers and prospective accounting students for growing the accountancy pipeline: A case study from Makhanda**

**Problem statement:** There is a declining pipeline of prospective accountants particularly in poor socio-economic areas where there are challenges relating to teaching and learning in mathematics and accounting. For learners, these challenges are compounded by their socioeconomic environments.

**Thesis statement:** There is an opportunity for the accounting profession to support prospective accounting students and their teachers of accounting and mathematics to increase the pool of prospective accountants.

**Research Question:** How can the accounting profession, prospective accounting learners, and their teachers collaborate, to grow the pipeline of prospective accountants?

**Research objectives:** The objective of the study is to investigate how the accounting profession could encourage learners to take up mathematics and accounting to increase the learners' career options and grow the pipeline of prospective accountants. The second objective is to investigate how the accounting profession could better support accounting and mathematics teachers from poor socio-economic schools with an understanding of subject content knowledge. An illustration of the perceived collaboration is presented in the figure below:



**Figure 1**

### **Research sampling**

Six teachers were individually interviewed and 20 Grade 9 learners were interviewed through four focus groups. All participants were selected from quintile level three schools in Makhanda.

### **Preliminary findings**

#### **Teaching and Learning**

The findings are consistent with those of previous scholars concerning teaching and learning difficulties experienced in the quintile level three schools. These include limited parental involvement in the learning process, lack of teaching and learning resources, onerous teaching loads as well as an increasing number of progressed learners in each grade.

#### **Teachers**

All teachers interviewed had appropriate teaching qualifications with different levels of experience, some with more than three decades of experience while some were at the start of their teaching careers. All teachers interviewed joined the learning space as their

first or second career choice and are all teaching Maths or EMS as their preferred subject choice. Passionate, Patient and Concerned are the top three descriptors of the interviewed teachers. Teachers reported a willingness to be empowered by external initiatives despite their heavy teaching schedules.

### **Learners**

Most learners interviewed were ambitious and confident, many aspire to pursuing their studies further and cited top professions as their chosen careers.

#### EMS and therefore Accounting as a subject choice

Majority of learners viewed EMS as a subject useful in their daily lives as well as business. However, The financial literacy aspect was viewed as challenging, difficult or complex. This influenced a general preconception that Accounting is difficult. Teachers also reported that even those learners who enjoy EMS shut down when getting to the financial literacy of EMS.

#### Mathematics and Mathematical Literacy

Many learners enjoyed maths and understood its importance in their daily lives. Many of the learners interviewed selected Math based of what “career stream” is offered in their schools. i.e. a learner has a deep interest in History but History is offered with Math literacy so they choose Math Literacy. The choice to do Math or Math Literacy was somewhat influenced by career choices, however there are flaws with how learners arrive at their selected career choice.

### **Career guidance**

“I wanted to be an actuarial scientist because I love accounting but because there’s no accounting here at school I have to change career or change schools. I have not decided what to do. I was going to take geography to replace accounting.” The “career streams” offered by schools have a significant effect on what learners can choose, learners are forced to choose streams and it is often not possible to pick and choose subjects per learner aspirations. Life Orientation (L.O) sometimes offers career guidance and sometimes does not. Often teachers of L.O are assigned the subject based on who has availability rather than the skills and knowledge of the subject. Career guidance by teachers was a contentious issue. Some teachers provide guidance and some do not. Sometimes it is well received by learners while other times, learners find teachers to be

undermining their choices and capabilities. Career guidance by schools was almost non-existent. Where the schools offered guidance in the form of organised career days, they fall short of what learners need to make informed career choices. Learners also cited that a lot of them make decisions based on what their friends are doing and their thinking is short-sighted rather than long term perspectives.

Learner 1: "...My aunt said there are no doctors in the family"

Learner 2: "...My parent wants me in the Air Force... I'm afraid of heights"

Parents had a significant influence on the learners choices, parents persuaded learners into certain careers which appear to be based on their own aspirations. Parents appear to be an unreliable source of guidance as they are not very knowledgeable about which careers are relevant and on demand. More than 50% of learners aspired to a career in the medical field, their general knowledge (i.e. personal experience of visiting a doctor) and visibility (i.e. through movies) of the medical society is a major contributor to this. Only 10% of the learners considered a career in accounting, although many more wanted to do accounting as a subject.

### **Key Insights to inform further engagements**

Of the four schools engaged, one had accounting suspended then brought back through the insistence of a new teacher. One school no longer offers accounting and two schools are phasing out accounting (i.e. Accounting is not offered in grade 10 in 2024). Many learners perceive Accounting as difficult and a lack of awareness about the accounting profession does not make it's difficulty worthwhile. The decision to do maths is often based on some career decision, despite how misinformed that decision may be. Learners do not have access to reliable sources of information to make informed career decisions. Schools do not have appropriate guidance tools to equip learners to make sound career decisions and subject choices, teacher guidance is contentious and parental involvement is unreliable as parents have limited knowledge.

When learners make career choices, accounting is often not a consideration due to learners not having much knowledge about it. Except for one learner, the researcher was the first Accountant the learners had met. Many of the learners only had a vague idea of

what accountants do. However, all learners had an interest in knowing more about the accounting profession with various questions ranging from the rigour of the qualification process, the types of opportunities, types of accountants, the ethics needed in the profession and what a day in the life of an accountant looks like.

#### Potential collaboration with learners [Prospective accounting students]

- Accountants could increase visibility of the profession to learners by sharing their own qualification journey's and sharing what accountants do.
- Accountants could find ways to explain accounting concepts to learners in more relevant and meaningful ways as they have the relevant practical experience.
- Accountants could share with learners the life skills needed to thrive in the profession.
- Firms could sponsor prizes for top mathematics achievers as motivation to perform well.
- External programmes and external parties who are interested in learners, boost their self-esteem and may encourage them to do the subjects considered more difficult (i.e. Pure Maths & Accounting)
- Brief but high impact interactions are appreciated as there are a few external programmes dedicated to tutoring learners in a few the schools.

#### Potential collaboration with teachers

- Most teachers are inundated with their teaching loads during school hours, however, many are willing to obtain external support that would make a meaningful impact on their learners and empower them as teachers.
- Partnerships with Accountants could be like having a knowledgeable person to bounce things off, particularly for EMS teachers.
- Accountants could assist teachers by sharing practical examples of concepts, thereby assisting them with the development of teaching material and aids which were considered a key constraint in teaching and learning at these schools.

**Appendix C: Phase 2\_ Interview questions for semi-structured interviews with firms**

<b>Interview questions with representatives from accounting firms</b>	<b>Relevance to study and link to supporting literature</b>
Does the firm have any initiatives to increase the pipeline of prospective accountants? Are any of these at a school and grade 9 level?	Research Objective 1: How can the accounting profession encourage learners to take up mathematics and accounting to increase the learners' career options and grow the pipeline of prospective accountants
The research has highlighted that learners find financial literacy (accounting part) difficult in grade 9, would the firm be willing to act towards changing this narrative?	
The research found that learners choose highly visible careers. Would the firm be willing to use its employees and trainees to increase the visibility of the profession and market it to young people at schools?	
The learners have cited various ways in which exposure to Accountants/Accounting firms could be beneficial to them. Looking at these ideas, are there any that the firm would want to engage on?	
The teachers have cited various ways in which exposure to Accountants/Accounting firms could be beneficial to them. Looking at these ideas, are there any which would also be beneficial to the firm or that the firm would want to engage on?	
Research Objective 2: How can the accounting profession better support accounting and mathematics teachers from poor socio-economic schools with an understanding of subject content knowledge.	