The Perceptions of Educators Regarding the Effectiveness of Exam Technique Workshops on Grade 12 Accounting Performance

Rachel Khoza¹, Kgabo Masehela², Lonah Mbhalati³, Kabelo Morake⁴. Department of Commercial Accounting, University of Johannesburg, Republic of South Africa ¹rkhoza@uj.ac.za; ²fmasehela@uj.ac.za; ³mmbhalati@uj.ac.za and ⁴kmorake@uj.ac.za

ABSTRACT

Following the end of apartheid, South Africa introduced the Curriculum and Assessment Policy Statement (CAPS), leading to a decline in the quality of Grades 8 and 9 EMS education. This has resulted in a skills gap among accounting educators, which has negatively impacted Grade 12 accounting performance. The University of Johannesburg has responded by offering exam technique workshops to educators since 2019. The primary objective of this study was to assess the perceptions of the educators regarding the effectiveness of the workshops as a way of improving students' performance and ultimately the results. The secondary objective was to explore the type of support educators expect from universities to improve the grade 12 accounting results. This study employed a mixed-method approach, incorporating quantitative data collected through questionnaires and analyzed using STATKON software, alongside qualitative data from open-ended questions. The findings revealed that educators expressed a positive perception of the importance of careful instructional planning for effective learning in accounting. Additionally, they indicated a need for increased support from universities to enhance their teaching practices. The comprehensive insights gained from this mixed-method design highlight the significance of fostering strong collaborations between higher education institutions and educators in the field of accounting to optimize instructional strategies and promote effective learning outcomes.

Keywords: Exam technique; Grade 12 Accounting Educators; Department of Education; D10 District Accounting Performance

1. INTRODUCTION

With the dawn of the new democracy in 1994, the government adopted a new curriculum in an effort to reform education, address historical inequities, and ensure equity for all South African people, regardless of race or creed. As a result, a new Outcomes-Based Education (OBE) was introduced between 1996 and 1997 along with new policies, the Education White Papers (1995a & 1996a), Department of Education Reports (1995b & 1996b), and the South African Schools Act (1996), which were to replace the apartheid education. Therefore, curriculum reform became one of the government's top priorities, which resulted in an establishment of the educational reform beginning in 1994 (Van Eeden, 2008). The first curriculum revision in South African education, known as Curriculum 2005, represented a fundamental shift in the pedagogical model toward a competence-based approach known as OBE, where the assessment of outcomes was the primary concern. The National Curriculum and Assessment Policy Statements (CAPS), which were implemented in 2012, are the most recent curriculum modification, according to the Minister of Basic Education, Mrs. Angie Motshekga (Gauteng Department of Education, 2010).

The main change that CAPS brought was that it includes a vast number of more specific aims

per subject and allows the use of textbooks (Moodley, 2013). CAPS also resulted in a new Accounting education dispensation that came with the introduction of new topics with an aim to align the curriculum with International Financial Reporting Standards (IFRS). One of the major changes was the merging of Business Economics and Accounting into one subject in Grades 8 and 9 (Economic and Management Sciences, or EMS), while in Grades 10 to 12 they are taught as separate subjects. Before the curriculum change, Accounting was taught as an independent subject from Grades 8 to 12. The changes have affected the quality of tuition where educators with training in Business Economics only are expected to integrate accounting content in Grades 8 and 9 EMS teaching.

Although these changes in the curriculum were necessary in South Africa, they have brought some challenges such as inadequate skills and training for educators (Phakathi, 2018). A change in curriculum is necessary to better prepare learners with the skills they need to thrive and compete in this rapidly changing world, and consequently, educators, who act as change agents, must be completely prepared for the curriculum changes. This means that the educators must be sufficiently trained and prepared in a variety of ways, including psychologically, intellectually, and technologically (Phakathi, 2018). This means that educators should continuously be provided with the necessary support or training to enhance their skills. It is on the basis of this need for support that the University of Johannesburg provided exam technique workshops to Grade 12 Accounting educators. The purpose of the workshop was to provide support to Grade 12 Accounting educators, focusing on how to answer Accounting exam questions while enhancing the content understanding.

Workshops on exam technique and performance have become increasingly popular in the past few years, despite the lack of empirical evidence as to whether they are effective (Wolcott, and Sargent, 2021). A gap in the research on the effect of exam technique workshops on grade 12 accounting performance is the lack of comprehensive studies that specifically focus on this topic. While there may be studies examining the impact of exam technique workshops on overall academic performance or other subjects, there might be a scarcity of research specifically tailored to grade 12 accounting students and educator's perceptions regarding these workshops (Rinaldi, 2022). In this article, a research gap is identified and a need for further research is emphasized. In filling up of this research gap, the findings may provide valuable insight into educators' perceptions of exam technique workshops for grade 12 accounting educators. In identifying the research gap, this research looked at the following different factors and explored how they interact with each other.

- Research on the effectiveness of such workshops, specifically in the context of accounting education at the Grade 12 level, has not been thoroughly conducted (Mafoso, 2019). The focus of most studies has been on studying for exams or academic interventions in general, but little attention has been given to accounting education at the Grade 12 level, particularly from the perspective of educators (Hendriks & Dunn, 2021).
- A distinct set of obstacles exist for accounting education at the Grade 12 level (Kelly, Hall, & Connolly, 2022). A comprehensive accounting curriculum includes complex concepts, technical knowledge, and specialized problem-solving skills (Rebele & Pierre, 2019).

Palepu, Healy, Wright, Bradbury, and Coulton, (2020) suggest that workshops on exam technique should address these particular issues, including how to understand accounting questions, manage time effectively, and apply the proper accounting principles. In spite of this, the extent to which these workshops assist students in improving their grades in grade 12 accounting is unknown.

- Despite previous studies examining the effectiveness of various interventions to support learners and improve performance, current literature is lacking in terms of evaluating the long-term efficacy of different strategies on performance, as well as the impact of the workshops on educator and learner satisfaction and motivation. Furthermore, there is a lack of research that looks at how multiple strategies can be combined to create a more comprehensive approach to improve performance (Double, McGrane, & Hopfenbeck, 2020). To further maximize the success of these workshops, and to ensure that they are successful in the long-term, it is imperative to regularly evaluate their impact on educators' and learners' perceptions and motivations.

2. LITERATURE REVIEW

2.1 Theoretical framework

Piaget (1948) highlights the importance of interaction and shifting perspectives as a method or strategy for acquiring or producing knowledge. As people interact, they learn something from one another that affects their social and individual thought processes. According to Piaget (1948:145), "individual's new understandings are constructed in an interaction between personal held knowledge and the knowledge found in the new or changed tasks". In addition, he claims that each person's knowledge is produced by the mental constructions that underlie it. This means that understanding is not static but rather dynamic, and it is influenced by both individual and social mental processes. Therefore, the theory that is relevant and underpins this study is constructivism. Constructivism speaks about interpretation, construction and internalization of occasions and situations relating to curriculum revisions.

Ültanır (2012: 195) asserts, "Constructivism is defined as an epistemology, a learning or meaning-making theory that offers an explanation of the nature of knowledge and how human beings learn. It maintains that individuals create or construct their own new understandings or knowledge through the interaction of what they already know and believe and the ideas, events, and activities with which they come in contact". Thus, this applies to this study because the accounting educators were equipped with skills to merge the learners' prior knowledge of the content with a new learning technique that focused mainly on how to answer exam questions. The exam technique workshops were designed to incorporate the constructivism theory and focused on the following concepts:

Problem-solving exercises: Educators were encouraged to assist learners to work on problemsolving exercises and practice questions related to the exam content. The exercises are designed to assist learners apply the concepts they learned, thus enhancing their grasp of the material and ensuring its retention. (Carpenter, Endres, & Hui, 2020).

Context-rich learning environments: The workshop was designed to help educators in being able to assist learners become more comfortable and confident when taking the exam. The

workshops were provided at the schools in a setting that closely mimics the exam conditions (George, 2020).

These study technique workshops were designed to equip educators with the skills they need to assist learners to improve the way they study for exams, as well as improve their understanding and retention of the material. The researchers applied these techniques in order to provide guidance to learners on how to maximize their study time, including how to break down and understand complex concepts.

2.2 Accounting subject and curriculum change overview

2.2.1 The importance of accounting

Accounting as a subject in school curricula is a critical component of educational systems globally and in South Africa (Lubbe, 2020). Numerous studies emphasize the importance of accounting education in developing students' financial literacy and decision-making skills. Accounting education equips learners with essential financial knowledge, including understanding financial statements, budgeting, and managing personal finances (Erasmus & Fourie, 2018). This fosters responsible financial behavior and empowers students to make informed economic decisions throughout their lives. Moreover, the inclusion of accounting in school curricula is linked to enhancing critical thinking and problem-solving abilities (Latif, Yusuf, Tarmezi, Rosly, & Zainuddin 2019); Kermis & Kermis, 2010). These cognitive skills are transferable across various academic disciplines and real-world scenarios.

A significant objective of teaching accounting in schools is to prepare students for higher education, particularly in business-related fields (Byrne & Flood, 2005). The early exposure to accounting principles provides a foundational understanding, easing the transition to more advanced accounting courses at the tertiary level. At a professional level, accounting as a profession is the process of combining financial data to make it transparent and understandable for all parties involved, including shareholders (Munoko, Brown-Liburd, and Vasarhelyi, 2020). Within the South African context, accounting education serves additional purposes beyond preparing students for higher education. It is seen to empower future entrepreneurs and bridge the skills gap in the workforce. The National Department of Basic Education (2011) emphasizes the promotion of entrepreneurial skills through accounting education, enabling learners to run businesses efficiently and contribute to economic growth. Furthermore, the country's focus on financial inclusion is supported by accounting education, which equips learners from diverse backgrounds with the financial management skills necessary for personal and professional success.

The South African accounting curriculum covers the logical, systematic, and accurate selection and recording of financial information and transactions, as well as the compilation, analysis, interpretation, and communication of financial statements and managerial reports for use by interested parties, according to the (Department of Basic Education, 2011).

2.2.2 Accounting curriculum change overview

Since 1994 election, the South African education system has undergone major changes. The first curriculum changes after 1994 was Curriculum 2005. The curriculum changes can be summarized as follows:

First phase

An outcomes-based approach was started in the first phase of the curriculum overhaul in 2005, and there was a big focus on skill development. The emphasis was solely on procedural elements, such as historical awareness and substantive knowledge was given up.

Second phase

The history curriculum made an effort to include both procedural and substantive information in the second phase, which included Revised National Curriculum Standards (RNCS) and National Curriculum Standards (NCS), respectively.

Third phase

Both procedural and substantive knowledge were realigned and employed as the main determinants in the CAPS policy papers in the third phase, which was implemented in 2010. Based on the foregoing, the study contends that the three curriculum revisions required Educators to consistently adapt their teaching techniques to novel and unanticipated classroom routines and practices. Furthermore, because they are unsure of what to anticipate, Educators are always uneasy and uncomfortable with a new curriculum.

Therefore, Curriculum 2005 was split into General Education and Training (GET) and the Further Education and Training (FET) band (DBE, 2010; Moodley, 2013). The GET band consists of Grades R to 9 while the FET band included Grades 10 to 12. Grades R to 9 curricula included eight compulsory learning areas of which one of them was Economic and Management Sciences (EMS). EMS in Grades 7 to 9 included Accounting, among others. Before curriculum change that introduced EMS, Accounting was taught as an independent subject from Grades 8 to 12. The introduction of EMS has brought implementation challenges (Schreuder, 2009). Educators and learners were faced with an implementation of the curriculum challenges, which were, among others:

- "inadequately qualified Educators such as EMS Educators did not know how to teach accounting since EMS was only business studies before curriculum changes,
- a curriculum that left too little time for Accounting as EMS includes business studies, economics as well as accounting, and
- little or no support from curriculum officials from the Provincial Education Department though they were training provided but was not sufficient" (Schreuder, 2009).

These challenges resulted in Accounting subject educators in lower grades struggling to teach the new accounting content, which results in learners struggling to learn accounting (Ngwenya, Sithole & Okoli (2020). This is because EMS consists of Accounting, Business Economics and Economics, which were three different subjects. The expectation is that one educator is supposed to be knowledgeable in all three subject areas and must handle the combination of the three disciplines (DBE 2011). According to a study done in rural KwaZulu-Natal schools by Letshwene, and du Plessis, (2021), teaching Accounting in EMS is met with significant reluctance and resistance. They pointed out that the majority of EMS Educators do not specialize in Accounting, and as a result, they frequently teach business studies or economics at the expense of the Accounting curriculum.

Added to the challenges were Accounting learners from GET who were entering the FET band who lack basic knowledge and skills. The lack in the skills has a negative effect on Grade 12 Accounting performance. This is a concern as Shreuder (2009) has emphasized that the FET accounting curriculum is based on the assumption that learners have mastered the basic accounting concepts from the GET band. These problems, which are the lack of educators' skills, which resulted in lack of understanding of basic concepts by accounting learners, have affected the performance in Grade 12 Accounting.

2.3 Grade 12 Accounting performance

The quality of education in South Africa is still a concern, despite progress being made since the dawn of democracy to improve the curriculum (Gumede & Biyase, 2016). Table 2.3.1 shows the performance of Grade 12 Accounting learners for the past five years:

Year	No. wrote	No. achieved at 30% and above	% achieved at 30% and above	No. achieved at 40% and above	% achieved at 40% and above
2017	103	68 318	66.1	44 041	42.6
	427				
2018	90 278	65 481	72.5	43 831	48.6
2019	80 110	62 796	78.4	42 113	52.6
2020	92 767	70 014	75.5	49 103	52.9
2021	105	79 093	74.7	54 518	51.5
	894				

Table 2.3.1 Overall achievements rates in Accounting

Source: DBE (2021)

Despite the fact that there has been an increase of 32% in the number of learners who sat for Accounting exams from 2019 to 2021 (from 80 110 to 105 894 learners), there has been a decline in the Accounting pass rate from 78, 4% to 74, 7%. The performance distribution curve, which shows the number of learners at each performance level (Level 1 -7), is shown in the figure 2.3.1 below:



Figure 2.3.1: Performance distribution curves in accounting (Percentages)

Source: DBE (2021)

From Table 2.3.1 of concern is the fact that out of the 74.7% learners who have attained a pass rate of 30% and above in 2021, about 41.5% (23.2 plus 18.3) are sitting below the 50% mark. This is an indication that the learners are struggling with accounting. Hendriks, and Dunn (2021) asserted that factors such as the competency of the teacher in teaching the particular subject, which results in poor content coverage, a lack of resources and infrastructure at schools, difficulties understanding the medium of learning and teaching at school and absenteeism of both educators and learners could also contribute to poor learner's performance. Furthermore, Ishola, Alao, & Ukpong, (2020) ascribed learners' poor academic achievement to deficiencies in the educators' teaching methods and techniques. Problems influencing learners' academic performance include insufficient teaching and learning resources, a lack of foundation in the subject area at lower levels, learners' negative attitudes regarding accounting as a challenging topic and insufficient teaching techniques (Du Plessis, & Letshwene, 2020). To address the issue of insufficient teaching techniques, educators must continuously come up with teaching techniques to improve performance, such as exam technique, hence the University of Johannesburg offered these workshops to educators.

2.4 Exam technique workshops

2.4.1 Overview

The higher education sector is always flooded with new ideas about teaching and learning processes and various teaching methods that are considered most effective for improving students' academic performance, such as accounting exam techniques. "Exam technique covers many areas including how to review and understand the scenario, how to analyze question

requirements carefully and how to structure your answer" (ACCA, 2022). An effective exam technique and a good content understanding are some of the important keys to exam success.

To address the insufficient teaching techniques that will improve performance, as indicated in section 2.3, the University of Johannesburg Department of Commercial Accounting community engagement has been offering exam technique workshops to Grade 12 Accounting educators in D10 district since 2019. The workshops involve assisting Educators on how to answer exam questions, focusing on exam technique.

2.4.2 The outcomes and feedback about the effect of the exam technique workshop on performance at D10 district

The D10 Accounting coordinator provided a report, which provided summarized feedback about the workshops from the educators and how they think the workshops have influenced their results. The details of the feedback regarding the workshop as outlined on the DBE D10 (2021) district subject report are summarized below:

- Assisted Educators on how to approach teaching the balance sheet
- How to coach learners to obtain part marks and operational marks
- The approach used for the balance sheet has assisted Educators in applying the same method to ensure learners score marks in the income statement, balance sheet and cash flow statement
- Helped learners to understand and memorize the financial formats easier
- Assisted Educators to better understand the incorporation of financial indicators in calculating a missing figure in financial statements
- The exam techniques helped learners to be more organized in their approach, saving time and ensuring learners score marks on operational marks
- Above all the support really assisted the district in improving the overall pass percentage over the years
- Not only did the pass percentage increase but also the quality of the learners' results.



Figure 2.4.1 summarizes the performance of the D10 Grade 12 Accounting learners' results:

Source: DBE D10 (2021)

According to the report provided by the D10 district coordinator, D10 educators, the exam technique workshops have assisted in improving the grade 12 accounting learners' performance since 2019 in their schools. There has been an increase of about 3.2 % (2018 - 88.5% and 2020 -85.3%) overall when compared to before the workshops started in the district. According to the educator's perceptions in the D10 district, the workshops had a positive impact on their grade 12 accounting performance and were beneficial for them. Although they may have been other factors affecting the increase in results, the educator's perceptions are that the workshops have contributed to the positive results. In 2021, there was a decline in the results, this may be attributable to the fact that the UJ team could not render support due to the Covid-19 pandemic challenges.

2.5 Contribution of the study

As a contribution to practice and theory, this research aims to support educators as agents of change (Rambeg, 2014) as well as deliver learner-centered classrooms in order to improve learners' chances of success. By offering workshops that are tailored to improve accounting teaching will contribute to accounting education in a significant way. Learning effective study techniques can boost learners' self-confidence, competence, and self-esteem. By understanding the perceptions and experiences of educators regarding the exam techniques, the present study adds to the body of knowledge of accounting education. The workshops could be duplicated in other provinces.

It is the opinion of the authors that the first step in improving high school outcomes is to develop accounting education in line with current trends in the accounting profession in high schools. This is in order to be able to meet the demands of the labour market in a changing work environment, to be competitive and to be able to adapt to the future.

3. METHODOLOGY

Research Design

This study employed a mixed-method approach to gain comprehensive insights into the perceptions of educators regarding the planning of instructional methods for accounting as a discipline, and the potential benefits of university support (Biwer, oude Egbrink, Aalten, & de Bruin, 2020). The quantitative phase involved the collection of primary data through structured questionnaires, which were then subjected to statistical analysis using the STATKON software. The decision to use quantitative methodology was based on the study's objectives, the type of questions being posed, and the available resources (Rashid, Rashid, Warraich, Sabir, & Waseem, 2019). The advantages and disadvantages of the quantitative method were carefully considered in relation to the study's goals (Theofanidis, & Fountouki, 2018). The chosen research design aims to enable objective data collection and employ statistical analysis to investigate relationships and patterns within the data (Swedberg, 2020). Furthermore, to enrich the findings and capture nuanced perspectives, a qualitative approach was integrated, incorporating open-ended questions that allowed educators to provide in-depth and contextualized responses (Conrad, & Tucker, 2019).

Population and Sampling Technique

The target population for this research study consisted of accounting educators from the D10 district, Gauteng region. The D10 district comprises Johannesburg North, Parktown, Randburg, Soweto, Central, Far North, and Cosmo City. There are approximately 73 accounting educators in this region. Purposive sampling was used for this research because it was the researchers who decided about the source of the best information to achieve the research objectives of the study. McMillan and Schumacher (2010) argue that in purposive sampling the samples are chosen because they are likely to be knowledgeable about the phenomenon the researcher is investigating. Cohen, Manon, and Morrison (2000) believe that it is a sampling technique where participants are chosen because of some defining characteristics that make them the source of the data needed for the study. The characteristic in this study was the attendance of the workshop. The questionnaires were sent to all the educators who attended the workshop.

The workshops have been offered since 2019, with the last one held in May 2022. Although the sample size is relatively small with only 29 responses received, qualitative research emphasizes the richness and depth of data rather than the size of the sample. By ensuring rigorous analysis and interpretation, valuable insights can still be obtained from this smaller sample (Guest, Bunce, & Johnson, 2006). They type of questions asked in this research and the use of STATKON to analyse the data ensured that the analysis was rigorous.

Data Collection Method and Technique

Primary data was collected through structured questionnaires distributed to the accounting educators and HODs who attended the exam technique workshop. The questionnaire provided a means of gathering objective data that can be analyzed using statistical methods (Finnegan, Bruce, & Seers, 2019). The use of a questionnaire reduced the vulnerability to subjectivity and bias, leading to more reliable and repeatable results (Lepri, Oliver, Letouzé, Pentland, & Vinck, 2018). The questionnaires included open- ended questions over and above the structured questionnaires.

Data Analysis Method

For the quantitative segment, the primary data collected through the structured questionnaires was analyzed using the Statistical Package for Social Sciences (SPSS) program. The data was also analyzed by STATKON, a statistical consulting service. Descriptive statistics were employed to summarize the data and identify key themes and patterns within the dataset (Field, Miles & Field, 2012). The form of descriptive statistics used in this study included counts, tables, and percentages to measure frequencies and ratios based on the questionnaire responses (Kaur, Stoltzfus & Yellapu, 2018). For the qualitative segment, the responses collected through the open-ended questions were combined into a report and included in the results.

By employing a mixed method approach the researchers aimed to gain valuable insights into the experiences of accounting educators regarding the exam techniques offered to them in the D10 district. The methodology allowed for the exploration of perspectives and a comprehensive understanding of the educators' perceptions on exam technique workshops.

4. RESULTS PRESENTATION, INTEPRETATION AND DISCUSSION

The data is analysed and discussed in relation to the research objective of this study, which is to investigate the effects of these exam techniques workshops on the Grade 12 results and the perceptions of educators. The discussion includes frequencies deduced from the questionnaires. The questionnaires were sent to 29 educators who attended the workshop. All of them responded, giving a valid response rate of 100%.

4.1 Demographics of the participants

Of the 29 respondents, ten were male (34.5%) and 19 were female (65.5%). The majority of respondents (37.9%) fell between the ages of 30 and 39 years. Eleven (27.6%) of the respondents were between 40 and 49 years, while five of the respondents (17.2%) were between the ages of 18 and 29 years. Five respondents (17.2%) were aged 50 years and above. In terms of racial distribution, 20 respondents (69.0%) were Black, four respondents (13.8%) were Indian/Asian, three respondents (10.3%) were coloured, while two respondents (6.9%) were White. These results therefore reflect that most respondents were of Black ethnicity. In terms of positions in the schools, most respondents (22) were educators (75.9%), followed by six HODs (20.7%) and one responded (3.4%) was other. In terms of educational level of respondents, most (41.4%) were post-graduate degree holders, 31.0% were under-graduate degree holders and 27.6% were other. Twenty-eight (96.6%) of the respondents, 27 (93.1%) were working for a school under D10 district and two (6.9%) were working at a school outside the D10 district.

		Poor	Average	Good	Very	Excellent
					good	
ET1. How will you rate your	Count	0	8	16	0	5
own experience towards the	%	0%	27.6%	55.2%		
exam technique workshop?					004	17 20/
e.g. the content (topics					070	1/.270
covered), presentations?						
ET2. Rate your understanding	Count	0	4	18	0	7
of exam technique relating to	%	0%	13.8%	62.1%		
accounting as subject after this					0%	24.1%
workshop?						
ET3. How would you rate	Count	6	19	4	0	0
learners' exam technique skills?	%	20.7%	65.5%	13.8%	0%	0%

4.2 Perceptions of educators on the exam technique workshops Table 4.2.1 Feedback on exam technique (ET) workshops

		Yes	No
ET4. Have you attended an accounting exam technique	Count	18	11
workshop before this one?	%	62.1%	37.9%
ET5. Do you think an exam technique workshop had/will	Count	29	0
have an effect on the performance of the Grade 12	%	100%	0%
Accounting learners?			
ET6. Would you recommend exam technique workshop to	Count	29	0
other districts?	%	100%	0%
ET7. Do you think a workshop covering exam technique	Count	29	0
can help learners pass Accounting in future?	%	100%	0%
ET8. If universities were to offer regular Accounting exam	Count	2	27
technique workshops for Educators, would you attend?	%	6.9%	93.1%
ET9. Do you cover exam technique during lessons?	Count	2	27
	%	6.9%	93.1%

Source: Authors' own work

Overall, the results showed positive feedback from the educators regarding the content of the workshops and they indicated that their understanding of exam technique has improved. This is supported by the fact that out of the 29 participants, 16 (55.2%, ET1) stated that they found the content of the workshop to be useful and 18 (62.1%, ET2) participants alluded to the fact that the workshop improved their understanding of exam technique. Furthermore, all 29 educators (100%, ET5, ET6, and ET7) think that the exam technique workshops can improve Grade 12 Accounting results and they would recommend them to other districts.

Apart from the above questions about exam techniques, educators were also asked the following questions as shown in Table 4.2.2, which summarises their responses:

Question	Responses
ET11 What topics are challenging to	The educators indicated that cash flow statements
your accounting learners?	and interpretation and analysis of financial
	statements are challenging for them.
ET12 Do the learners struggle with	Educators indicated that learners understand the
how to answer questions or do they just	concept but struggle to answer the questions. They
don't understand the content?	highlighted language barrier as one of the factors
	that may be contributing to this.

Table 4.2.2 Challenging topics in accounting and whether learners struggle with answering questions

Table 4.2.3	Perception a	bout the sul	oject as a s	subject	(SP)

		Poor	Average	Good	Very	Excellent
					good	
SP1. How is the attitude of the	Count	2	13	11	0	3
learners taking accounting as a	%	6.9	44.8%	37.9		
subject? i.e. are they enjoying it? Are		%		%	00/	10.20/
they participating in class, are they					0%	10.5%
understanding?						
SP2. How will you rate your	Count	0	0	15	0	14
knowledge of accounting as a	%	0%	0%	51.7	00/	40.00/
subject?				%	0%	48.3%
SP3. How will you rate your own	Count			5		24
attitude towards accounting as a	%			17.2		
subject, i.e. Do you enjoy teaching				%		on 00/
the subject, do you understand the						02.070
content?						

According to the results, educators have excellent attitude towards Accounting as a subject, with 24 educators (82.8%) indicating this. However, the educators think that the learners themselves do not have a good attitude towards Accounting as a subject and this can have an impact on performance. Tshabalala and Ncube (2013), who identified negative attitude as one of the problems affecting performance in Accounting, support this finding.

 Table 4.2.4 The role of universities in assisting Accounting learners to improve performance

		Yes	No
RU1. Are you receiving any	Count	7	22

support from other universities	%	75%
to help with delivering the		
Accounting content in your		
school		

		Poor	Average	Good	Very	Excellent
					good	
RU2. How would you rate	Count	13	10	4	0	2
universities involvement in	%	44.8%	34.5%	13.8%		
high school Accounting					0%	6.9%
education?						
RU3. How would you rate	Count	5	11	11	0	2
the support you are	%	17.9%	37.9%	37.9%		
receiving from universities					00/	6 00/
currently in terms of exam					0%	0.9%
technique workshops?						

The results show that out of 29 educators, 22 (75%) indicated that they are not receiving support from universities. This means that universities are not sufficiently supporting educators in delivering the accounting syllabus learners. Furthermore, 13 (44.8%) educators have rated the support they are receiving from universities in general as poor, which is an indication that universities can still do more to bridge the skills challenge that was brought by the curriculum change as indicated by Phakathi (2018). However, 22 educators (75.8%) have rated the support they are getting from the University of Johannesburg community engagement specifically, through the offering of exam technique workshops, between average to good (RU3).

Apart from the questions above on universities support, educators were also asked to indicate what sort of support the universities can offer to assist them in delivering the accounting content to grade 12 learners (RU4: What sort of support do you think universities can offer high school Educators?). They indicated that they would appreciate workshops focusing on the following amongst others:

- Workshops covering the actual content (material), workshops for both Educators and learners including revisions on the challenging topics such as ratios, cash flow statements etc that the learners are struggling to grasp;
- Career guidance for learners, to provide more clarity on the available career choices;
- Motivation and encouragement for learners by giving them realities about becoming Chartered Accountants or professional accountants as the students lack motivation;
- How to close gap between university and high school;
- Have Accounting expos, Accounting Olympiads, incentives for learners who do well in Accounting and vacation work so that they get exposure to accounting in the real world;
- Development of online materials to align the curriculum with the current technology trends, for example, using Youtube, videos, facebook, pages, and Tik Tok, etc;
- Mentorship programmes for learners; and
- Provide onsite support for Educators and learners, for example, arranging regular visits to schools.

5. CONCLUSION AND RECOMMENDATIONS

Accounting is one of the universal languages of business and finance. Business and economic decision-making are based on sound analysis of financial information. The economy cannot flourish if financial records are not kept accurately and acted upon. As such, the economy needs people who are equipped with these much-needed skills. Although the learners should be the focus, however the educators should also not be overlooked in this process. It is therefore necessary to upskill accounting educators in high schools. Barnes at al. (2009) also asserts that the average grade 12 mark has an impact on how students perform at university in accounting. Accounting as a subject equips learners with skills that are relevant in both their personal and academic lives. Skills such as presenting and communicating information; critical, logical, and analytical thinking, ethical behavior, sound judgement, thoroughness, orderliness, accuracy, and neatness (DBE, 2010).

The decrease of the learners who are taking Accounting as a subject is likely to have an impact in the economy, so it is necessary to continuously provide the necessary support to accounting educators have raised concerns about the lack of support from universities, which is concerning, given the fact that these learners feed into the same universities. There is a need to bridge the gap between universities and high schools. The findings in this study indicates that educators need support from universities to assist in delivering the Accounting content to Grade 12 learners. One of the ways that universities can offer support to Grade 12 Accounting educators, is by providing exam technique workshops. Exam workshop techniques are the procedures and recommendations that should be employed in the examination room which make the most effective use of the examination time and the way questions should be answered. Learning effective study techniques can boost learners' self-confidence, competence, and self-esteem. This can help minimize stress associated with deadlines and tests. By mastering good study techniques, students might be able to reduce the amount of time spend in studying and free up more time for other activities.

The exam technique workshops conducted by the University of Johannesburg in D10 district since 2019 have yielded positive results by providing the educators with a different approach to teaching accounting. This approach encouraged learners to be more organized in their approach, saving time and ensuring learners score marks on operational marks. The learners were also able to focus on obtaining part marks and operational marks. Furthermore, the educators' perceptions of the exam technique workshops were positive as per responses from the open-ended questions as discussed. We recommend that these workshops should be conducted in other districts and other provinces and be done regularly. This can be formalized and be provided as part of the teacher's Continuous Personal Development (CPD).

Exam technique is an important tool for effective learning as indicated in the literature. Apart from the exam technique workshops, universities can also offer support to educators in the form of career guidance for learners, mentorship programmes for learners, workshops on actual accounting content focusing on challenging topics such as cash flow statements and analysis of financial statements (ratios). Furthermore, universities can provide workshops that will assist in changing the learners' attitude towards Accounting as a subject as indicated by the educators. Lastly, universities can also assist Educators in developing online materials, which can be useful in delivering the content. Providing this support to educators will contribute to bridging the gap between higher education institutions and high schools, this will make the transition for learners easier. The authors identified a number of limitations to take into account as well as possible directions for future research in a study on the effect of exam technique workshops on grade 12 accounting performance. Here are some of the constraints and ideas for further

research:

The workshop's effectiveness may vary based on the educator's teaching methods, level of knowledge, and personal biases. The way that different instructors conduct the seminars could have an effect on the results (Harrison-Bernard, Augustus-Wallace, Souza-Smith, Tsien, Casey, & Gunaldo, 2020). The instructor's level of expertise, and teaching style can be paramount in determining the success of the seminar, as it will directly shape the way the information is presented, and ultimately how well it is absorbed.

The study's conclusions are restricted by its limited sample size as the questionnaires were sent to only educators from the D10 district who attended the workshops. To increase the number of respondents and expand the scope of the research, it would be beneficial if future research can broaden the study's scope to cover other districts. This will improve the study's validity and enable it to generalize its findings (Sequeira, et al., 2019). Further research is necessary in this area to find innovative ways that high schools and universities can work together for the betterment of education in South Africa and contribute to SDG 4 (Quality education).

The majority of research concentrate on immediate results, like increases in exam performance following workshops (Son, Hegde, Smith, Wang, & Sasangohar, 2020). Future studies ought to examine into how these workshops affect accounting performance over the long term, including whether the learned abilities are maintained and used in later academic or professional settings. Furthermore, it will provide valuable insight into how best to design and deliver these workshops in the future to maximize their effectiveness. Additionally, it is critical to assess the impact of these workshops on participants' motivation and confidence levels; this could provide deeper insight into how successful the workshops were in providing participants with the resources and skills needed to succeed both in their current academic and professional pursuits.

6. REFERENCES

Association of Chartered Certified Accountants. (2022, June 8). Retrieved June 8, 2022, from <u>https://www.accaglobal.com/us/en/student/exam-support-resources/fundamentals-exams-study-resources/f5/exam-technique.html.</u>

Barnes H., Dzansi D., Wilkinson A., & Viljoen M. (2009). Researching the first-year accounting problem: factors influencing success or failure at South African higher education institutions. *Journal for New Generation Sciences*, 7,2.

Bazeley, P. (2018). Mixed methods in my bones": Transcending the qualitative-quantitative divide. *International Journal of multiple research approaches*, *10*(1), 334-341.

Biwer, F., oude Egbrink, M.G., Aalten, P. and de Bruin, A.B., 2020. Fostering effective learning strategies in higher education–a mixed-methods study. Journal of Applied Research in Memory and Cognition, 9(2), pp.186-203.

Blumberg, B.F., Cooper, D.R., & Schindler, P.S. (2014). Business Research Methods (4th edition). McGraw Hill Education, New York. <u>https://www.mheducation.co.uk/business-research-methods-9780077157487-emea-group.</u>

Brookman, F., Maguire, E.R. and Maguire, M., 2019. What factors influence whether homicide cases are solved? Insights from qualitative research with detectives in Great Britain and the United States. *Homicide studies*, 23(2), pp.145-174.

Byrne, M., & Flood, B., 2005. A study of accounting students' motives, expectations and preparedness for higher education. *Journal of further and Higher Education*, 29(2), 111-124.

Carpenter, S. K., Endres, T., and Hui, L. (2020). Students' use of retrieval in self-regulated learning: Implications for monitoring and regulating effortful learning experiences. *Educational Psychology Review*, *32*, 1029-1054.)

Castleberry, A. and Nolen, A., 2018. Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in pharmacy teaching and learning*, *10*(6), pp.807-815.

Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education (5th edition.)*. The Routledge Falmer, London.

Conrad, L.Y. and Tucker, V.M., 2019. Making it tangible: hybrid card sorting within qualitative interviews. *Journal of Documentation*, 75(2), pp.397-416

Creswell, J.W. (2014). Research design: *Qualitative, quantitative and mixed methods* approaches (4th edition). SAGE Publications, Thousand Oaks.

Department of Basic Education (2021). *National Curriculum Statements (NCS) Grades R - 12*. Pretoria. <u>https://www.education.gov.za/Curriculum/NationalCurriculumStatementsGradesR-12.aspx.</u>

Department of Basic Education (DBE). (2011). Curriculum and Assessment Policy Statement. Accounting. Further Education and Training Phase, Grades 10-12. Pretoria. Department of education, Republic of South Africa.

Department of Education (DOE). (1995a). White Paper on Education and Training – Notice 196 of 1995: Education and Training in a Democratic South Africa. Pretoria: Department of Education, Republic of South Africa. Government Gazette, 357(16312), pp.4-80.

Department of Education (DOE). (1995b). *Report of the committee to review the organisation, governance and funding of schools*. Pretoria, Department of Education, Republic of South Africa.

Department of Education (DoE). (2005). *Revised National Curriculum Statement (R-9)* orientation programme-senior phase. Pretoria. Department of Education, Republic of South Africa.

Double, K.S., McGrane, J.A. and Hopfenbeck, T.N., 2020. The impact of peer assessment on academic performance: A meta-analysis of control group studies. *Educational Psychology Review*, *32*, pp.481-509.

Du Plessis, E.C. and Letshwene, M.J., 2020. A reflection on identified challenges facing South African teachers. *The Independent Journal of Teaching and Learning*, *15*(2), pp.69-91.

Erasmus L. J, and Fourie, H., 2018. Inclusive accountancy programmes in South African higher education: A revised teaching approach. *Accounting Education*, 27(5):495–512.

Field, Z., Miles, J., & Field, A. (2012). *Discovering statistics using R*. Discovering statistics using R, pp.1-992.

Gauteng Department of Education (GDE). 2010. *Circular 21*. Johannesburg: Gauteng Department of Education, Republic of South Africa.

George, M. L. (2020). Effective teaching and examination strategies for undergraduate learning during COVID-19 school restrictions. *Journal of Educational Technology Systems*, 49(1), 23-48.)

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods*, *18*(1), 59-82.

Gumede, V., & Biyase, M. (2016). Educational reforms and curriculum transformation in postapartheid South Africa. *Environmental Economics*, 7, 2, 69-76.

Harrison-Bernard, L.M., Augustus-Wallace, A.C., Souza-Smith, F.M., Tsien, F., Casey, G.P. and Gunaldo, T.P., 2020. Knowledge gains in a professional development workshop on diversity, equity, inclusion, and implicit bias in academia. *Advances in Physiology Education*, 44(3), .286-294.

Hendriks, C. and Dunn, G.F., 2021. Factors that influence learners' performance in grade 12 Accounting: A case study in the Northern Cape. *Koers*, 86(1), 1-14.

Huberman, M., & Miles, M. B. (2002). *The qualitative researcher's companion*. Thousand Oaks, CA sage. Publications, Inc.

Ishola, N.A., Alao, O.E. and Ukpong, M.J., 2020. Teachers' Instructional Quality and Students' Difficulty Level in Financial Accounting at Senior Secondary Schools in Lagos State, Nigeria. *Multidisciplinary Journal of Language and Social Sciences Education (2664-083X, Online ISSN: Print ISSN: 2616-4736)*, *3*(3), pp.51-72.

Kaur, P., Stoltzfus, J., & Yellapu, V. (2018). Descriptive statistics. *International Journal of Academic Medicine*, 4, 60.

Kelly, O., Hall, T. and Connolly, C., 2022. PACE-IT: Designing blended learning for accounting education in the challenging context of a global pandemic. *Accounting Education*, p1-20.

Kermis, G., and Kermis, M., 2010. Professional Presence and Soft Skills: A Role for Accounting Education. *Journal of Instructional Pedagogies*, 2.

Latif, N. E. A., Yusuf, F. M., Tarmezi, N. M., Rosly, S. Z., and Zainuddin, Z. N., 2019. The Application of Critical Thinking in Accounting Education: A Literature Review. *International Journal of Higher Education*, 8(3), 57-62.

Lepri, B., Oliver, N., Letouzé, E., Pentland, A. and Vinck, P., 2018. Fair, transparent, and accountable algorithmic decision-making processes: The premise, the proposed solutions, and the open challenges. *Philosophy & Technology*, *31*, pp.611-627.

Letshwene, M.J. and du Plessis, E.C., 2021. The challenges of implementing the Curriculum and Assessment Policy Statement in accounting. *South African Journal of Education*, 41(2), 1-10.

Lubbe, I., 2020. Towards a global model of accounting education-a South African case

study. Journal of Accounting in Emerging Economies, 10(4), pp.601-620.

Mafoso, N.N., 2019. Mentoring as an intervention management strategy to improve academic success of Grade 12 accounting in selected Free State schools (Doctoral dissertation, University of the Free State).

McMillan, J.H. & Schumacher, S. (2010). Research in education. Harper Collins, New York.

Moodley, G. (2013) Implementation of the curriculum and assessment policy statements: challenges and implications for teaching and learning, [Masters Dissertation, University of South Africa, Pretoria].

Muhaidat, J., Albatayneh, A., Abdallah, R., Papamichael, I. and Chatziparaskeva, G., 2022. Predicting COVID-19 future trends for different European countries using Pearson correlation. *Euro-mediterranean Journal for Environmental Integration*, 7(2), pp.157-170.

Munoko, I., Brown-Liburd, H.L. and Vasarhelyi, M., 2020. The ethical implications of using artificial intelligence in auditing. *Journal of Business Ethics*, *167*, pp.209-234.

Ngwenya J., Sithole N., & Okoli M. (2020). Educators' experiences of teaching Accounting in the context of curriculum changes in South Africa. *The journal for Transdisciplinary Research in Southern Africa*, 17, 1, 873.

Palepu, K.G., Healy, P.M., Wright, S., Bradbury, M. and Coulton, J., 2020. Business analysis and valuation: Using financial statements. Cengage AU.

Phakathi, S.P. (2018). *The challenges of curriculum changes in teaching economic and management sciences in schools in the umhlathuze circuit,* [Masters dissertation, University of Zululand, Richards bay].

Phogat, S. and Gupta, A.K., 2019. Expected maintenance waste reduction benefits after implementation of Just in Time (JIT) philosophy in maintenance (a statistical analysis). *Journal of Quality in Maintenance Engineering*, 25(1), pp.25-40.

Piaget, J. (1948). *The moral judgment of the child*, Free Press, University of California. <u>https://www.simonandschuster.com/books/The-Moral-Judgement-of-the-Child/Jean-Piaget/9780684833309</u>.

Ramberg, M. R. (2014). What makes reform work? – School-Based conditions as predictors of Educators' changing practice after a national curriculum reform. *International Education Studies*, 7(6), 46-65.

Rashid, Y., Rashid, A., Warraich, M.A., Sabir, S.S. and Waseem, A., 2019. Case study method: A step-by-step guide for business researchers. *International journal of qualitative methods*, *18*, p.1609406919862424.

Rebele, J.E. and Pierre, E.K.S., 2019. A commentary on learning objectives for accounting education programs: The importance of soft skills and technical knowledge. *Journal of Accounting Education*, 48, pp.71-79.

Republic of South Africa. 1996a. The National Education Policy Act (Act 27 of 1996). Pretoria: Government Printer.

Republic of South Africa. 1996b. The South African Schools Act (Act 84 of 1996). Pretoria: Government Printer.

Saunders, M., Lewis, P., & Thornhill A. (2012). Research methods for business students 8th edition. Pearson, London.

Schreuder, G.R. (2009). *The role of Economic and Management Sciences in preparing learners for Accounting in Grade 10*. (Publication No: 153177708). [Master's thesis, Cape Peninsula University of Technology, Cape Town].

Son, C., Hegde, S., Smith, A., Wang, X. and Sasangohar, F., 2020. Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of medical internet research*, *22*(9), p.e21279.

Swedberg, R., 2020. Exploratory research. *The production of knowledge: Enhancing progress in social science*, pp.17-41.

Theofanidis, D. and Fountouki, A., 2018. Limitations and delimitations in the research process. *Perioperative Nursing-Quarterly scientific, online official journal of GORNA*, 7(3 September-December 2018), pp.155-163.

Tshabalala, T., & Ncube, A. C. (2013). Causes of poor performance of ordinary level pupils in mathematics in rural secondary schools in Nkayi district: Learner's attributions. *Nova Journal of Medical and Biological Sciences*, *1*, (1) pp.1-6.

Ültanır, E. (2012). An epistemological glance at the constructivist approach: constructivist learning in Dewey, Piaget, and Montessori. *International Journal of Instruction*, 5, 2, 195-212.

Van Eeden, E.S. (2008). Impressions on aspects of the process and outcomes of curriculum transformation in History for schools after 1994 in South Africa. *The South African Society for History Teaching (SASHT)*

Wolcott, S.K. and Sargent, M.J., 2021. Critical thinking in accounting education: Status and call to action. *Journal of Accounting Education*, 56, p.100731.