

Pedagogical Content Knowledge Challenges of Accounting Teachers

Alfred Motalenyane Modise

Faculty of Education, Central University of Technology, Free State, South Africa
Telephone: 0827036686, E-mail: mamodise@cut.ac.za

KEYWORDS Economics and Management Science (EMS). Integrated Subjects. Curriculum

ABSTRACT The purpose of the study was to explore the pedagogical content knowledge challenges faced by teachers in teaching Accounting as an integrated subject in Grade nine (9), in the senior phase schools in South Africa. Participants were a purposive sample of 12 EMS teachers (female = 58, 3%, Black = 95%, age range 26 to 43 years old). Data was collected using *semi-structured individual interviews* and *questionnaires* from the participants. The results showed that some of the teachers are not qualified to teach Accounting and concentrate on Economics and Business Studies only, and time allocated to teachers to teach Accounting is insufficient. Learners lack prior knowledge in the subject from the previous grade and the results showed that the Accounting part is not covered in a lot of the books. The study recommended that qualified teachers be appointed to teach the three subjects and Accounting must be separated from the other subjects.

INTRODUCTION

The study explores the pedagogical content knowledge challenges of teaching Accounting as an integrated subject within the EMS learning areas in Senior Phase School in South Africa and at the same time explores the pedagogical strategies that could be used to address the problem. According to the Department of Basic Education (DBE) (2011: 8), the subject Economic and Management Science (EMS) deals with the efficient and effective use of different types of private, public or collective resources to satisfy people's needs and wants. It reflects critically on the impact of the resources exploitation on the environment and the people. The subject EMS deals with the effective management of scarce resources in order to maximize profit. The subject is practical and equips learners with real life skills for personal development and the community also benefits, as it is a practical subject. The activities given to the learners should contribute to their personal development and sustainable growth and the community must also benefit (DBE 2011: 9). EMS consists of three subjects, that is, Accounting, Business Economics and Economics. The combination of three subjects must be handled by one teacher who is expected to be an expert in all the three learning areas, that is Accounting, Business Studies and Economics (BDE 2011: 8)

Problem Statement

The research problem statement pursued by the researchers was to investigate the pedagogical

content knowledge challenges in teaching Accounting as an integrated subject in Grade 9 in Lejweleputswa Senior Phase Schools, in Free State Province.

Research Questions

The research questions of this research study were:

- What are the pedagogical content knowledge challenges faced by teachers in teaching Accounting as integrated subject within grade nine EMS learning area?
- What pedagogical strategies do teachers use in order to teach Accounting as an integrated subject within EMS learning area?

Research Objectives

The objectives of this research study were:

- To explore the pedagogical content knowledge challenges of teaching Accounting as an integrated subject within EMS learning areas in Lejweleputswa Senior Phase Schools.
- To explore pedagogical strategies that teachers use in order to teach Accounting as an integrated subject within EMS learning areas in Lejweleputswa Senior Phase Schools.

RESEARCH METHODOLOGY

The researcher used the qualitative research design for this study. This methodology, accord-

ing to Neukrug (2016: 426), looks at the context of events, natural setting, subject's perspectives and reasons for the events and phenomena needing exploration and explanation. McMillan and Schumacher (2010: 321) state that qualitative researchers accumulate data by interacting with selected individuals in their settings (field research) and by acquiring and reviewing written documents relevant to the study.

Data was collected from twelve (12) EMS teachers (E1-E12) (female=58.3%), who are teaching EMS in Grade 9 in Lejwelephutswa District, Free State Province of South Africa. They were selected using the guidelines of purposive sampling (Jonson and Christensen 2012: 231). These teachers were selected because of their experience in teaching EMS, they agreed to participate in the study and they were accessible to the researcher. There are necessarily limitations inherent in this study. The first limitation is that the study used a relatively small sample of ten EMS teachers and this may well limit the generalization (Jonson and Christensen 2012: 231). The semi-structure interview and questionnaires were used to collect the data from the respondent elicited information about the educator related, learners related and policy related challenges these people faced in their work as EMS teachers.

Teaching Integrated Subjects

This reconceptualization had a direct bearing on teaching, learning and assessment procedures and approaches (Ngwenya and Maistry 2012: 21; Gouws 2008: 52). An issue facing EMS teachers implies a need to change their teaching and assessment practices and to align them with the requirements of the new curriculum. As rightly put by Assan and Lumadi (2012: 255), the new integrated subject called for teachers to find innovative and creative ways to facilitate learning and teaching. However, many teachers may lack the conceptual knowledge to integrate effectively, especially if they have been trained along the traditional discipline model.

The subject EMS, which draws from broad disciplines such as Accounting, Business Studies and Economics, has been developed to ensure that learners are equipped with critical thinking, communicating, mathematical, collecting, analyzing and organizing skills (DBE 2008:8). Springer and Borthick (2004: 277) point out that

the ability to think critically, reason in a variety of ways and to solve problems is necessary among EMS students in particular. The application of such skills requires teachers who are competent in the content of this subject. The literature further points out that teachers not only need to have a strong grasp of the subject content matter, but also need to know how to teach specific content in a way that actually results in students learning it (Van Driel and Berry 2010: 656).

The content in the EMS curriculum is such that educators should have an acquisition of discipline content knowledge of Accounting, Business Studies and Economics and be able to integrate knowledge that may help the learners fit into a post-school working environment. In their study, Ngwenya and Maistry (2012: 31) argue that EMS teachers face a number of challenges that emanate from a variety of sources. She posits three clusters of challenges, that is, the nature of EMS subject matter, the context in which the teachers teach, and the training of teachers.

Challenges relating to the subject matter of EMS are based on the need for teachers to master and understand the content of EMS as an integrated subject. Literally speaking, Accounting, Business Studies and Economics have their own theoretically conceptualization and cannot be forged into one subject and it is not at all easy for teachers to stay up to date with this new development in EMS. Available literature suggests that challenges related to teaching an integrated subject like EMS creates teaching a 'stressful' experience (Sithole and Lumadi 2012: 71; Ngwenya and Maistry 2012: 31). These researchers indicate that teachers find it difficult to grasp the mammoth content and fail to relate it into a real life classroom situation.

These findings confirm Khanare (2012: 84), who in her study on the teachers' experiences and practices relating to the teaching of Integrated Science in Form Three in Lesotho, came to the conclusion that teachers rarely teach science as an integrated subject. Teachers focus more on what they know best, that is, based on their training they chose to teach Biology, Chemistry or Physics. For example, if one has been trained as a Biology teacher, s/he concentrates more on Biology content and sacrificing curriculum coverage of Chemistry and Physics. This is because such teachers' training institutions

train them in a disciplined-based model and not in an interdisciplinary model.

Another strain for teachers who are teaching EMS in South African schools relates to teachers' professional training and development. Ngwenya and Maistry (2012: 30) found that there was a strong relationship between a teacher's training and their teaching. Teachers have problems with EMS because they are either trained as Accounting, Business Studies or Economics teachers, and they had not had any exposure to EMS during their training. This presents teachers with the problem of having to teach learners a completely new discipline. For example, Accounting is more practical and requires some form of mathematic skills as it deals with figures. A study carried out in rural KwaZulu-Natal schools (Ngwenya and Maistry 2012: 31) revealed that there is a widespread reluctance and resistance to teach Accounting in EMS. They noted that the majority of teachers who teach EMS do not have Accounting as their specialization, and as a result tend to teach Business Studies or Economics while sacrificing the Accounting curriculum. If ever they teach it, it is too theoretical rather than practical. What is evident here is that teachers do not find it easy to teach Accounting in depth not in breadth as they lack the content and pedagogical skills.

Other challenges faced by teachers teaching Accounting as an integrated discipline include factors such as resources and time. These include the need for EMS teachers to understand specific Accounting stationery and hands-on experiences in using stationery such as the 'Cash Book, General Journal and Ledger Book'. It is easy for teachers to get frustrated with all these documents if they have never been trained on how to use them while pursuing their teaching career. Sithole and Lumadi (2012: 77) posit, "It is important to be fully aware of the curriculum goals, because these goals in effect hold teachers accountable in terms of the curriculum they are teaching, and they also serve as markers on which teachers can base their effectiveness". In the context of teaching Accounting within the EMS subject it is evident that EMS teachers have to understand and comply with the requirement and conventions that govern Accounting as a discipline. These include the need to prepare appropriate teaching resources such as Accounting stationery, calculators and the time-consuming nature of using demonstra-

tions and experiential learning (Sithole and Lumadi 2012: 78). What is emerging from the literature is that time allocated to EMS in the South African school's timetable should be of concern when designing subject timetables.

Apart from the problems associated with the subject content knowledge and teachers' training in the teaching of Accounting as an integrated subject in grade nine in South African schools, available literature also suggests challenges are based on the context in which teachers teach. Teaching Accounting especially in rural areas poses a major challenge of keeping up to date with the requirements of EMS, especially the teaching of the Accounting component. The best way to teach learners to master Accounting is through direct experience and practice and the use of active learning (Ngwenya and Maistry 2012: 30). However, lack of resources such as proper Accounting stationery and financial calculators means that they cannot provide their learners with concrete experiences of the Accounting concepts and practices used in the real world (McIntosh and Goodman 2016: 219). Moreover, rural areas lack facilities such as banking and insurance institutions and shopping centers, which provide real and relevant documents and information needed by Accounting teachers and learners (Venger et al. 2016: 277). It means that the primary motivation for teaching and learning Accounting in rural schools is bleak. The flurry of recent literature maintains that rural areas are still underdeveloped with regards to information and infrastructure within the rural communities in the periphery of society's mainstream activities due to factors such as low level teaching and learning (Chikoko and Khanare 2012: 23; Pansiri 2008: 446; Balfour et al. 2008: 95). Accounting teachers as part of such communities would therefore be equally marginalized and disadvantaged, and it means there is pressure for these teachers to keep abreast with the Accounting developments in the business world and therefore many learners are vulnerable.

Time Allocations

According to the DBE (2011: 10), the teaching time for economic and management science is two hours per week. As this subject involves the development of Accounting skills of learners in Grade 8 and 9, one hour per week must be used to teach financial literacy in terms of the annual teaching plan.

FINDINGS AND DISCUSSION

Profile of Teachers

Participants were a convenience sample of 12 teachers (females = 58.3 %). Of the 12 teachers in the sample, 2 (16.6%) were holders of Diploma in Secondary Education (DSE) while 10 (83.3%) held university degrees. The majority of respondents in the sample were well-experienced teachers and range from having 2 to 42 years of teaching experience. It is assumed that the responses that the teachers gave relating to the pedagogy of Accounting were a result of their experience(s) in the teaching of the subject. Only 4 (33.3%) teachers who are qualified to teach Accounting and 8 (66.6%) are not qualified to teach Accounting.

Challenges Related to Learners

Ferreira (2009: 25) points out that the majority of South Africa's teachers, especially in secondary schools, work in classrooms where English is officially the language of learning, but is not the first language of either the teachers or

the learners (Soh 2016: 192). Paying attention to language is very important in order to improve the quality of the Accounting education to equip learners, irrespective of their socioeconomic background, race, gender or intellectual ability, with the knowledge, skills and values for self-fulfillment to participate meaningfully in society as citizens of a free country (DBE 2011: 6).

Most of the teachers complain that learners are not committed to their books and discipline is one of the challenges that they have with learners. Since learners are not disciplined there is no effective teaching and learning in the class. The teachers have mentioned lack of parental care as a challenge since there is no one who cannot control and help learners at home with school-work.

E2: "Learners do not do their homework since some of them are not staying with their parents and there is no supervision."

E3: "The Accounting language is a problem to the learners."

E4: "In Accounting we used Accounting concepts, principles and Accounting language, and therefore it is challenge for learners to use Accounting language and concepts."

Table 1: The profile twelve (12) teachers from the selected schools attached

Teachers	Gender	Age	Qualifications	Subject done in Grade 12 at school	Major subjects done at University/ College	Experience
1	M	36	Degree	Consumer Studies, Business Studies	Business Management	11
2	M	31	Degree	Business Studies	Business Studies	6
3	F	38	Degree	Accounting	Economics and Business Studies	13
4	F	42	Degree	Economics	Business Studies and Economics	15
5	M	28	Degree	Accounting, Business Studies, Economics	Accounting, Business Studies, Economics	3
6	F	35	Diploma and PGCE	Economics and Business Studies	Accounting, Economics and business Studies	6
7	F	26	PGCE and Diploma	Economics and Business Studies	Economics and Business Studies	2
8	M	43	Degree	Economics and Business	Business and Economics	18
9	F	37	Degree	Accounting	Business Studies and Economics	7
10	M	43	Degree	Accounting and Business Studies	Accounting and Business Studies	17
11	F	40	Degree	Business Studies	Business Studies	42
12	F	41	Degree	Business Studies	Business Studies	14

Participants were a convenience sample of 12 teachers (females = 58.3 %). Of the 12 teachers in the sample, 2 (16.6%) were holders of Diploma in Secondary Education (DSE) while 10 (83.3%) held university degrees. The majority of respondents in the sample were well-experienced teachers and range from 2-42 years teaching experience. It is assumed that the responses that the teachers gave relating to the pedagogy of Accounting were a result of their experience(s) in the teaching of the subject. Only 4 (33.3%) teachers who are qualified to teach Accounting and 8(66.6%) are not qualified to teach Accounting.

E5: "Learners think that Accounting is difficult and are not doing well in Accounting."

E6: "Learners have attitude towards Accounting so they are not doing well."

E7: "Learners who are good in Mathematics are doing well and those who have phobia are not doing well and created a negative attitude towards Accounting."

E8: "Learner they have a fear of unknown since they associate Accounting with Mathematics."

"The learners concentrate on Economics and Business Studies and feel that the Accounting part is difficult and is for brilliant learners only. The respondents feel that the language is a barrier, learners struggle with English as second language and Accounting language. It is recommended that teachers must install self-confidence to the learners."

E1: "Since it is three subjects and you cannot teach all of them at the same day, I think Accounting must be taught every day and learners will be good in Accounting."

E2: "Learner can cope with three subjects, I think the lot is too much for the learners and some is confusing learners."

E3: "Language is problem to the learners and Accounting terms."

E4: "Learners are not committed."

Learner's motivation and commitment is a challenge to most learners, some are staying alone at home without parents and therefore no one is motivating them to do the schoolwork.

Mughal (2015:148) asserts that the lack of discipline affected a learner's academic performance and their progress in school but good discipline helps develop desirable learner behavior. If a school has effective discipline, the academic performance will be good and if a school lacks effective discipline, the achievement academically will be poor (Snape 2016: 230; Amunda 2014: 54).

Challenges Related to Teachers' Subject Matter and Resources

Many South African teachers did not receive all the training they need. According to (DBE 2012: 8), ninety percent of the public school teachers have more than three years training. The training was not a sufficient higher qualification. Southern and East Africa Consortium for Monitoring Educational Quality (SACMEQ) and few other testing programs have neither tested the learners nor the teachers. It has been found

that teachers often lack subject knowledge. The problem of subject knowledge has been recognized for a long time, and there have been many initiatives to provide teachers with in-service training and the training has not been of a sufficiently high standard (DBE 2012: 58).

The number of newly qualified teachers joining the teaching profession has been too low. An average, approximately 10,000 teachers leave the public service every year and only 5,000 join the profession annually. The young South Africans join other professions as the economies grow. The other reason is that schools have not been producing enough people who are ready to enter a Bachelor's Program (DBE 2012: 54).

The respondents in this study point out that every change in the world and business world affects them, and even information and technology affects them, therefore teachers must be familiar and accommodate those changes in their professionalism and content they teach. The respondents believe in trends such as pastel Accounting banking, and Internet banking.

In some schools the Heads of Department (HOD) appointed by the school are not capable to control the entire three subjects at the same time, especially Accounting. Some HODs have not done Accounting at the university or college of education. Some were appointed in the past, which is before the introduction of the new curriculum in South Africa

Some of them had to say as follows.

E1: "My problem is Accounting, I only teach Economic and Business Studies and the educator teaches Accounting since he knows Accounting."

E2: "I am comfortable with teaching Business Studies than any other subject since I have done it at university."

E3: "We have different textbooks and sometimes we are confused which one should we used to teach."

E4: "I have a large number of learners in the class and I cannot give them attention."

E5: "Relevant teachers must be recruited who are capable to handle three subjects since we are from the old system of education."

E6: "We need support from the learning facilitators to empower us, especially in Accounting."

E7: "I do not like the Accounting part in EMS since I have not done it at the college of education in the past."

E8: "I am not comfortable in teaching the Accounting part because my interest is in Economics and Business Studies only."

E9: "The content is too much for the learners and extra classes are needed."

E10: "Learners must be taken on a field trip since the subject is practical and finance is a problem to take learners for the field trips."

The combination of three subjects has been identified by the respondents as a challenge to handle them. According to the results, most of the teachers are comfortable to teach the Economics and Business Studies part only. The results showed that some of the teachers have not done Accounting at the Higher Institution. The respondents feel that it is difficult to balance between theory and practice since they are not expected of the subject, or even familiar with the subject, sometimes due to lack of resources.

Curriculum reform brought many changes in teaching, learning and assessment. These changes are evident in the Accounting, Business and Accounting curriculum. The implementation of the NCS resulted in reconceptualization and redesign of Economic and Management Sciences (EMS) as a new integrated school subject (DBE 2002: 4).

CONCLUSION

The results showed that some of the teachers are not qualified to teach Accounting and concentrate on Economics and Business Studies only, time allocated to teachers to teach Accounting is insufficient. Learners lack prior knowledge in the subject from the previous grade and the results showed that the Accounting part is not covered in a lot of in EMS books.

RECOMMENDATIONS

The study recommend that qualified teachers who can teach Accounting must be appointed at primary schools and it will be advantageous to the learners since they will be taught by qualified teachers and they will get the Accounting basics and principles at the lower level. The study also recommends that teachers must network with teachers from other schools to improve the teaching of the subject. The study recommended that Accounting must be separated from Economics and Business Studies due to the fact that teachers cannot handle three subjects at the same time and some are not qualified to teach three subjects. The study recom-

mends that professional bodies must be established to assist the teachers and it will be an opportunity for teachers to share the ideas in that forum. The Department of Basic Education must encourage the teachers to study Accounting at Universities. Lastly, the study recommends that teachers must work as a team whereby other teachers can help with Accounting, and therefore internal arrangements can be made.

REFERENCES

- Amunda YA 2014. *Ill-discipline is Destructive*. USA: Author House Publishers.
- Assan TEB, Lumadi MW 2012. Facets of integration in economic and management sciences: Theory, learning-teaching, assessment and metaphor. *Journal of Social Sciences*, 32(3): 255-264.
- Balfour RJ, Mitchell C, Moletsane R 2008. Troubling contexts: Towards a generative theory of rurality as educational research. *Journal of Rural and Community Development*, 3(3): 95-107.
- Chikoko V, Khanare F 2012. School management teams' conceptualization of school assets in addressing the needs of children orphaned and made vulnerable by HIV and AIDS: Evidence from South Africa. *Journal of Social Science*, 32(1): 23-36.
- Department of Basic Education 2012. *Action Plan 2014: Towards the Realization of Schooling 2025*. Pretoria: Government Printers.
- Department of Basic Education 2008. *Subject Assessment Guidelines, Accounting Grade 10-12 (General)*. Pretoria: Government Printers.
- Department of Basic Education 2011. *Curriculum and Assessment Policy Statement. Grades 7-9: Economic and Management Sciences*. Pretoria: Government Printers
- Department of Basic Education 2002. *Revised National Curriculum Statement for Grades R-9 (Schools), Overview*. Pretoria: Government Printers.
- Ferreira A 2009. *Teaching Language*. South Africa: MacMillan (Pty) Ltd.
- Gouws FE 2008. Assessment in the intermediate and senior phase. In: J Dreyer (Ed.): *The Educator as Assessor*. Pretoria: Van Schaik, pp. 52-77.
- Jonson RB, Christensen L 2012. *Education Research: Quantitative, Qualitative and Mixed Approach*. USA: SAGE Publications, Inc.
- Khanare TB 2012. *Experiences and Practices of Form Three Integrated Science Teachers with Regard to Outcomes and Assessment Strategies*. MEd Thesis. KwaZulu-Natal: University of KwaZulu-Natal.
- McIntosh K, Goodman S 2016. *Integrated Multi-tiered Systems of Support: Blending RTI and PBIS*. New York: Guilford Press.
- McMillan JH, Schumacher S 2010. *Research in Education: Evidence-based Enquiry*. Boston: Allyn and Bacon.
- Mughal JA 2015. *Impact of a Citizenship Program on Middle School Students*. Germany: Anchor Academic Publishing.
- Ngwenya JC, Maistry SM 2012. Teaching and assessment in Accounting: An exploration of teachers'

- experiences in a rural KwaZulu-Natal school. *Journal of Social Sciences*, 33(1): 21-30.
- Neukrug ES 2016. *The World of the Counsellor: An Introduction to the Counselling Profession*. USA: Cengage Learning.
- Pansiri NO 2008. Improving commitment to basic education for the minorities in Botswana: A challenge for policy and practice. *International Journal of Educational Development*, 28(4): 446-459.
- Sithole BM, Lumadi W 2012. Pedagogical challenges besetting Business Studies teachers in secondary schools: A Botswana perspective. *Journal of Social Science*, 32(1): 71-80.
- Snape J 2016. *California Penal Code 2016 Book 1 of 2*. California: Snape Legal Publishing.
- Soh K 2016. *Teaching Chinese Language in Singapore: Retrospect and Challenges*. New York: Springer.
- Springer C, Borthick A 2004. Business simulation to stage thinking in introductory Accounting: Rationale, design and implementation. *Issues in Accounting Education*, 19(3): 277-303.
- Van Driel H, Berry A 2012. Pedagogical content knowledge. In: P Peterson, EO Baker, B McGaw, (Eds.): *International Encyclopedia of Education*. 3rd Edition. Oxford: Elsevier. pp. 656-661.
- Venger A, Lubienski, Steiner-Khaams G 2016. *World Yearbook of Education 2016: The Global Education Industry*. New York: Routledge.

Paper received for publication on August 2015
Paper accepted for publication on May 2016