

BRIDGING THE CONTENT KNOWLEDGE GAP OF TEACHERS: AN AGENDA TO IMPROVE BUSINESS STUDIES TEACHING IN SOUTH AFRICAN COUNTRYSIDE SCHOOLS

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Abstract

'Transformation' became the buzz word in South Africa in 1994. Lots of changes have taken place in all aspects of the new South Africa as a result of democratization and education is not an exception to this reality. The changes in education seek to provide equal opportunities for all citizens of the new democratic society. With the introduction of Outcomes Based Education stakeholders of education e.g. government, communities, parents and the general public, have become obsessed with quality of teaching and learning. To achieve quality education teachers must be more knowledgeable and skillful in some particular subjects to be able to teach well. This is however contrary to the observation of these writers. The reality is that most economic and management science teachers in the rural black schools have some gaps in content knowledge of the subjects. The existence of insufficient content knowledge among Business Studies (i.e. Accounting, Business economics and Management) teachers is a direct result of the apartheid education policy which did not provide better resources for training of teachers for countryside schools. Most of the teachers in the countryside schools were trained in under-resourced 'home land' colleges of education with little emphasis on content knowledge of business studies subjects. With the drastic changes taking place in the curriculum and content, particularly of business studies subjects in the new South Africa, it has become more apparent that teachers of these subjects need both in-depth knowledge of the content as well as the methodology or skills for imparting the specific content to their learners. The paper which is a case study advocates for the use of in-service training programmes for Business Studies teachers in the countryside schools as a strategy to fill in the gaps in content knowledge. The experiences of the authors are validated by a small-scale empirical investigation.

Key words: in-service, transformation, quality, content, knowledge, teacher, skills, student.

Introduction

Since the abolition of apartheid and the dawn of majority rule in 1994 South Africa has undergone tremendous transformation. Lots of changes have been instituted to ensure that the injustice of the past, especially the discriminatory practices in education (which put the country's majority at a disadvantage) are redressed. From April 1994 transformation became the buzz word and practice in

South Africa. It is a painful fact that before the democratic dispensation black South Africans received an inferior type of education which did not provide them with opportunities for employment. The apartheid system of education was designed on racial lines with the majority of the country's citizens (i.e. black and indigenous people, receiving the most inferior type of education (Quan-Baffour, 2006, 1). Prior to the new dispensation very few black schools taught some sort of science, mathematics or business subjects (i.e. Accounting, Business Economics and Management). The department of education of South Africa (1997, 21) describes the senior secondary schools at the time as designed for mono-functional provision of education that largely served as feeder institutions for technikons (Polytechnics).

The education system in the new South Africa is based on grades and it is similar to what prevails in most developing countries. Grades 1-7 and 8-12 form the primary and secondary schools respectively. Secondary schools are called High Schools in South Africa.

To make education reflect the ideals and principles of a democratic country the new government that came into power in 1994 had to make drastic changes to both the curriculum and the school system as a whole to give every school child access to education and equal opportunity to work. Education under the new democratic dispensation aimed at bringing about social transformation, integration, relevant knowledge and skills, applied competences, human rights, inclusivity, social justice and respect for indigenous knowledge systems. To achieve these democratic ideals Outcomes-Based Education was introduced. The philosophy which informed the introduction of O B E is that education must lead to evidence of learning of specific knowledge and skills for employment. In line with this, the High school curriculum was transformed to include, among other subjects, science, mathematics, technology and Business or Commercial studies. The education transformation made it mandatory for all schools (rural or urban) to teach the above named school subjects. This positive development has made all education stakeholders i.e. government, communities, parents and the civil society obsessed with quality in teaching and learning.

The cornerstone for quality education however, is a quality teacher who knows the subject and can teach it effectively for the realization of education goals. Thus to achieve quality education teachers must be more qualified, knowledgeable in particular learning areas or subjects and very conversant with the state of the art methods of delivery. To the contrary the authors have observed that many accounting, economic and management science school teachers in most countryside schools have insufficient content knowledge of the subjects they teach. The reason being that most of the teachers in the countryside schools were trained in under-resourced 'home land' colleges of education with little emphasis on content knowledge of business studies subjects. With the drastic changes taking place in the curriculum and content of business studies subjects under the new dispensation it has become more apparent that some of the teachers are unable to teach some aspects of the new curriculum and grade levels. There are some of them whose training was limited to specific grades e.g. Grade 5, 7 (senior primary school) or 8 (first year of High school) of Business Economics or Accounting. By 'pegging' their training at specific grades these educators were not adequately prepared to teach other grades of business studies under the transformed school curriculum. This situation makes it crucial to bridge the knowledge gap through in-service education which can empower teachers to do effective teaching for the realization of learning outcomes. This paper which is a case study, advocates for the use of in-service education and training programmes for commercial studies educators in the Bophirima region as a strategy to fill in the gaps in content knowledge. The paper employed a small-scale empirical study to validate the assumptions and experiences of the authors who have been teaching life orientation and commercial subjects in some of the countryside schools of South Africa since 1989.

Teachers' Training and Quality of Teaching

It is generally assumed that higher-quality teachers can engage in higher-quality teaching practices in their classrooms which may lead to improved student learning outcomes. This is the main expectation of all stakeholders of education - parents, students, government and civil society. The high expectations of education stakeholders can only be met when teachers' content knowledge is improved. The quality and competency of a teacher has a direct relationship to teacher qualifications

and tested ability, teacher professionalism – the degree to which teachers are given responsibility and authority over their work and classroom teaching practice (Boe and Gilford, 1992, 32). Although it may be difficult to realize a universally agreed standard quality for teachers, a teacher's training, qualification, duration of training, knowledge of a subject, application of appropriate teaching strategies and commitment to teaching as a career or profession are very important factors in effective teaching and higher student achievement.

The South African department of education (2003, 5) affirms that the kind of teacher envisaged to contribute to the transformation of education through effective teaching should be well qualified, competent, dedicated, caring, mediator of learning, designer of learning programmes, administrator, assessor, researcher, subject specialist and lifelong learner. In Saunders' (2000, 12) view effective teachers at a mature stage of development tend to know their subject matter; use pedagogy (i.e. teaching strategies) appropriate for content, create and sustain an effective learning environment, reflect on their teaching and children's responses and make changes to the learning environment where necessary, have a strong sense of ethics, are committed to teaching and care about their students.

To achieve these qualities among Business Studies teachers it becomes crucial to upgrade their content knowledge and professional practices. In our view since these teachers are already at post the best way to address the problem is through an in-service training. In-service training (INSET) as a strategy could not only address gaps in content knowledge and provide skills in teaching but also improve the teacher's confidence and general competence.

In- Service Training Provision for Teachers and Quality Teaching

The concept 'in-service training' (INSET) has been defined in many ways by different scholars and authorities. In-service training covers all those courses and activities in which a serving teacher may participate for the purpose of extending his professional knowledge, interest or skill (Bagwan-deen, 1993, 21). This definition suggests that in-service training activities should be implemented to achieve positive changes which may lead to the improvement of the teacher's teaching output. In-service training may cover aspects such as updating content knowledge and skills of teaching among teachers. In-service training also involves a whole range of activities by which serving teachers and other categories of educationalists (within the formal school system) may extend and develop their personal education, professional competence, and general understanding of the role which they and the school are expected to play in their changing societies (Hartshorne 1985, 6). INSET further includes the means whereby a teacher's personal needs and aspirations may be met, as well as those of the system in which they serve.

In-service training for teachers has been practiced in many countries over a long period of time. The background of in-service training programmes for teachers could be traced from 1922 when it was first used in Greece (Saeed 1999, 181). In modern times in-service training may take the form of initial in-service training, periodical in-service training or intensive in-service training. The duration of such in-service training programmes varies. They may include the objectives, content outline, method(s) of teaching and assessment procedure for teachers (Saeed, 1999). INSET may also take different forms such as a school based (initiated by a local school to provide training for its teachers in specific teaching areas) or district based (organized by district or regional education authorities for teachers in a particular area). Whatever form in-service training takes, organizers must do some needs analysis in order to address the real learning needs of teachers.

In-service training is part of the general professional growth of teachers or as some people may call it, is a continuous professional development of teachers. It may involve activities that develop individual teacher's skills, knowledge, expertise and other characteristics as a teacher. It is a structural training activity that is intended to develop the skills and capabilities of teachers in a defined area with the purpose of enhancing student learning (Kriek, 2005). In-service training may be regarded as professional development relating to a life-long development programme that focuses on a wide range of knowledge, skills and attitudes in order to educate students more effectively. It is a formal systematic programme designed to promote personal and professional growth. It can also be seen as the acquisition of specific knowledge and skills.

In-service training plays an important role in improving a teacher's professional growth. It

may be done through short courses, seminars, conferences, workshops, inter-school meetings, lectures or mentoring but its objectives may include learning activities tailored to meet the academic and professional development needs of teachers. In-service training may lead to the acquisition of general knowledge that reflects the demands of the changing didactic environment. It helps teachers to consolidate and reaffirm the content knowledge of their chosen subjects. In view of the drastic changes taking place in education no amount of a teacher's initial training may equip him/her with knowledge and skills needed to teach throughout the teaching life. It is for this reason that schools need to institute in-service training activities to equip their teachers with relevant knowledge and skills for effective teaching. In most developing countries, including South Africa, changes do take place in the curriculum from time to time according to society's current national needs. Teachers therefore need some in-service training to enable them implement new changes in the curriculum. An important requirement of any profession is that its members engage in lifelong learning in order to continue to grow, and to improve their knowledge so that their clients may receive the best knowledge and skills available to them (Griffins, 1979). As the saying goes; a lamp cannot light another lamp unless it continues to burn its own flame.

In view of the importance of continuous professional development the school should structure itself as a centre for inquiry, where teachers and principals work together in the pursuit of their own professional development. Everyone in the school is expected to be engaged in the continuing process of inquiry, studying and reflecting. This requires the school to see itself as a learning organization where its members – principal, teachers, learners and supporting staff – are constantly engaged in learning (Glatthorn and Fox 1996, 16). Through continuous learning teachers in particular may be able to innovate their teaching skills and techniques and provide a framework for transforming their high expectations into actual high achievement among learners. This culture of learning and innovation can lead to improvement in academic performance among learners. In-service training could develop in teachers the criteria that may enable them to assess their content knowledge and teaching practices in an ever changing environment.

All said and done the ultimate purpose of in-service education is improvement in learning output among learners. It is presumed that a knowledgeable teacher can teach effectively for the realization of learning outcomes.

Emphasizing the importance of in-service training Shulman (1987, 48) suggests that an in-service programme for teachers must cover the following:

Content knowledge, that is., the mastery of specific content being taught.

- Pedagogical knowledge, i.e. understanding of the theories and principles of teaching and learning, understanding of the learner, and the knowledge and principles of classroom behaviour and management.
- Pedagogical content knowledge, i.e. the ability to blend technique and content, including understanding how specific topics are related to one another and how they are most effectively organized and presented in the classroom to maximize learning.

The teacher's subject knowledge is related to assessment, since knowledge of the subject provides teachers with some focus for learning. Teachers use their subject knowledge base for decision making and what they are going to do (Jones and Moreland 2005, 195). Thus a sound teacher subject content knowledge positively affects decisions to change pedagogical strategies on assessment, implementation of curriculum and curriculum development. When studies are carried out about areas of knowledge that a teacher should have are examined, three categories are found viz: "content", "pedagogical", and general cultural" (Nakiboglu and Karakoc 2005, 2002). A fourth category which is as important as the three above is what is referred to as Pedagogical Content Knowledge (PCK). The PCK is a "special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding (Nakiboglu and Karakoc, 2005).

Darling-Hammond (2006) suggests a model that can be used to address the content knowledge of a curriculum in a democratic dispensation i.e. the "what" and "how" knowledge of teaching in such an environment. The model is explained in figure 1 below.

The sketch (figure 1) below is a framework for understanding teaching and learning adapted from Darling-Hammond (2006).

Teaching as a Profession

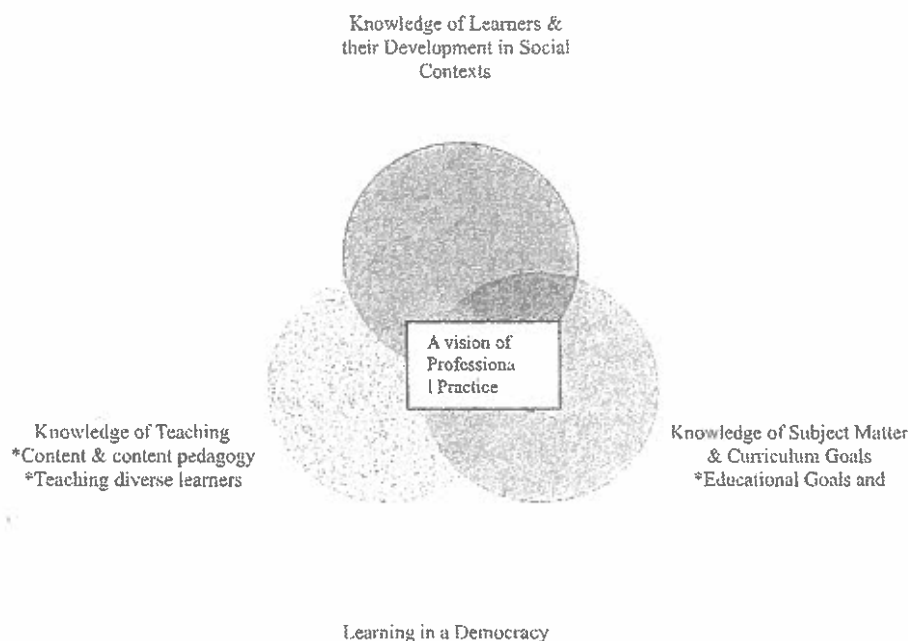


Figure 1. Preparing Teachers for a Changing World.

Figure 1 above shows the model of Darling-Hammond (2006) which identifies the statements for standards of teaching as follows:

- Knowledge of learners and how they learn and develop within the social context, including knowledge and language development.
- Understanding of curriculum content and goals, including the subject matter and skills to be taught in light of disciplinary demands, students needs, and the social purposes of education; and
- Understanding of and skills for teaching, including content pedagogical knowledge and knowledge for teaching diverse learners, as these are informed by understanding of assessment and how to construct and manage a productive classroom.

The discussion above makes it clear that PCK can be used to achieve the implementation of the NCS in general and in the economic and management sciences in particular. A lot is needed on the part of educators to increase their content knowledge as well as the methodology if teaching is to lead to the achievement of anticipated outcomes.

Methodology

The aim of the study was to determine whether school teachers of Accounting Business Economics and Management subject areas have the required content knowledge to teach the new curriculum of South African schools. To this end the researchers employed both quantitative and qualitative approaches in the data collection and analysis. The three subject advisors of Accounting, Business Economics and Management in the Bophirima Regional Education Office in the North West province were purposely selected to participate in the investigation. As subject advisors the three officers were deemed information rich hence their inclusion in the investigation

Again the researchers visited the professional support forums in the Taledi and Greater Taung Area (Education) Project Offices to collect names of all teachers teaching Accounting, Business Economics and Management subjects. The researchers purposely chose the two Area Project Offices (APOs) from the 4 in the region because their schools are mostly in rural areas where most well qualified educators

are scarce. The Business Commerce and Management teachers from the two APOs number 120. The researchers used the random sampling technique to select 45 out of the 120 teachers to participate in the research. Random sampling is that method of drawing a sample of a population so that all possible samples of fixed size n have the same probability of being selected (Strydom and De Vos 2000, 193).

In ensuring that each teacher stood the equal chance of being selected all the 120 names were written on pieces of papers. The pieces of papers were neatly folded and put in a small basket. The basket was gently shaken to shuffle all the pieces of papers containing the names of the 120 Business Studies teachers. After every shuffling of the papers five children were asked to pick a piece of paper each. This process of selection went on till 45 pieces out of the 120 papers were picked by the five children. The 45 pieces of papers were then unfolded and the names of the selected teachers recorded. The Business, Commerce and Management teachers who were randomly selected to participate in the research were made up of 15 males and 30 females.

Permission to involve selected teachers and subject advisors in the investigation was granted by the Area Project Office. The researchers made appointments with the selected teachers and their respective school authorities for the administration of the questionnaire. The participants were met at their individual schools between 3-4 pm (after school hours) during the months of May and June 2008.

A semi-structured questionnaire consisting of 8 items was given to all the participants to provide their candid views on pertinent issues regarding the teaching of Business Studies, Accounting and Economics. The researchers read through the items with each respondent and asked them to feel free to point out any item they did not understand. This was done to ensure that all participants understood the items and were able to answer them adequately. The items, among other things, sought the opinion of teachers on the implementation of the National Curriculum Statement (NCS), the content of the Business subjects, support for teachers to implement the new curriculum, teachers' training in the subjects and their classroom experiences in the teaching of those subjects, where they teach, the grades they teach and the kind of training received to teach the revised national curriculum.

A semi-structured interview was also conducted on the 3 subject advisors. The interview sought information on their observations during school visits regarding the content, methods and difficulties teachers face in teaching the business studies subjects, their assessment of educators training in the content and methods of teaching. The interviews with the subject advisors were done to confirm the views of the teachers.

Results and Discussions of Educators' Responses

The data collected by means of questionnaires and interviews were analysed, presented and illustrated.

Table 1. Ages of educators.

Age brackets	Number	%
20-29	4	8.9
30-39	25	56.7
40-49	6	13.3
50-59	6	13.3
60+	4	10
Total	45	100

Table 1 above indicates that majority of the teachers (56.7%) fall within the 30-39 age bracket followed by those between the ages of 40 to 59 years. These are people who might have been in the teaching profession for a number of years. Only four of the participants are between 20-29 years

of age. These are relatively young people who might have entered the teaching career in recently. Three of the teachers are around 60 years, a possible indication that they are experienced teachers at the threshold of retirement.

Table 2. Period educators were trained.

Period	N	%
Before 1984	8	17.8
1985-1994	12	26.7
1995-1999	15	33.3
2000-2004	6	13.3
2004-2007	4	8.9
Total	45	100

Table 2 above indicates that a majority of teachers, about (80%) teaching in the Accounting, Business Economics and Management subject areas were trained long before the National Curriculum Statement (NCS) came into effect. These teachers have no formal training in the new curriculum. As teachers who lack content knowledge and methodology of the new Accounting, Business Economics and Management Science curriculum they might be struggling to teach the learning area. Such a situation could hamper effective teaching for the realization of learner achievement.

The item regarding the qualification of teachers yielded the information on table 3 below.

Table 3. Educators' qualifications.

Qualification	N	%
Masters	4	8.9
Honours	4	8.9
BA/B.COM	6	13.3
UDE	27	60
STD/PTC	4	8.9
Total	45	100

Key: BA – Bachelor of Arts, first degree in humanities
B.Com – Bachelor of Commerce, first degree in Commercial/business subjects
UDE – University Diploma in Education
STD – Secondary Teachers' Diploma
PTC – Primary Teachers'

The information from table 3 above reveals that majority of the teachers (60%) trained in the former colleges of education where their training restricted them to teach specific grades (e, g. Gr. 5, 6, 7, 8 etc) of High school Business Studies subjects. The indication here is that most of them may not be able to teach Accounting, Economics and other subjects under Business Studies due to lack of sufficient content knowledge and methods of teaching the revised national curriculum. The worry is that these teachers now teach all grades of learners in Accounting, Business Studies and Economics under the Further Education and Training (FET) phase.

All the teachers indicated that they have attended few short workshops on the implementation of the National Curriculum Statement, i.e. the revised national curriculum. They conceded that the short workshops were not enough to empower them to teach the new subjects effectively. The participants

were of the view that the department of education should provide them with continuous professional development programmes to update their knowledge and skills for effective teaching and the realization of learning outcomes. The respondents also conceded that there are some specific topics in their subject areas they never studied at college and therefore cannot teach them effectively. All the respondents concurred that they have problems in teaching some aspects of the topics included in the new curriculum. They indicated that the learning outcome 1 (one) which deals with the business environment topics on contemporary issues like globalization, socio-economic issues, legislations and social investment were problematic. In learning outcome 2 the drawing up and presentation of business plans and business information and the development of action plans and ethics also pose challenges to effective teaching. The respondents mentioned that topics on business operations and the use of graphs and their interpretation in Accounting also pose serious challenges to their classroom practice.

In Economics, again the respondents mentioned that some of the topics in all the learning outcomes are too new to them and they cannot teach them effectively without the knowledge of the content. The respondents particularly mentioned topics like production, possibility frontier, mathematical equations and models and the interpretation of graphs. In Accounting, the story was no different. The various topics in all the learning outcomes pose challenges to educators. The respondents specifically mentioned topics like manufacturing and production, cost statements and interpretation in learning outcome two; value added tax (VAT) analysis and interpretation of financial statements in learning outcome 1 (one), and inventory systems and topics in auditing and control measures were mentioned as challenging in learning outcome three. The indication here is that the teachers are unable to teach most of the important topics under the National Curriculum Statement and this is a blow to the achievement quality education.

Results of Interview with Subject Advisors

The interviews with the three subject advisors pointed to almost the same problems stated by the teachers. The subject advisors mentioned that from their interaction and observation the business studies teachers have problems in teaching Learning Outcome 3, i.e. the analysis and interpretation of financial statements, Learning Outcome 1 i.e. the use of graphs and their interpretation in the areas of the production, mathematical equations, the preparation of business plans, financial analysis and research methods. The subject advisors concurred with the teachers in their suggestion that the department of education must urgently provide teachers with more support in both content knowledge and methods of teaching business studies learning areas.

Conclusion

The need for more training in content knowledge for effective classroom teaching has become very clear in the findings of this investigation. The extension of the content of the Business subjects by the National Curriculum Statement makes many teachers ineffective because of lack of content knowledge and teaching methodology. In their responses the participants did not shy away from the truth that they trained before the curriculum reformation and implementation. They therefore need more training to empower them to teach effectively for the realization of educational outcomes. This reality was confirmed by the views expressed by the subject advisors.

Thus the empirical investigation and the literature study have validated the observations of the researchers. The paper therefore concludes that for teachers to be able to implement the National Curriculum Statement in the Economic and Management Sciences subject areas the department of education must provide them with an effective in-service training as a strategy to bridge the content knowledge gap (among teachers). Without this the realization of outcomes education in the business subjects may, for a very long time, remain a mere dream in South African rural schools.

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