

Education Studies in South Africa

The Quest for Relevance, Rigour and Restructuring

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Education Studies in South Africa

The Quest for Relevance, Rigour and Restructuring

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Research Justification

The thesis of this volume is that the fields of scholarly enquiry of education - internationally as well as in South Africa in particular - despite being fields of virile scholarly activity and output, are in need of a major overhaul. In this collected work, this want in research is encapsulated in three words: relevance, rigour and restructuring. Research in the scholarly field(s) of education is predominantly of small scale, non-accumulative, widely condemned as not of a comparable standard to research conducted in other social sciences, much less at par with research in the natural sciences, and lacking structure in the sense of being anchored in a firm theory. To make matters worse, scholars in education internationally have till very recently and in South Africa still eschew discussion as to the packaging or structuring of knowledge produced by education research. The book consists of chapters all containing original research unpacking these desiderata from a variety of angles. The authors had them served by a variety of methods, from deductively argued position papers to empirical research, the latter both quantitative (survey research) and qualitative. In the concluding parts of the book, three main objectives are tabled as to how to proceed to produce rigorous, relevant and structured research. The first is that a unified theory of education should take education as it appears in the world, as its prime object of research, rather than attempt to construct a theory of education deduced from theories extant in cognate social sciences or humanities, such as sociology, psychology or philosophy. Secondly, a theory of education should have a normative superstructure, and in this regard, the creed of human rights is suggested as a place to look for such a normative superstructure. Even in the miniscule amount of research abroad recently devoted to the structuring of education knowledge, scholars have contended with an analysis of existing practices in packaging education knowledge in different national settings, and have refrained from assessing these, much less made suggestions as to how to proceed to the construction of a theoretical edifice superseding national boundaries. Thirdly, in construction of a comprehensive theory of education, scholarship should carefully negotiate the field of tension between striving towards the scientific ideal of universally valid statements and reflecting the specificities of different contexts. In this regard, the tools and expertise of scholars in the field of comparative and international education are highlighted as a valuable resource. In bringing into the spotlight of scholarly investigation the need to bring rigour, relevance and above all structure in the production of knowledge of education, the book offers original research. The similarity report of an iThenticate analysis confirms that the work contains no plagiarism. The book is a scholarly book, aimed at scholars of education, with a message as to how they can raise the state of scholarship in education.

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Abbreviations, Figures and Tables Appearing in the Text and Notes

List of Abbreviations

AIDS Acquired Immunodeficiency Syndrome

CAPS Curriculum and Assessment Policy Statement

CoP Community of Practice

CRA Contrapuntal Reading Analysis

CSL Critical Service-learning

DHET Department of Higher Education and Training

EA Educational Assistant
EP Extended Programme

ERIC Education Resources Information Center

FET Further Education and Training
HEI Higher Education Institution
HIV Human Immunodeficiency Virus

HOD Head of Department

HPS Health-promoting School

ICT Information and Communications Technology
IEA International Association for the Assessment of

Educational Achievement

LTSM Learning and Teaching Support Material

MEHRTESR Ministry of Education and Human Resources,

Tertiary Education and Scientific Research

MIE Mauritius Institute of Education

MK Mauritian Kreol

MRTEQ Minimum Requirements for Teacher Education

Qualifications

NCF National Curriculum Framework NQF National Qualification Framework

OECD Organisation for Economic Co-operation and

Development

PE Physical Education

PISA Programme for International Student

Assessment

SACHES Southern African Comparative and History of

Education

SAERA South African Research Association

SBST School-based Support Team

SIAS Screening, Identification, Assessment and

Support

SIDS Small Island Developing States

SITES Second Information Technology in Education

Study

SMEP Sympatric Metamorphotic Educational Praxis

SNA Support Needs Assessment

SoTL Scholarship of Teaching and Learning STEM Science, Technology, Engineering and

Mathematics

TIMSS Trends in International Mathematics and Science

Study

TLS Teaching & Learning Syllabus

TOC Teacher on Call

TTOC Teacher Teaching on Call

UNESCO United Nations Educational, Scientific and

Cultural Organization

WCCES World Council of Comparative Education

Societies

WHO World Health Organization

WIL WWC	Work Integrated Learning	
	What Works Clearingshouse	
ZEP	Zone d'Education Prioritaire	
ZPD	Zone of Proximal Development	
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Chapter 1

Relevance, rigour and restructuring: The 3Rs as a compass for a community of scholars in need of direction

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Abstract

The argument of this chapter is that the fields of scholarly enquiry of education – internationally as well as in South Africa in particular – despite being fields of virile scholarly activity and output, are in need of a major overhaul. This need can be encapsulated in three words: relevance, rigour and restructuring. This chapter commences with a survey of education scholarship

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internationally, setting the broader frame within which to hang the picture of education scholarship in South Africa, unpacked in the second section. The three identified missing parts of scholarship abroad and in South Africa - rigour, relevance and restructure - form in turn the themes of subsequent sections. Serious, even scathing criticisms are incessantly levelled by scholars active in other fields with regard to the sub-standard standing of fields of education knowledge, education students and scholars in the field of education. This criticism is corroborated by publications from scholars of education themselves. Despite much pressure from various quarters towards relevance, there is a nagging feeling, substantiated by reports appearing with regular monotony in the scholarly literature, that education research lacks relevance, wrapped up in an ivory tower, removed from the everyday reality of schools and classroom. A third criticism levelled against education as a field or fields of scholarship is the lack of structure, variously formulated as the lack of coherence or the lack of accumulative scholarship. Being the lead chapter of this volume, this chapter sets the basis for themes further explored in subsequent chapters in the book.

Keywords: Education research; Relevance; Rigour; Structure; Theory.

■ Introduction

It is commonplace to state that the world of today is a rapidly changing world, even a world where the rate of change is increasing. This applies to how people work, how they travel, how basic social institutions such as the family are defined and structured, and how society, political organisation and health services and wellbeing are conceptualised and thought about. Yet, the way education is practised and even thought about, schooling and higher education in particular, do not seem to have gone through the same radical and high-speed transformation. Harold R.W. Benjamin's (1893–1969) 1939 satirical book *The Saber Tooth Curriculum* (Benjamin 1939), which became a classic in

education, drew attention to the anachronistic appearance of institutions of education. Schools in modern times still tenaciously cling to their defining features at the time when mass systems of public schools were established in the newly industrialised societies of the early 19th century; despite the fact that schools today increasingly seem to be at variance with what modern society requires (cf. Wolhuter 2018b). Using the computer metaphor of Odora-Hoppers and Richards (2011; cf. Botha & Wolhuter 2019), it could be argued that the contemplation of the design and development of completely new operating systems for education - that is a total reconceptualisation of schooling. higher education, research and community-based learning which will make possible multi-paradigmatic, multi-epistemic, place-relevant learning and knowledge generation is imperative. Only if the operating system and the algorithm are changed, then the hardware (schools, universities. programmes, etc.) and software (programmes, curricula. textbooks, etc.) will have a noteworthy positive effect. What this means is that the research and education project - that is approaches, traditions, assumptions and theories - should be reviewed and revised, not only for the sake of knowledge democracy and cognitive justice but also to ensure that education retains its practical relevance.

It is not only education in practice, in schools and universities and other institutions of education, that is in need of a paradigm shift. The field of scholarly enquiry having the assignment to guide the renewal and reform of the education project, the scholarly field of Education, with all its sub-fields, too is in need of a major overhaul. The thesis of this chapter is that this need can be encapsulated in three words: relevance, rigour and restructuring. These terms are unpacked as a framework for understanding the chapters that follow, a selection of papers read at the 2018 Annual Conference of South African Research Association (SAERA), each one zooming in on one aspect of education in schools and universities, or one facet of education scholarship, specifically within the South African context.

This chapter commences with a survey of education scholarship internationally, setting the broader frame within which to hang the picture of education scholarship in South Africa, unpacked in the second section. The three identified missing parts of scholarship abroad and in South Africa – rigour, relevance and restructure – form in turn the themes of subsequent sections.

■ Education scholarship internationally

Education is a rather recent field of scholarship visible at universities. Compared to areas of learning such as philosophy, classics, theology, medicine or law, education has a very brief history of an institutional presence at universities. The first chair of education appeared as late as 1779 at the University of Halle in Germany (Boyd & King 1975; cf. Grouws [1992] 2006:4). Even in a country such as England, having a history of universities spreading over almost a 1000 years, the institutional presence of education is but one and a half centuries old (the first being at the University of Manchester, in 1852) (Furlong 2013).

When surveying the literature on the state of education scholarship internationally, three points of concern are evident. These three points of concern can be summarised as the lack of rigour, the lack of relevance and the problem of structure.

The lack of rigour

In the first place, serious, even scathing criticism is incessantly levelled by scholars active in other fields with regard to the substandard standing of fields of education knowledge, education students and, in particular, scholars in the field of education (G3 Business Solutions 2005; Kannemeyer 1990; Van der Walt, Potgieter & Wolhuter 2010). More than 50 years ago, Edmund King (1965), in a volume of education in the United States of America (USA), in the chapter on higher education in the USA, sadly notes that scholars in other fields look down on academics in schools or faculties of education as having no authoritative,

expert knowledge, as 'knowing nothing'. Such accusations are not confined to informal, unsubstantiated talk amongst academics, but are evident in scholarly publications as well, even in the pages of one of the most esteemed journals in the field. In an article published in *Educational Researcher*, David Larrabee (1998) dealt with this uncomfortable accusation which academics in fields of education have to contend with from time to time.

The Oxford Dictionaries (2018) gives the meaning of the word 'rigour' as: 'the quality of being extremely thorough and careful', 'severity or strictness' and 'harsh and demanding conditions'. *Rigour* is axiomatically part of scholarship (Nelson 2011:374). An argument or process lacking rigour is somewhat held in contempt Nelson 2011). A thesis or plea defended with less than rigour results in academic condemnation. Respected learning, teaching and assessment, particularly at the level of higher education, is characterised by rigour as one of the signature features. In the education sciences, lack of rigour also has ramifications for teacher education. Rusznyak et al. (2016) explain why academic depth and rigour in teacher education programmes are of importance for prospective teachers.

Research is defined as: 'methodically acquired, verified, systematised knowledge' (Stoker 1968). All three these components bring expectations of rigour. Processes such as reliability, validity, synthesising, presenting and weighing arguments against and for, measurement, statistical methods, the principles of logic and drawing conclusions on the basis of evidence - hallmarks of the research method - all presuppose rigour. Rigour comes close to the concepts of quality and excellence, often also used in the discourse on research (particularly research in university settings) (cf. Powell et al. 2018:10), but the term rigour does, on the other hand, has nuances of its own. In this age of the university caught within the web of the workings of the neo-liberal economic revolution, quality brings with it meanings of performativity, accountability, quality assurance and managerialism, which is not the same as rigour; in fact, these imperatives may well work against rigour in research.

Excellence on the other hand begins to float in the direction of world class universities and the feverish pursuit of university rankings; the author also wishes to keep the idea in mind clean from these connotations, hence the use of the word 'rigour'.

Yet this concept and the way it operates in scholarly endeavour is not without its problems. Apart from the problem of cultural relativity (a problem the concept of academic rigour shares with quality), there is also the problem that rigour (as it is lying close to the concept of rigid) chimes in difficult with notions of creativity, innovativeness and 'out of the box' thinking, all noble ideals of research.

The lack of rigour in education scholarship can surely be traced back to a number of factors. The following factors, identified by Van der Walt, Potgieter and Wolhuter (2016), as causal factors for lack of depth and rigour in teacher education programmes, surely also have implications for education scholarship, when keeping in mind the dual mandate of academics at faculties or schools of education to conduct both teaching (teacher education) and research (in the fields of education):

- the student-staff ratios that tend to be exceptionally high in education faculties or schools or departments at universities and the quality of student-intake
- reforms in teacher education programmes in recent decades
- the pragmatic predilection detectable in education-related research
- low levels of funding for education research
- the short history and institutionalised presence of the field of education at universities
- the weakly developed structure of many specialisation fields of education
- incoherence in field(s) of education-related knowledge, and also the non-accumulative nature much education-related researches have.

Student-staff ratios in schools or faculties of education tend to be higher than those of other schools or faculties, and substantially so, in South Africa as well as abroad (cf. Van der Walt et al. 2010). McDonald (2013) published an excellent synthesis of existing literature on the effect of student-staff ratios on teaching and learning, and staff wellbeing at higher education levels. There is conclusive evidence that high student-staff ratios at higher education levels result in lower achievement levels of students, lower development of higher cognitive faculties and reduced interest for learning amongst students, whilst staff wellbeing is adversely affected by high student-staff ratios (McDonald 2013). Unfortunately, McDonald's analysis did not cover the effect of student-staff ratios on research productivity, and no study correlating these two could be found. However, the enormous amount of time required to conduct research thoroughly, as well as the negative effect that McDonald (2013) found in the literature of the co-variation between student-staff ratios and staff wellbeing point to the conclusion that the high student-staff ratios typically found in schools or faculties of education are detrimental to the promotion of rigour in research in education. There is also an oft-levelled accusation that students of education are of relatively poor quality, and comprise those who could not gain entry into programmes educating for more prestigious professions, such as law or medicine (cf. De Muynck & Ruit 2010:1335-1336; Silova & Kazimzeda 2010).

In recent decades, the structure of teacher education programmes worldwide changed. Whereas, historically, teacher education programmes consisted of a theoretical, academic schooling in the basic disciplines of education as the salient core blocks of such programmes – examples include philosophy of education, history of education and educational psychology – a forceful trend has been for teacher education to increasingly take the form of training in a set of skills to be applied rather mechanically in teaching. This training is very much reminiscent

of training of technicians or tradespeople (see Altbach 1991; Zeichner 2010). This trend could surely be related to a multitude of factors, such as the neo-liberal economic revolution, the rise of Mode 2 knowledge and a general pragmatic trend in the education of the profession and the business of universities in general. But it affects the research function, namely research in the basic disciplines, and the rigorous quest for truth and knowledge as the *summum bonum* of the university adversely. It also indirectly works to the detriment of the development of rigorous research in that students are no longer trained in the full scope, possibilities and research methodologies of disciplines. On how this trend affects the field of comparative and international education at universities, Masemann (2008) comments 'then Comparative Education flows a mile wide but an inch deep'. What should also be mentioned with the restructuring of teacher education in recent times, is the institutional shift of teacher education, from teacher training colleges to universities. This entailed in various instances the incorporation of teacher training colleges and their staff into universities' faculties or schools of education, or the upgrading of teacher training colleges to teacher education universities. Teacher training colleges had a different mission when compared to universities. Whilst there was, since the days of the normal schools, a strong focus on character formation and moral education, these institutions (teacher training colleges) had no research brief and no culture of research. It is difficult not to suspect that the incorporation of these teacher training colleges into schools of education at universities diluted or distracted the latter in their brief and core function of conducting rigorous research.

Academic staff of faculties or schools of education tend to be occupied with the education of teachers, rather than to focus on research. They are, therefore, not full-committedly active in scholarship pursuing the quest for knowledge and contributing to the construction of theory in education. This means that these faculties or schools of education are by no means known as centres of academic depth and rigour (Qi & Kevin 2013). As far as

research that is conducted is concerned, the impression is that it is mainly concerned with addressing challenges in practice (i.e. in the lecturers' own lecture halls, in schools and in classrooms) (Whitty 2006).

The relatively short history of education as a specialisation at universities has been explained above, whilst the lack of structure will be dealt with in a subsequent section of this chapter.

■ The lack of relevance

The Oxford Dictionary (2018) defines the term 'relevance' as 'the quality or state of being closely connected or appropriate'. In the realm of the fields of education scholarship, relevant will then mean connected or appropriate to the practice of education, that is what takes place in schools and other educational institutions, and policy formulation for everyday implementation.

A number of contemporary trends have factors that certainly constituted a force moving education research in a direction where 'relevance' is one of the ideals or criteria, at least supplementing, even compromising if not replacing the historically (pure) quest for truth as inspirational-ideal, with its resultant 'blue sky' research as a signature feature. The first of these pertains to the global higher education revolution.

Since 1990, a global higher education revolution has been manifesting across the world (for details regarding the causes and key features of this revolution, cf. Altbach, Reisberg & Rumbley 2009; and for a sketch of this revolution, telescoped within the South African context, cf. Wolhuter 2011). Whereas historically higher education, universities, in particular, devoted themselves undistractedly to the quest for knowledge (the 'ivory tower' model of the university), the emergence of the knowledge society, the commodification of knowledge and the state's scaling down its range of activities, which has made the university increasingly dependent on private sector funding and less on public funding, have all added up to increasing pressure to make

their products, including their research output, more relevant to the needs of society.

A second factor nudging education research in the direction of increasingly fitting the bill of being relevant, is the neo-liberal economic revolution. Since the late 1980s, this revolution originated in the countries of Western Europe and North America; after 1990, it spread to Eastern Europe, Asia and also to the Global South. The role of the state in the economy has been scaled down, and the forces of the free market and a liberal (laissez faire) economy have been given freedom of reign. The principles of free market economies (such as the profit motive, the pursuit of efficiency and cost-benefit analysis) as well as a value orientation looking for the immediate practical value or utility of everything in a consumer-oriented society, were also carried into institutions and societal sectors way beyond the economy. One such sector was education, not the least the higher education sector.

The nascent knowledge-economy and the neo-liberal economic revolution and the rising call for relevance also resulted in a change in the way in which knowledge is packaged. There is discernible change in university settings (in context of modules and programmes as well as in research foci, scientific organisations and publications); a change from what Gibbons (2003) calls Mode 1 knowledge to Mode 2 knowledge. Knowledge is no longer generated, ordered and taught and learned in a discipline-bound format (that is Mode 1 knowledge) but in an open system, transand interdisciplinary, where knowledge is ordered and evaluated not so much on scientific criteria, as by practical and utilitarian considerations (Mode 2 knowledge) (Wolhuter 2014). Such an epistemological-organisational frame exerts strong pressure on research to fit the bill of relevance.

An argument can also be made regarding the changes in teacher education programmes (as explained above) that constitute a force moving the education research agenda towards more relevance. The change in teacher education towards – as it

has been bluntly stated - equipping teachers with a 'bag of tricks' has as its research counterpart research on how to find a 'quick fix' to problems teachers encounter in classrooms and in schools. After all the university is characterised by a teaching-research symbiosis or nexus, that is the meaning or rationale of research is to find its way back to teaching programmes, enhancing such programmes.

The global testing regime, that is the International Association for the Assessment of Educational Achievement (IEA) and the Programme for International Student Assessment (PISA), too exerts a force in making education research more relevant to the education or at least the education politics or public discourse of education of the day (cf. Zapp, Margues & Powell 2018a:190). Whilst the IEA studies have mainly been an academic exercise (although particularly the Trends in International Mathematics and Science Study [TIMSS] - Trends in International Mathematics and Science Studies - have also been used as currency in the competition between nations), the PISA studies are out and out a race between nations. The PISA studies are managed by the Organisation for Economic Co-operation and Development (OECD) and is an international survey taking place every three years, aiming to assess education systems worldwide, by testing the skills and knowledge of 15-year-old students. Triennially, since the year 2000, 15-year-old students in participating countries from randomly selected schools in these participating nations take tests in the key subjects of reading, mathematics and science. To date, students representing more than 70 nations have taken part.

Yet for all these pressures towards relevance, there is a nagging feeling, substantiated by reports appearing with regular monotony in the scholarly literature, that education research lacks relevance, wrapped up in an ivory tower, removed from the everyday reality of schools and classroom. For example, Pollard (2007:125) alleges that education research in the United Kingdom is deemed as '...being small scale, irrelevant, inaccessible and

low quality'. David Blunkett (2000:1), at that stage head of the Department of Education and Employment in the United Kingdom, stated: '...we need social scientists to help to determine what works and why, and what types of policy initiatives are likely to be most effective'.

In the time-spirit of the break of a new millennium, a major reconsideration as to the role and nature of the field of history of education has taken place amongst the most eminent scholars in the field of history of education (cf. Wolhuter & Karras 2016). One of the visions these theorists saw for the field is a role for history of education to inform public debate on education and on education reform (cf. McCullough 2000:1–16; Vinovskis 2015:30–44). Yet after almost two decades into the 21st century, not as much as one example where scholars of history of education have visibly impacted on public discourse on education can be found.

This absence of conspicuous relevance can be traced back to a multitude of possible factors. At the level of education policy formulation, there is a long history of governments following own beliefs, preconceived opinions or ideology, even in the face of massive evidence (cf. De Wet & Wolhuter 2007). Another factor is the growth in programmed research activity within university settings (cf. Margues et al. 2018:168, 170) replacing the historical situation of letting each academic following his or her own research trajectory based on own professional judgement. Whilst it could be stated that such official research programmes generally respond to the imperatives of practice (and therefore are from that reason relevant), the wheels of bureaucracy turn slowly and bureaucracy tends to take on a life of its own, serving own interests - all these distract from a rapid response to the call from practice. A final factor for the dearth of relevance is the lack of autochthonous theory in education, and the resultant fact that education scholarship on whatever theme is still stuck, like a Siamese twin, to base theory in extra-education fields, rather than in education and its subject of study, education praxis in the world. This problem will be unpacked in the next section where one of its ramifications, namely, the lack of structure in education, will be focused upon.

The need for structure

A third criticism levelled against education as a field or fields of scholarship is the lack of structure, variously formulated as the lack of coherence or the lack of accumulative scholarship. There is no universally uniform manner in which education as a discipline or field of scholarship is structured or packaged. In the first published international comparative study of how education as a field is constructed, the recently published book edited by Whitty and Furlong (eds. 2017), it is clear from the seven countries covered (France, Germany, Latvia, Australia, China, England and the USA) that in each country education is packaged in a different way, more strongly influenced by national contextual factors than by any universal categories. In their first chapter to this volume, Furlong & and Whitty (2017) draw together insights gained from this seven-country survey. They distinguish three knowledge in education: academic traditions knowledge traditions, knowledge traditions and integrated knowledge traditions. In Germany, the study of education formed a subject of research as a free standing discipline rather disconnected to teacher education at universities. In France likewise, teacher education historically took place in the 'normal schools' and research in education stood disconnected with teacher education. However, unlike Germany, it did not evolve as a free standing discipline of research, but education became intertwined with other disciplines, such as philosophy, economics and sociology. In the Anglophone countries (USA, England, Australia), the discipline has been closely tied to teacher education. The field had a strong, explicit institutional presence as in Germany (but unlike France, where it has been dissolved in other disciplines) but unlike Germany where it has been present as a free standing discipline; in the Anglophone countries, it has the appearance of an applied field.

The lack of autochthonous theory means that many studies are saprozoically stuck to theories and paradigms of the related or parent fields where they find their origin, rather than being anchored in a theoretical edifice constructed with the prime intention to illuminate education. Historians and theoreticians of the field of comparative and international education, for example, describe the signature feature of this field in the period since 1990, as one in which there occurred a proliferation of paradigms, a phase of heterogeneity as it is called by a prime scholar mapping the field (Paulston 1997) – the name 'heterogeneity' is indicative of the variety of diverse theoretical orientations making up the field.

The modern day predilection towards programmed research at universities too constitutes a force working against building up a carefully considered structure or corpus of knowledge. Such programmes are overly driven by funding, and as the governments or statutory organs are invariably the largest source of funding, research agendas are defined and driven by politics rather than by needs in the construction of a corpus of knowledge (cf. Zapp & Powell 2016). The problem is that much political steering clearly favours short-term results instead of long-term advancement because of the agenda-driven and project-oriented character of funding priorities (Zapp et al. 2018a:195). Elzinga (1997) writes about an epistemic drift occurring in research activity. Epistemic drift describes the process of scientists moving from internal or purely scientific criteria to more external or policy-related (or funding source-related) criteria for conducting research (Zapp, Powell & Margues 2018b:41). Margues et al. (2017) write about 'reverse engineering' or, as Espeland (2016:281) describes 'working backwards'.

■ Education scholarship in South Africa

Education scholarship in South Africa has developed historically in a very pillarised way, being a corollary of the historical development of the university sector in the country, and mirroring socio-political segregation patterns in society. Different universities for black people and for the two main sectors of the white population, the Afrikaans and English first language speakers, came into being during the late 19th and 20th centuries (cf. Welch, Yang & Wolhuter 2004). These pillarised sections of the scholarly community of South Africa developed their own theoretical orientations, based on their histories, their political and philosophical outlooks and their (historical and linguistic) attachment to international scholarly networks (cf. Wolhuter 1999). At the risk of overgeneralisation:

- The Afrikaner scholars were strongly influenced by the continental (especially the Dutch and German) scholarly community, and by the pro-segregation political sympathies within the Afrikaner section of the population.
- The white English scholars strongly subscribed to the liberal system of values and to academic traditions in the United Kingdom.
- The rising generation of black scholars were strongly affected by theoretical orientations such as classical and neo-Marxism, dependency theory, black consciousness, pan-Africanism, postcolonialism and decolonisation theory.

This pattern of pillarised development of education scholarship in South Africa, as well as the conditions under which it has developed, have had implications for all three of rigour, relevance and structure of education scholarship in South Africa.

Rigour

To return to the conditions under which South African scholarship developed, mentioned in the last paragraph, it should be borne in mind that for three decades, c. 1960 to 1990, South African scholars were subjected to an international academic boycott (cf. Harricombe & Lancaster 1995). This cut the South African scholarly community off from not only the recent developments at the cutting edges of their fields of research but also from the international gatekeeping system (blind peer reviewing in particular) of the systems of knowledge in their fields of expertise.

It is difficult to measure rigour and to find publications dealing with this topic. However, a number of citation impact studies on education research in South Africa have been published, as along with the registration of South African scholars in international journals, and as far as these could be taken as an indicator of rigour, there is reason for a not unqualifiedly positive verdict on the rigour of scholarship in the field of education within South Africa. In a recently published study of the authors of the total sum of articles in all 2012 editions of all Web of Science indexed education journals, it transpired that South African authors make up only 273 of the total authorship of 18523, or 1.47% (Wolhuter 2018c). In recently published research of the citation impact and transition rate (into articles and book chapters) of doctoral theses completed in the fields of education in South Africa in 2008, it was found that of the 97, 70 registered no citation impact, whilst 65 theses produced neither an article nor a book chapter, nor could they make any citation impact (Wolhuter 2015).

The most expensive survey of education research conducted in South Africa was that of Deacon, Osman and Buchler (2009), Commissioned by the National Research Foundation. Though becoming rapidly dated, it is still the most extensive document of its kind. Deacon et al. (2009:13-14) found that 94% of education research taking place in the country were small-scale research. They describe this as research conducted 'quickly and cheaply', in a 'publish or perish context', under suspicion of lacking depth and being of a high level of superficiality (Deacon et al. 2009).

Relevance

More than 30 years ago, a South African academic and scholar in education, Owen van der Berg made the allegation that the way education has historically been practised at South African universities is that of an isolated field of scholarship, divorced from the social, economic and political practicalities of society (Steinberg 1987:16). The low levels of relevance can be ascribed to a number of possible factors, and those enumerated in the international survey above probably play their part on

South African soil too. However, within the South African context. a number of compounding forces are at play too. The three schools of thought in education scholarship identified above all do not lend themselves readily to relevance. As stated, the Afrikaans school has as its intellectual roots the Dutch and German intellectual traditions in education (of a generation ago). In these two adjacent parts of the world, education was (until very recently) considered as one of the humanities, rather than as a(n empirical) social science, as in the Anglo-American academic world. This means that the basic theoretical frameworks or superstructures of research were located in philosophical systems, far removed from the everyday education realities at the grassroots level. In the pre-1994 Afrikaans-speaking education research community, fundamental pedagogics (known for its extreme philosophical abstractions) attained the position as the central foundation stone of all fields of education; even a field such as comparative education was strongly influenced by this position of hegemony of fundamental pedagogics (cf. the key publication of Stone 1983). The liberal stream too found its main source of inspiration and reference point in the liberal system of values, rather than in the education praxis of the day. In any case, this school is also closely associated with the school of liberal education, with its 'ivory tower' kind of universities. The radical paradigms such as the reproduction theory have drawn heavy criticism in the international literature for their decontextualised focus on structures, being far removed from the everyday reality in schools and classrooms (cf. Heyman 1979).

After 1994, because of several factors in the political context, the critical views expressed (very vocal in the era before 1994) became muted (cf. Gumede & Dikeni 2009; Johnson 2004:217–218; 2009:315, 316).

Structure

In the case of the construction of a unified structure to order the mass of accumulated and accumulating information gleaned from research, the impediments identified above in the international arena are equally extant in the South African context too, compounded by a number of additional factors. The three salient but widely divergent paradigms visible in South African scholarship each supposes its own theoretical edifice, very difficult to reconcile within one harmonious, coherent theoretical framework.

One of the deficiencies in South African scholarship in education is the lack of attention to theory (cf. Van der Walt & Wolhuter 2018). Van der Westhuizen, Van der Walt and Wolhuter (2011) conducted an analysis of reviewers' reports of all articles submitted over a seven-year period to the *South African Journal of Education* – a top journal in education in South Africa, at least as measured by impact factor – and found that the biggest single reason for turning down submissions was the absence of a theoretical framework. The years of the academic boycott must surely have cut off South African scholars from the momentous developments in education theory development which have taken place internationally during the decades following 1960.

■ Conclusion

Whilst the scholarly fields of education are a hive of activity (as measured in the number of graduate students, books, peer-reviewed journals and articles and professional organisations and conferences), these fields are at the same time wanting. What is urgently needed is attention to rigour, relevance and the restructuring of knowledge. If these are needed internationally, within the South African context, these problems have been compounded by a number of historical factors. The exposition in this may sound like an undiluted, unidimensional negative depiction of the landscape of (especially South African) education scholarship. The chapters in the remainder of this volume, based mainly on a selection of papers read at the 2018 Annual Conference of SAERA, with its theme being these very same issues, zoom in on particular themes or issues in education scholarship, and beside concretely illustrating the problems of the lack of rigour, relevance

and restructuring, also offer alimpses of how such rigour, relevance and meaningful structuring can be and indeed have been made part of such scholarship in education. In Chapter 2, P.N. Munje, F.P. Khanare and N. Muthusamy present an example of rigorous and relevant research on overcrowded classrooms - a pressing problem not only in South Africa but widely prevalent in the nations of the Global South - whilst it is also be pointed out how findings on such research should be casted into a structure so as to be of maximum. value. The author of the third chapter, dealing with the pressing problem of the need to support novice teachers, demonstrates not only the value of rigorous and relevant research but also underscores the need to package or structure the outcomes of such research in a corpus of knowledge into which the professional community can readily tap into, not only as individual members of the profession but also as groups of professional reflecting practitioners, a need which the second chapter identifies as strongly as the first chapter, which culminates as a recommendation as to how to approach the problem of overcrowded classrooms.

The ensuing chapter (ch. 4, focussing on leadership and school health coordinators), once again reports rigorously conducted qualitative research on a very relevant topic, but what is emerging, that is a common lacuna which this chapter and the preceding two displays, is the pressing need for structure in education scholarship (in South Africa and beyond). There is little in terms of a body of structured research or widely spread theoretical edifice into which this research could be placed and which scholars interested in follow-up research, and practitioners (teachers), school leaders, policy designers and school planners on the topic can consult. In Chapter 5, the unique role of the field of comparative and international education in rendering a corpus of rigorously required, relevant and meaningfully packaged education knowledge in South Africa is explained. This role relates to the comparative method of research, and the field's wide focus on the education system, providing simultaneously an all-encompassing framework, and a framework operational for the mining of practice relevant knowledge.

The theme of the salience of the *context* is taken further in the ensuing chapter (ch. 6), where the authors relate their experience of educating student teachers in using the screening, identification, assessment and support (SIAS) model of learner support. The research reported in this chapter is an example of relevant research, right to the point of the teacher at the coalface of practice, relevant triple fold being scholarship of teaching and learning (SoTL) (on the part of a teacher educator), research being an *in vivo* learning experience for student teachers and research directly serving grade one learners. At the same time, this research shows the why (the importance) and the how of taking into account the context or situation of learners when designing practice to support them.

Then Tanya Spamer, Julialet Rens and Carolina Botha draw attention to the value of parental involvement in the education of children. To be true to the teaching-research symbiosis as a hallmark feature of a university, education research needs to feed into teacher education courses. For all these to qualify as relevant in any societal context, South African in particular, mean to engage with social justice issues. The next two chapters touch upon the issue of social justice. Firstly, the development of critical social justice as part of teacher education, written by Andri Schoonen, Lesley Wood and Corné Kruger, highlights the critical importance of social justice consciousness in rigorously building a relevant structure of education knowledge, and maps the development of critical social justice as its learning flipside. Then Aruna Ankiah-Gangadeen and Pascal Sylvain Nadal write about policies on language of learning and teaching in Mauritius, and in this continues the theme of social justice, highlighted in the preceding chapter as a consideration imperative in the construction of a rigorous, relevant theoretical framework for education. The issue of language of learning and teaching is a too often overlooked critical factor in education not only in Africa but in increasingly multilingual societies worldwide, it is becoming a challenge globally; this chapter rightfully brings this issue to the fore. Noteworthy is the fact that the authors of this chapter also foreground recognitive social justice, besides purely redistributive social justice, thus drawing attention to the role also to be accorded to the voice of students in the construction of a theory of education.

In the final four chapters international developments in the packaging of education knowledge are surveyed, with aim of finding suggestions as to how to make education scholarship in South Africa more relevant, rigorous and especially more structured. Then, also with especially the requirement of structure in mind, guidelines on theory construction in education are offered. The implications and possibilities of the Fourth Industrial Revolution and two new modes of knowledge production in the world (Mode 2 and Mode 3 knowledge) for education scholarship are under discussion in the last two chapters.

Chapter 2

Mapping enablers and constraints in context: Primary teachers' experiences of teaching in crowded classrooms in a South African school

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■ Abstract

Overcrowding in primary school classrooms, and its implications for teaching and learning, have ignited ongoing global discourses. This chapter is underpinned by the school improvement framework, and is based on a qualitative single case study, which interrogated overcrowding in a South African primary school. Data were gathered using unstructured interview questionnaires completed by eight teachers, and observations of three classrooms in a selected school. Data were analysed using a thematic approach. It was gleaned that, although teachers instigated initiatives to manage overcrowded classrooms, their lack of empowerment on best-management practices acted as a constraint. The chapter suggests that teachers should be introduced to professional learning communities as a way of promoting existing initiatives for managing overcrowded classrooms. This can be actualised if the Department of Basic Education monitors and evaluates schools, to identify those facing challenges and capacitates teachers with skills to manage crowded classrooms in the best way possible.

Keywords: Classroom management; Teacher-learner ratio; Learner performance; Crowded classrooms; Teaching and learning; Primary schools.

■ Introduction

Overcrowding in primary schools is an ongoing challenge that is often debated in education spaces around the world, including South Africa (Adams 2014; Lewis 2017; Marais 2016; West & Meier 2020). Over the years, the phenomenon has been a thorn in the flesh of primary school teachers in South Africa (Lumadi 2008). The causes of overcrowding that result in high teacher-learner ratios remain a challenge for affected teachers in many parts of

the world. Meador (2018) notes that, in an ideal society, there would be 15-20 learners in a classroom to ensure effective teaching and learning. In the view of Zenda (2020:37), large classes in some South African schools have a negative impact on practical activities and compromise the management of classroom discipline (West & Meier 2020). Hence, Hanaya, McDonald, and Balie (2020:15) report that, 'a teacher is less likely to have the capability to organise learning systematically in an overcrowded classroom'.

Adams (2014) reports that, in the United Kingdom, considering that the official teacher-learner ratio is 1:30, a quarter of learners are accommodated in overcrowded classrooms. Similarly, the decision by many Australians to live in central business districts is causing overcrowding in urban schools (Lewis 2017). Queensland is the most affected, with up to 25% of schools located in central business districts exceeding the official teacher-learner ratio of 1:28 (Vonow 2016). Statistics show that more than 4000 of Australian state-run schools exceed the official limit by at least three learners (Vonow 2016). These figures are low compared to India, where 60% of learners are accommodated in overcrowded classrooms (Chowdhury 2016).

Unlike the United Kingdom and Australia, the causes of overcrowded classrooms in African countries are largely because of the drive to achieve free and compulsory education (Asodike & Onyeike 2016). There have been inadequate infrastructural upgrades and teacher provisioning to accommodate the growing number of learners that need to benefit from the compulsory basic education drive (Kubheka 2016). In comparative terms, the situation is worst in Nigeria, where 80% of primary schools experience overcrowding (Babatunde 2015). Jayesimi (2020) argues that limited infrastructure exacerbates this problem in Nigerian schools and has negative implications for the universal basic education dream and, consequently, hinders the provision of quality education for primary school learners, leading to low levels of learner achievement. A school in the Rundu area of Namibia is

reported to experience an even more precarious situation, with up to 74 learners crammed into classrooms designed to contain 35 learners, requiring many to sit in uncomfortable positions on the bare floor to learn (Muyamba 2018).

Research indicates that overcrowded classrooms reduce teacher-learner interaction, lead to indiscipline and negatively affect outcomes, as learners do not all have access to resources, which are often limited (Asodike & Onyeike 2016). Overcrowding also leads to inadequate individual learner attention, especially by struggling learners, excessive workload for teachers and an increase in dropout rates (Asodike & Onyeike 2016; Meador 2018; Onwu & Stoffels 2005). It seems that the challenges associated with crowded classrooms are beyond the control of teachers, who are expected to efficiently manage the huge numbers of learners, whilst ensuring smooth teaching and learning, irrespective of the context.

Asodike and Onyeike (2016) note that, because there are no prescribed ways to manage crowded classes, teachers' ingenuity has the potential to introduce some relief through individual and collaborative initiatives. Therefore, teachers should be organised and possess the skills to manage the available space efficiently, and to be creative and able to formulate lessons that are engaging. They should also be able to understand and manage various dynamics within the classroom to ensure a smooth teaching and learning process (Asodike & Onyeike 2016; Meador 2018). According to Tsakeni and Jita (2015), teachers in challenging circumstances can mitigate their situations by working collaboratively, observing what others do and reflecting on their practices, thereby promoting individual and group professional development, in what Voelkel and Chrispeels (2017) consider as professional learning communities (PLCs). When PLCs are applied judiciously, space is created for teachers to collaborate, share their challenges and learn from individual experiences, with the intention of improving teaching and learning and, ultimately, learner performance. Feldman (2017) maintains that such

spaces can lead to a shift in the mind-sets of teachers, and change traditional pedagogical approaches that may no longer be producing the best outcomes.

Overcrowding in South African primary schools

The South African government, in collaboration with the Department of Education, has made tremendous strides in revamping the country's education system by initiating the necessary policies, reallocating resources to needy schools and reserving a large portion of its budget for education. It has also introduced a school feeding scheme that supports its aggressive agenda of compulsory primary education for all (Arendse 2011; McLaren 2017; Munje & Jita 2019; Van der Berg et al. 2011). The government aims to achieve equity and quality education for all. It should, however, be noted that stimulating learner interest and instilling critical thinking skills (Matsepe, Maluleke & Cross 2019) are important gateways to achieving quality education, and these are not achievable in crowded classrooms.

The increasing number of children being taught in overcrowded classrooms is alarming, and causes scrutiny of the government's agenda of quality education for all (Matshipi, Mulaudzi & Mashau 2017), and challenging teacher experiences. Overcrowding is seemingly the norm in South African public primary schools. This is worsening by the day and has severe consequences for teachers and learners. West and Meier (2020) contend that the government, on its own, cannot resolve the problem of overcrowding in South African schools. West and Meier (2020) suggest that success is achievable with the assistance of relevant stakeholders. Noteworthy is the fact that some schools in South Africa still accommodate more than 40 learners in a class (Mbhele 2019; Ntongana 2019). Ngcukana (2018) describes learning in such circumstances as literally squeezing the joy out of teaching and learning by teachers and learners, because of the negative implications of overcrowding in a learning situation.

Amongst the causes of overcrowding in South African primary schools is a lack of classroom infrastructure (Matshipi et al. 2017); many classrooms are too small for the number of learners and teacher provisioning (Kubheka 2016), and a single school often serves an entire community (Matshipi et al. 2017). The crisis seems to be worsening, because teachers increasingly struggle to control the situation, and are expected to find ways and means to navigate such spaces and to facilitate the journey to deliver quality basic education for all (Matsepe et al. 2019). Research in South Africa indicates that, in addition to causing a strain on teachers, in some schools, overcrowded classrooms increase indiscipline, incidents of bullying and violence (Hanaya et al. 2020; Ncontsa & Shumba 2013). Overcrowded classrooms could make it difficult for teachers to identify and deal with cases of bullying, indiscipline and vandalism early enough, before they escalate. These challenges often culminate in negative implications for teaching and learning and, ultimately, lead to low levels of learner performance. Therefore, strategies are required urgently to resolve overcrowding and associated challenges, sooner rather than later, in order to create an enabling learning environment for all learners and, thus, to boost efforts made to improve learner performance (Matshipi et al. 2017). Based on a conviction that not much has been unveiled in terms of strategies to deal with overcrowded classrooms in South Africa, there is a need for government's practical involvement in fighting the problem, as it continues to affect teaching and learning negatively (West & Meier 2020).

It is important to note that the challenges of crowded classrooms are not only applicable to South African schools, but are experienced widely in schools of the Global South. Table 2.1 presents the learners per teacher ratio in primary schools in various parts of the globe.

The data in Table 2.1, in particular those of Global South regions, raise concerns worth interrogating. At a time when PISA and IEA provide mass data banks that are attractive to researchers, scholars such as Vulliamy (2004:277) and Stenhouse (1979)

TABLE 2.1: Learners per teacher ratios in various world regions (2014).

Region	Ratio
Europe	14.20
North America	18.04
South America	20.33
Asia	22.74
Africa	38.03
World average	23.75

Source: Adapted from UNESCO (2019).

caution against the reduction of (education) research to datamining exercises and to the excessive reliance on quantitative studies. This is because of the necessity of taking the complexities of context into account, making qualitative research a preferable option for the present chapter. The research in this chapter is an example of a qualitative study that factors in the complexities of a particular school context by focussing on specific research questions.

■ Research questions

In an attempt to explore this educational space, the chapter delves into the following questions:

- 1. What are teachers' experiences in relation to overcrowded classrooms?
- 2. Why do teachers experience overcrowded classrooms the way they do?
- 3. How do teachers manage overcrowded classrooms?
- 4. How can challenges associated with overcrowded classrooms be turned into opportunities to learn and succeed?

■ Theoretical framework

The chapter employs the school improvement framework, which philosophises the enhancement of change in learning conditions at schools, in order to achieve certain education goals

(Bush & Thurlow 2003). This change can be achieved by facilitating planning to improve teaching and learning conditions (Seifert & Hartnell-Young 2015). The framework addresses qualitative evaluation of classroom challenges, such as overcrowding, and assists in the initiation of change processes that have the potential to ensure classroom conditions that are conducive to teaching and learning (Jansen 2001). The framework emphasises the fact that teachers, as primary change agents in school settings, have the ability and potential to manoeuvre challenges by initiating workable strategies and using their individual resources. However, doing so depends on structures being in place and support mechanisms being at teachers' disposal. Clearly, positive environments have the potential to impact teaching and learning positively and, ultimately, to improve learner performance.

Considering teachers' daily experiences with learners, and the conditions prevalent in schools, teachers have the best understanding and sense of what can be done to mitigate these circumstances, of the potential that can be enhanced through training and ongoing professional development and of what would fit their individual spaces and circumstances. Although teachers are overwhelmed by a variety of challenges related to overcrowding. it is possible that, if given the necessary support and guidance, teachers have the potential to create opportunities and strategies that could lead to improvement. These efforts are likely to lead to outcomes that meet the country's education goals, which include quality education for all - a goal Spaull (2013) visualises as currently under threat. To achieve success in this journey, consideration should be given to the availability of resources, school cultures and pressures accompanying such efforts, whilst being mindful that challenges facing the South African education system are embedded in complex contextual settings.

■ Methodology

A qualitative single case study approach was adopted to obtain vital information on a contemporary event in a natural setting (Punch 2009; Yin 2018). The focus was to explore teachers' understandings and experiences, and the strategies employed when dealing with overcrowded classrooms, which is an ongoing discourse in various school milieus across the globe (Govender & Jacobs 2020). This discourse is essential, because of the vital role classroom settings play in the teaching and learning process.

Unstructured interviews were used to gather data, because of their simplicity and flexibility, and the need to give participants an opportunity to express their individual experiences and opinions. Eight teachers between the ages of 29 and 48 years were chosen to participate in the research. The teachers taught the most overcrowded classes at the particular school - between 50 and 100 learners in a single classroom. The teachers had taught at this school for between 2 and 17 years. These teachers were selected to obtain a comprehensive view of their experiences and strategies for managing overcrowded classrooms, and to determine how their individual resources served as assets in their iourneys as agents of change in the classroom. Regarding their qualifications, five of the teachers had Bachelor's degrees in education; one had a Bachelor in pedagogics, and another, a National Diploma in education. The teachers' profiles were considered suitable for answering the research questions that guided the study (Palys 2008). To corroborate data obtained from teacher interviews, observations were conducted in three classrooms, to decipher what actually happens in overcrowded classrooms.

Observations were used to gather data first-hand on the topic under discussion (Cohen, Manion & Morrison 2011). The essence was to observe teachers' behaviours and attitudes, the way they interact with learners, their teaching methods, as well as how they approach and manage incidents of learner misconduct, which is a common phenomenon in overcrowded classrooms. Although eight teachers participated in the interview process, only three classrooms were observed, multiple times, to validate the pattern of emerging data. Observations were made from the back of the classroom, to ensure that there was no interference in

any activities or scenarios that were taking place in the classroom. These measures were taken to ensure that all data obtained were natural and valid. The data obtained from observations were compared to the data that emerged from interviews, to compare teachers' views with their actions, for the purposes of validity and reliability.

■ Research design

The study focused on a public primary school, which was given the pseudonym Cosmo Primary, located in the Umlazi district in the KwaZulu-Natal province of South Africa. The school accommodates mostly learners from disadvantaged backgrounds; hence, many of them are not required to pay fees. There are between 50 and 100 learners per classroom, and they face dire challenges, such as limited teaching and learning resources. The school has 20 classrooms and 25 teachers. The school's enrolment grossly exceeds policy specifications. The classrooms were selected using the convenience sampling method (Farrokhi & Mahmoudi-Hamidabad 2012).

Data analysis

Interviews were audio-recorded and observations were manually documented. Observations allowed for detailed descriptions of situations within the classroom to be recorded (Creswell 2008). The thematic mode of analysis was used to analyse data emerging from the interviews and observations (Brazeley 2013; Guest, MacQueen & Namey 2012). This approach made it possible to produce rich descriptions of the available data, in a way that gives the reader a good sense of what emerged from the study. The data were read thoroughly, numerous times, then transcribed and analysed. After coding the data, efforts were made to identify emerging patterns. These patterns were sorted into categories and later placed into four main groups: why teachers

manage challenges associated with overcrowded classrooms the way they do, existing challenges associated with overcrowded classrooms at the school, strategies adopted by teachers to manage overcrowded classrooms and why teachers remained resilient despite the challenging nature of their work conditions

Ethical considerations

Because the study involved humans and real-life situations (Dongre & Sankaran 2016), ethical clearance was requested from the University of KwaZulu-Natal (Protocol number: HSS/0435/014M) and the Department of Basic Education. The principal was informed verbally and through a consent form that the principal was asked to sign of the intention to conduct research at the school. In addition, participating teachers were verbally informed of the purpose of the research, what was expected of them, the duration of the research and of their rights during and after the research. The teachers also signed individual consent forms to validate their verbal agreement. For confidentiality purposes, names of teachers and that of the school were replaced with pseudonyms, to enhance the quality of the research (Roger et al. 2018). The teachers were named TA, TB, TC, TD, TE, TF, TG and TH.

■ Findings and discussions

Four major themes emerged from the findings:

- 1. challenges associated with overcrowded classrooms
- 2. why challenges associated with overcrowded classrooms are persistent
- 3. strategies teachers adopt in managing overcrowded classrooms
- 4. how teachers use hope as a survival strategy in the midst of challenging work conditions.

Challenges associated with overcrowded classrooms

The challenges caused by overcrowded classrooms included a gross shortage of resources, restricted availability of space, various health-related challenges, a lack of individual learner attention, learner misconduct, psychological trauma for teachers and increased workload.

School conditions were demoralising for learners, who often find themselves in very uncomfortable spaces. Discomfort was exacerbated by constraints caused by having to share what they had in terms of resources. It was observed that the excitement to learn had disappeared in most of the learners. Researchers identify overcrowding as one of the silent causes of learners' poor performance and dropout (Buop, Aloka & Nyaswa 2018; Mupa & Chinooneka 2014).

In addition to shortages of resources, learners in overcrowded classrooms often compete for insufficient space, which makes movement problematic. In some instances, learners are forced to endure discomfort and sit on the bare floor to acquire an education (Montsho 2016; Ntongana 2019). In reality, desks meant for two learners accommodate four learners. Teacher TA shared personal experiences relating to space in an overcrowded classroom: 'there are too many children in the classroom. The space in the classroom is insufficient for the number of learners [we have]'.

Understandably, overcrowded classrooms pose a potential health hazard for learners. It was reported that learners are particularly restless in summer, because of heat. This discomfort is exacerbated by poor ventilation and a lack of air-conditioning facilities. Teacher TE lamented that: 'sixty-four learners in a class in summer is a nightmare. Fans do not work. Learners are uncomfortable, very restless and not focused'.

Teachers noted that such conditions negatively affect learner's academic achievement. The irony is that, when learners are

crowded into a classroom, individual attention and guidance cannot be given to everyone, a situation that ushers in a multitude of other implications. Teacher TF expounded:

'You lose personal connection with learners and it is difficult to place a name to a face. As a result of not knowing the names of the learners, some feel they are insignificant. Learners cannot receive individual attention.' (Teacher, gender undisclosed, date unknown)

Researchers maintain that, in overcrowded classrooms, there is bound to be less connection between the teacher and the learners, and limited individual assistance, which exacerbates the possibility of demotivation and a feeling of being neglected on the part of the learners (Marais 2016; Meador 2018). Poor performance is likely to be one of the consequences. Notably, disciplinary problems are bound to increase too, especially when learners know that they can get away with bad behaviour, which the teacher does not notice.

Teachers reported that learner misconduct increased in crowded classrooms, especially with issues such as noise, petty theft, harassment and violence. Teacher TB expounded on the noise levels in the classroom:

'There is too much noise, the learners are always talking, and disturbing the class. It is difficult to discipline learners because the numbers are high, learners always talking and fighting.' (Teacher, gender undisclosed, date unknown)

In most cases of misbehaviour, learners ignored the presence of teachers – this trend was also identified in other disadvantaged schools (Munie 2018). Teacher TE explained:

'Learners fight a lot over minor issues, like falling over one another, missing their belongings, as there is no space for their [individual] belongings. So I find myself solving minor issues that [may] provoke serious discipline problems. This takes time from the teaching.' (Teacher, gender undisclosed, date unknown)

Teacher TB confirms that learner discipline negatively influenced teaching and learning and makes teachers reluctant to conduct assessments, in spite of assessment being an important component of teaching and learning. 'I find myself solving minor discipline issues and this takes away time from teaching. I also take home marking as there is not enough time to mark learners' work' (Teacher, gender undisclosed, date unknown). Other teachers also declared time to be a scarce commodity, with not enough time to conduct assessment and do marking. Failing to assess learners is critical because, if teachers do not regularly assess learners, it means that they are defaulting on an important component of teaching and learning, because assessments are conducted for formative and diagnostic purposes (Veldhuis et al. 2013), as well as for quality assurance (Abejehu 2016). Unless they conduct assessments, teachers cannot identify learner challenges and provide the necessary support. In the view of teachers, assessing learners as regularly as required aggravates their workload problem. Teacher TG explained that the workload for teachers emanating from the teaching of overcrowded classrooms extends to the home front:

'I take marking home, since it is impossible to mark at school. This takes away my personal time. My daughter complains that I am neglecting her. I sometimes ignore her needs to get my work done and this causes problems.' (Teacher, gender undisclosed, date unknown)

The teachers described learner misconduct, coupled with additional workload, as frustrating and traumatising, and it often metamorphosed into psychological problems. It was reported that some learners become unnecessarily aggressive because of frustration caused by learner behaviour, and this affected the teachers. Teacher TB shared the following experience: 'I don't cope at all. I am always stressed. I am always stressed and shouting' (Teacher, gender undisclosed, date unknown). Teachers who react in this manner are not likely to achieve intended educational objectives, nor will they be able to complete the syllabus as required by the Department of Basic Education. Teachers' stress levels escalate because of learner misconduct. because neither heads of departments (HODs) nor the principal intervene to heal the teachers. Research reveals that in schools where HODs and principals do not execute their duties, multiple negative effects are bound to result (Marais 2016).

Nkambule and Amsterdam (2018) explain that the South African education system faces certain realities that need to be embraced if a positive way forward is to constitute the country's primary objective. Amongst these realities is providing adequate support for teachers, some of whom are caught up in contexts facing a variety of challenges. However, it was determined that, despite these demotivating circumstances, teachers endeavoured to invoke their individual resources to ensure that learners acquire quality education, against all the odds.

Why challenges associated with overcrowded classrooms are persistent

Participating teachers reported that, despite their experience, they were unable to manage overcrowded classrooms. In their view, their inability was a result of lack of support from management, the way policies are implemented, inadequate teacher training and a lack of ongoing development initiatives.

According to the teachers, the lack of support from HODs and the principal exacerbated their challenges. Teachers reflected that if the stated administrators could give them at least some support, it would go a long way to relieve them of some of their stress, and boost their morale. Research shows that, when teachers are demoralised or unmotivated, there are likely to be direct, negative repercussions for the teaching and learning process (Marais 2016). Teacher TE expounded: 'I am not motivated, sometimes I am confused and I don't know how to handle certain issues and nobody wants to assist. So I figure out on my own what to do' (Teacher. gender undisclosed, date unknown). It is clear that teachers tried to apply their individual resources to solve classroom challenges associated with overcrowding; however, in most instances, the challenge was too overwhelming, and their efforts resulted in isolated pockets of successes. Frustration experienced by teachers when dealing with overcrowded classrooms is a common phenomenon (Meador 2018). According to the teachers, the lukewarm responses of HODs and principals contributed to teachers ceasing to report classroom challenges relating to overcrowding, especially teachers' inability to manage the challenges.

Failure to adhere to the prescribed learner-teacher ratio of 30:1 stipulated by policy (Department of Basic Education 2013) contributes to exacerbating challenges experienced by teachers in overcrowded classrooms. It was reported by teachers that class sizes were, in some cases, more than twice the size recommended by policy, with their current class sizes being between 50 and 100 learners, who were squeezed in classrooms designed to accommodate 30. This concern, which was described as having been the norm at the school for many years, was confirmed during observations. Learners were observed to operate in extremely uncomfortable learning spaces, with some of them sitting on the bare floor. Irrespective of efforts made by teachers, learner performance in conditions such as this is likely to be low. Apparently, the Department of Basic Education is attempting to resolve overcrowding through post provisioning: however, contextual realities such as this indicates that the efforts are not yielding fruit in South African classrooms, especially at the primary level (Baruth 2009), which has implications for the quality of teaching that is envisaged by South Africa's constitution (South Africa 1996). In an investigation into the causes of teachers emigrating from South Africa, Mlambo and Adetiba (2020) identify overcrowding and unconducive teaching environments as some of the factors that motivate teachers to leave the country.

In addition, teachers attributed their inability to manage overcrowded classes to their lack of training, and the absence of continuous professional development initiatives. In the view of teacher TC, teachers had not been given enough guidance during their teacher training on how to manage overcrowded classrooms – what Nkambule and Amsterdam (2018) see as normal within the South African educational system. Teacher TG expounded on the implications of the lack of training and continuous professional development: 'I cannot give of my best. I was not trained to cope with this. The Department needs to provide workshops for teachers who deal with overcrowded classrooms' (Teacher, gender

undisclosed, date unknown). In the view of this teacher, overcrowded classrooms were just another new phenomenon encountered in the real world of work. Teacher TH reported: 'I was not trained for this. This situation has made me dislike teaching and I cannot plan because there are too many challenges that come my way' (Teacher, gender undisclosed, date unknown).

Evidently, teachers were not psychologically prepared for overcrowded classrooms, but are expected to navigate such spaces using their individual resources. Although this could have been an opportunity for teachers to exploit PLCs (Voelkel & Chrispeels 2017) to learn from one another and reflect on their practices for managing overcrowded classrooms, they were not doing so intensively. A teacher (gender undisclosed, date unknown) complained, 'You have no choice; you have to accept it and teach'. In their view, the present circumstances were overwhelming and had implications for their morale as professionals.

Teachers' voices were corroborated by observations, which clearly indicated a deterioration of their passion and enthusiasm in the classroom amongst learners. They were observed as being disinterested and disengaged from lessons, having to operate in cramped space. The way teachers structured their lessons indicated that sub-standard teaching was taking place at the school. Referring to a study of student teachers, Marais (2016) maintains that a lack of skills makes it challenging to manage overcrowded classrooms. The narrative by teachers was that the system is the problem, as it is failing to prepare them adequately for classroom challenges, such as overcrowding. Clearly, when overcrowded classrooms are not managed well, there are likely to be negative consequences for the teaching and learning process (Macías & Sánchez 2015). In addition to their lack of management skills, teachers also reported constraints caused by limited resources, which stifles efforts put in place to manage the teaching and learning situation in overcrowded classrooms (also see Marais 2016), especially in science subjects, where sufficient instruments are required to conduct experiments with maximum learner participation. Teacher TA noted:

'There are not even resources, especially when you want to conduct experiments for natural sciences. When technology projects are done learners are unable to purchase materials and [the] school is unable to provide materials for [all] the learners. This makes teaching very difficult.' (Teacher, gender undisclosed, date unknown)

In the view of this teacher, and as confirmed by the voices of others, it can be argued that the teachers' circumstances were psychologically challenging, which often made them lose hope of assisting learners to achieve quality education, irrespective of teachers' determination to do so.

Strategies teachers adopt in managing overcrowded classrooms

It was evident that, despite a lack of support from administrators, and in spite of inadequate resources and learner indiscipline, teachers were determined to give their learners the best education possible, by tapping into their individual resources and harnessing them to individually, and in a few instances, collectively, create ways and means to manoeuvre challenges associated with overcrowded classrooms. They did this because they were hopeful that their endeavours could have a positive impact on learner performance.

Teachers used corporal punishment, adopted group work approaches and initiated other management strategies, including workable class rules, to ensure smooth teaching and learning, although this objective was not often achieved.

Teachers initiated individual strategies to maintain discipline and, in doing so, sometimes contravened the law by applying corporal punishment to keep learners focused. Teacher TC explained that:

'A practical is hard to conduct. I use corporal punishment and I give learners lots of note[s] to copy and write so that they are busy, but they still scream and shout and act like you are invisible.' (Teacher, gender undisclosed, date unknown; see also Munje 2018)

Although corporal punishment does not guarantee effective teaching, the teachers argued that they are left with no choice, because they were doing what was humanly possible to ensure that teaching and learning was achieved.

Teachers also indicated that teaching styles and methods have to change to adapt to existing conditions and to accommodate all learners. Group work was preferred by these teachers, because of its convenience for teaching and to get all learners involved, as teacher TA explained:

'Group activities are done outside to minimise movement and noise. I take it one step at a time, ensuring that all work prescribed is completed. I tend to shout a lot. I sometime reward them with sweets. No one talks unless they put their hand up.' (Teacher, gender undisclosed, date unknown)

According to the teachers, group work is effective for managing large classes. In their view, group work is easy to consolidate and check. These efforts by the teachers show their abilities as agents of change and, thus, fall within the school improvement framework (Donald, Lazarus & Lolwana 2006). These strategies, however, require teachers to plan well and focus on activities that capture the attention of learners, to engage them and encourage them to participate genuinely. A group work approach is considered to be sustainable for learning in overcrowded classrooms (Asodike & Onyeike 2016; Marais 2016; Mezrigui 2015). Despite group work being seen as a 'convenient' teaching method, it creates spaces in which learners become passive recipients of knowledge (Mtika 2011), with minimum individual learner support being the order of the day (Du Plessis 2020). Furthermore, Jansen (2001) claims that group work is futile in the South African context.

Teachers also formulated workable class rules to keep learner conduct in check. Teacher TF explained how this was done:

'I make clear rules concerning classroom management. I do not ignore minor discipline problems because it saves me time to deal with a small problem than larger ones. I deal with discipline without disrupting the lesson. I provide rules and provide reward[s] for good behaviour.' (Teacher, gender undisclosed, date unknown)

Efforts such as this enabled teachers to manoeuvre the challenges they experienced in overcrowded classrooms, although negative implications for learner academic achievement were still unavoidable. It also emerged that teachers shared their experiences with colleagues, because of the conviction and hope that they could assist learners to achieve success, despite all the odds.

How teachers use hope as a survival strategy in the midst of challenging work conditions

The tenacity of teachers at this school was because of them being able to cling to hope, despite the discouragement that accompanied scenarios in the classroom, which led to demotivation and apathy. In their view, having the learners' best interests at heart has the potential to pave the way for success. Thus, negative attitudes about learner misconduct were overshadowed by the hope that things might change for the better in the near future. Teachers were also inspired by their ability to reflect on what they did, which led to them to acknowledge that learners are mere victims, caught up in a wave of challenges they know nothing about – all learners want is an education to guarantee their future. Teacher TF was passionate in explaining what kept teachers going year after year:

'I try to maintain a positive and calm attitude. I try to find solutions to challenges. I understand that the learners are victims. They do not have a choice with regards to which school they attend.' (Teacher, gender undisclosed, date unknown)

Clearly, the 'small pockets' of efforts made by teachers to enhance smooth teaching and learning in the classroom are in agreement with the school improvement framework. This framework prioritises teachers as agents of change, whilst valuing the tiniest initiative that is meant to nurture the psychological wellbeing of learners (Donald et al. 2006). Most importantly, in an era where pandemics such as COVID-19 pose a threat to humanity, efforts

by the state to decongest classrooms is not an option, but a duty, as classrooms may become new hubs for the spread of viruses (Mzakwe 2020).

■ Conclusion

It was determined that overcrowding is a reality in our schools, and the phenomenon needs to be dealt with aggressively before it gets worse. Clearly, the lack of support from HODs and principals, inadequate resources and the persistent lack of professional development, which could provide ways and means to manage overcrowded classrooms, are making matters worse for teachers. The consequences of overcrowding are glaring for teachers and learners. Situations characterised by indiscipline, bullying, stealing and fighting by learners cause stress and trauma for teachers. Despite these challenges, teachers revealed themselves as enablers; they were very enthusiastic about and hopeful for a better life for learners. They demonstrated their agency by drawing from the experiences of colleagues and finding individual and inventive teaching strategies. However, the pressing challenge posed by overcrowded classrooms made teachers implement policies such as corporal punishment, which any government cannot condone if it wants to protect children's rights.

Recommendations

Considering the complexity of the phenomenon of overcrowded classrooms, teachers in this context demonstrate agency to address it. The researchers, therefore, recommend that affected schools should introduce PLCs, in order to advance existing initiatives for managing overcrowded classrooms. The researchers also suggest that further research is conducted, to explore the use of school improvement theory, which involves learners, educators and communities to explore the causes of overcrowded classes together, and to propose ways of managing or minimising overcrowding in classrooms in South Africa. It is also important

that the Department of Basic Education becomes more involved, through monitoring and evaluating the functionality of schools, to identify schools facing challenges such as overcrowding, in order to provide the necessary assistance. Considering that this study focused on a particular case at a micro level, it would be important that further studies be conducted at a macro level, to gain a deeper understanding of the problem of overcrowding that plagues many schools in South Africa. Through such research efforts, management strategies and approaches to address overcrowding in schools can be developed. In this regard, teachers can apply PLCs to plan their lessons and initiate strategies for managing overcrowded classrooms.

The research culminates in the proposal for establishing PLCs. Professional learning communities should be implemented and subjected to research, and the findings should be included in a structure for improving schools and education quality – a structure that could be tapped into easily by scholars and practitioners alike.

Chapter 3

Novice teachers' challenges in practice and perspective on mentorship

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Abstract

The data received from four novice teacher participants within their first year of in-service teacher practice presents a scope of the experiences that have been influenced by their pre-service teacher education program and in-service support as a practising professional in an urban setting in northern British Columbia, Canada. The participant data revealed experiences, knowledge and needs the novice teachers faced in their first year of service and their understanding of mentorship within their district.

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The participants revealed there was mentorship offered in their school district as an optional program, but was not a policy-driven priority.

Keywords: Canada; Teachers; Teacher attrition; Teacher education; Teacher induction.

■ Study significance

The aim of this study was to determine challenges faced by novice teachers, their experiences and understanding of and access to mentorship as a novice teacher. The research presented is an example of not only rigorous research but also relevant research, as the data will enable a better understanding of the gap between theory and practice regarding novice teacher preparation, in-service practice and mentorship programming through the lens of novice teachers. The shock reality the four novice teachers faced clearly indicates a need for pre-service teacher education programs to be aware of improving program delivery, that is it underscores the need for relevance and rigour in education, in structuring such knowledge so that it can be tapped readily in teacher education programs. The research also reveals the need of individual schools to support these teachers when they are hired, and the support the school district provides in the form of professional development through the implementation of a comprehensive mentorship program, once again a program informed by research, research-derived knowledge thus structured or packaged that in-service education programs for (novice) teachers can easily draw from it.

■ Methodology

Each participant was individually interviewed for approximately 2 h regarding their own experiences and challenges as a novice teacher in their first year. The guided interview questions provided space for the participants to expand on their initial responses and go back to add information in any or all of the foci areas of

the interview. Each participant was also requested to submit a letter regarding any information that they thought would be beneficial to up and coming teacher candidates preparing to transition to become a novice teacher in the K-12 school system. All the participant-related information has been collated and summarised as four distinct cases with regard to their professional practice stemming from pre-service teacher education, practicum experiences, day-to-day classroom experiences and their familiarity and/or involvement with mentorship.

■ Guiding interview questions

- 1. How would you describe the reality of being a novice teacher in comparison to being a pre-service teacher?
- 2. What were some of your greatest experiences regarding successes or accomplishments as a novice teacher?
- 3. What were some of your greatest experiences regarding challenges you faced as a novice teacher?
- 4. Do you feel you were efficiently prepared to fulfil the roles and responsibilities expected of you as a novice teacher?
- 5. What would you change in your pre-service program that would effectively prepare future pre-service teachers?
- 6. What does teacher mentorship mean to you?
- 7. Does your school district provide a mentorship program for novice teachers? Please elaborate on your response.
- 8. What is your experience with teacher mentorship?
- 9. Do you believe mandatory novice teacher policies should be put in place? Please elaborate on your response.
- 10. Do you have any information or concluding remarks you would like to add regarding this interview discussion that we may not have explored?

■ Novice teacher participants

The four participants (P1, P2, P3 and P4) had just completed their first year of professional teaching practice as secondary school

teachers for English, Social Studies and/or History subjects. Participant 1 (P1) specialised in the subject of Social Sciences and English. However, P1 accepted a teaching job as a full-time elementary school Physical Education (PE) teacher because of a lifetime experience of playing and providing coaching for various sports. Participant 2 (P2) worked as a mill worker on a shift from 11:00 pm to 07:00 am for several years before deciding to enrol in a teacher education program. P2 specialisations were also in the subjects of English and humanities. The expressed reason for enrolling stemmed from the joy and interest in learning and experiencing new things. Participant 3 (P3) loved the idea of going back to school and being a student again. P3 held various jobs for several years and felt there was a need to get a career rather than working to pay the bills. P3's parents were teachers. Participant 4 (P4) specialised in the subject areas of English and History. The experience of volunteering in a school district elementary school for two years before enrolling and working as an educational assistant (EA) whilst attending the program were key factors that fuelled P4's desire to complete the program. The offer of two teaching contracts came about after completing the teacher education program, but P4 exclusively chose to be a Teacher on Call (TOC) which is another name for a substitute teacher for several secondary schools in the district.

Data findings

The findings have been summarised for each participant from the individual interview with specific quotes that truly highlight the participants' thoughts and perceptions of the first-year experience and how they might have been better prepared. Included with the summary notes and quotes, the participants have provided a letter with reflective thoughts that they would like to pass on to future teachers transitioning as a novice teacher in the first year of in-service classroom practice.

Participant 1's (P1's) interview

Participant 1 started the novice teacher role as a TOC in May after completing a Bachelor of Education degree and accepted a full-time teaching position in the fall of 2018. Teacher on Call is basically a substitute teacher for absentee classroom teachers. P1 had every intention of being a TOC which would entail filling in or substituting for teachers who are not able to attend for whatever reason. However, the district superintendent called to offer a full-time PE position in one of the several elementary schools.

Although P1 had no official PE teacher education, the lifetime of being involved in sports as a participant and a coach was the foundational piece leading to a successful year. However, this does not preclude challenges experienced throughout the year. The experience with volunteering was an important piece for P1 to be able to build student-teacher relationships in a realm other than in a classroom mode. P1 made the following statement to express their first thoughts about teaching in an elementary school, but soon realised there would be challenges:

'Parts of me thought there'd be a little more rainbows and flowers and little ducks considering elementary school and the whole idea of innocence. You find out pretty quickly that some kids have learned how to work adults. The innocence goes right out the window and even five-year-olds know how to work it'. (Teacher, gender undisclosed, date unknown)

Participant 1 received support and informal mentorship from staff members and the school administration and believes the staff members are appreciative of having a *Go To PE Person* in their school because many of them do not want to teach PE. Participant 1's perception of the first year as an elementary school PE teacher was metaphorically described as *curve balls* being thrown without any anticipation and that there are many little pieces that lead to no one-fix for every situation muck like the one-size does not fit all. The issues arise when students have melt downs and take off from

the outdoor spaces or the gymnasium rather than having a more manageable space such as a classroom. Participant 1 also spoke of friends outside of education earning so much more money without sacrificing time for other people but realised that the idea of teaching students new sports and activities was not a sacrifice in that P1 was coaching students to learn new sports.

Participant 1 reflected on the conversations with other teachers which helped with activity ideas and classroom management strategies and also with the social emotional aspect of the job. The principal was always available when P1 needed assistance in an informal and formal mentorship capacity. Participant 1 was considering applying to another position in the school, because of the pressure of not being specifically trained in PE and running out of ideas to keep the students engaged. The decision to stay as the *Go To PE Person* stemmed from attending a national PE conference where the relevant ideas and strategies were discovered along with building relationships and peer networks with other PE teachers across the country. Participant 1 has heard many colleagues say that they would not teach PE if they did not have permission which allows P1 to step into the roll and get to know all students and staff in the school.

Participant 1's (P1's) letter to pre-service teachers

'Dear Perspective Teacher Candidate

I have been asked to give you a little bit of hindsight wisdom from my practicum experience. Hopefully this "if I knew then what I know now" advice will help you along the way and make your in-service experience better. Firstly, one of my personal mottos is "If it's easy, it's not worth it". The last practicum especially will be amongst the hardest times of your life. I love my job and enjoyed the schooling aspect but there were times that I was afraid to go to school. It was not because of my students it was because I felt my confidence waning. I will give you a few pointers based around a simple theme.

The theme is "Be true to yourself". I know that it can be an abstract concept but I will give you examples to help nail it down (I cannot stand abstract answers and then there is nothing concrete).

The first example is know what you want to do or know what you want to try. Be confident in those decisions, not stubborn. Make sure you have thought out those activities and your application will work and do not be afraid to experiment. The way I see it you have four options: either the activity goes sort of well, mostly well, totally awesome, or it crashes. Right there is a 75% chance of some form of success.

Communication with your co-operating teacher and your supervisor is key. As best as you can, let them know what you are trying to set up and what your aims and objectives are. If something happens in class such as a management issue and you deal with it please make sure you let them know what you did or what you attempted to do. I had a couple of observations where something was brought up and my observer interpreted it wrong but I lacked the confidence to say what I had really done or what my end goal was. Do not let other people make the decisions for you. If you know what you did own it. Sometimes the Socratic method is used to try to get you to answer your own question. Sometimes I felt so brow beaten that I felt I was doing everything wrong and I just admitted nothing was good enough. In actuality, I was probably given the opportunity to own my work and what I had done.

Be flexible and adaptable. Flexibility is the key, because of all the variables during the day. I like being adaptable better and taking the challenges and obstacles that face you and make them work for you. That is a true skill. Don't just dodge something take the time to make it better'. (Teacher, gender undisclosed, date unknown)

Participant 2's (P2's) interview

Participant 2's first perception of being a teacher was that the job would present daily dynamic experiences for which P2 reiterated the appeal of each day being different in a classroom whether it be classroom dynamics or the content being delivered. Participant 2 supported this understanding in the following statement:

I've taught the same unit a couple times now and it's different every time. Kids ask different questions every time, so I guess my thoughts going in was this was a job that was going to challenge me over and over again and I liked that. I hate the idea of something being stagnant'. (Teacher, gender undisclosed, date unknown)

Participant 2 expressed the enjoyment of interacting and building relationships with students, school staff and the administrators. Participant 2's hope is to wake up and go to work every day and enjoy it as stated:

'I don't want to wake up being like oh my god I got to go to work. I don't have any lingering doubts or regrets of my choice to be a teacher'. (Teacher, gender undisclosed, date unknown)

Participant 2 continued to express the importance of making connections with students in order to gauge their social and emotional states which influence the intellectual ability to work.

Participant 2 stated that the most effective learning as a preservice teacher was in the classroom practicum experience. The act of teaching in the classroom was most valuable as a trial by fire or survival by doing it and getting through it. The practice is something that cannot be taught in the teacher education programs. A simple example to support this notion captured P2's experience as a TOC as:

'When things go wrong, you have to know who to talk to. You have to know the support teachers who are the student's case managers, and what counsellor is assigned to them. It's just trial by fire in a sense that you are not prepared for in your pre-service program. Another example is when you're TOCing at a school you need to know which secretary to talk to for your teaching assignment for the day because there could be four of them. You need to know the layout of each school to learn where the classroom is, where the department offices are, location of the washrooms, how the phone system works. It seems so miniscule, but it adds up. So, you cannot be prepared for that in the university or pre-service programs'. (Teacher, gender undisclosed, date unknown)

Participant 2 had the fortune of being mentored by four very strong practicum teachers at different schools before completing

the teacher education program. The indication that these mentors were easy to talk to and offer advice anytime provided a sense of how important mentorship was for P2's early experience as a classroom teacher leading to confidence and the ability to successfully complete the first year as a novice teacher. Participant 2 knew of some teacher candidates who did not receive as much mentoring in that these mentors or co-operating teachers were in their last year before retiring and appeared to not put as much effort into mentorship. Participant 2 indicated that there needs to be more in-service training for co-operating teachers with more communication between the teacher education programs, the school district, the co-operating teachers, practicum supervisor and the teacher candidate regarding overall goals and objectives of the practicum experience.

Participant 2 mentioned the need for an improved TOC booklet designed for each school in the district which should be updated every year as something the teacher education program could initiate as a project in this statement:

'I want to come back to the point of how the university and school districts can assist with the TOC assistance when they arrive in a new school to teach for the day. The whole pamphlet or booklet idea is such a huge professional aspect that you need to be aware for to prepare and make the TOC experience a success. The district gives you a TOC book that has a little thing that says you should arrive at this time and they give you a map a room number, but it's a lot of educational jargon. It's something that you need to experience. At one school there are some classrooms that are not listed on the map in the TOC book. Different schools have different bell times for class schedules. A good idea would be to include the muster point and protocol when there is a fire drill'. (Teacher, gender undisclosed, date unknown)

Participant 2 expressed the importance of peer networking as a form of mentorship. Having the peers to bounce ideas off and find out how these people are dealing with classroom management and other things associated with the students and the classroom or school environment. Participant 2 will seek out a department colleague when requesting assistance regarding subject content:

'There's a huge mentoring factor I get from the people that have been teaching in a school for long time. These teachers know things and are so willing to help. I also try to make sure I let teacher candidates know things that I didn't know when I was a teacher candidate. I make sure I do it in a way that I'm not trying to get off that I'm telling them what to do or they should do things'. (Teacher, gender undisclosed, date unknown)

Participant 2 also suggested that mentorship training and specific guidelines be presented to ensure the mentors and mentees understand their roles. The specifics of mentorship can be explored through professional development for those who wish to be co-operating teachers to mentor teacher candidates which fosters professional respect in the process.

■ Participant 2's (P2's) letter to pre-service teachers

'First Year Teacher Letter

My first year out of the education program was full of highs and lows. My positive experiences mostly centred on the amazing staff members I met at the variety of schools I worked at in School District 57. I started last year as a Teacher Teaching on Call (TTOC) and was assigned to both elementary and secondary schools even though my background of training was in high school. I initially felt extremely overwhelmed in an elementary setting, but thanks to some amazing mentors they made the transition a lot easier for me. For example, I remember one of the days I was subbing in an elementary classroom and a grade one student asked me how to write the letter "h". I remember being completely flustered because I have never been approached with such a question. All the students that I had encountered in secondary schools I had been at had already developed their basic writing skills. My solution to solving that student's question at that time was to just essentially write the 'h' for them. I then remember having a lengthy conversation with another teacher who let me know that my feelings were not uncommon and that teachers who switched from the secondary stream to the elementary stream often encountered similar problems.

Now to transition over to the unhappy part of the letter where I discuss some of the issues I encountered. Firstly, I was never told by anyone just how chaotic it can be walking into multiple schools as a TTOC. Each secondary school has multiple secretaries (sometimes as many as four) and the offices are always packed in the morning, which makes it challenging to figure out where you have to go. For example, when you first show up you have to find out who is the correct secretary, they will then give you the notes the regular teacher has left you, and then you have to find this teacher's room. Each school should give you a handbook with a map but these maps are difficult to read and the book is usually packed with information. Another frustration I had was that each school had a different bell schedule. For instance, some high schools would have short days on Wednesday and some would have it on Thursdays. Some schools had double blocks and some did not. Some schools got out at 3:12 pm whilst others finished at 3:02 or 3:06. This made any hope of consistency from Monday to Friday unachievable. Thankfully the district has decided that all high schools will now operate on the same bell schedule. My last big concern was that I had little to no experience using First Class (school district email system) and Easy Grade Pro (marking program). These programs are so vital in the workplace setting and are used every day by staff and I kind of had to learn as I went and asked people tons of questions. In fact, I am still learning more about them as I type this today. I am now halfway through my second year out of the program and I have felt as though I have come so far but I still realise there is still so far to go. My advice would be to not let things intimidate you and ask for help as problems occur. Administration and your colleagues are here to help you and remember "the only time you are actually growing is when you're uncomfortable". (Teacher, gender undisclosed, date unknown)

■ Participant 3's (P3's) interview

Participant 3's perception of being a first-year novice teacher is that there is a lot more freedom as a teacher than there is as a pre-service teacher. The practicum experience calls for one to be working to the standards of the co-operating teacher and the practicum supervisor that may be philosophically or professionally misaligned. Participant 3 indicated that this was the case in the long practicum of 3 months and had to adjust the teaching style

and classroom activities depending on who was observing and providing feedback. There was the reality of the realisation that the practicum placement was not a place where P3 could explore and experiment within the classroom and had to operate to the standards that others have set and expected to be followed. Participant 3 expressed the long practicum experience as: 'I was a guest in the classroom'.

Participant 3 noted that in the first practicums the students were easy to manage and that both the practicums were easier than the third and last one. Participant 3 felt there was not a lot of feedback from the co-operating teachers and the practicum supervisors. The last practicum was challenging as P3 realised the difficulty with classroom management. This challenge led to finding peers and setting up a peer network and mentoring group to bounce ideas off of each other. Participant 3 knew when entering into the teaching profession that teaching would be a challenging job because of being a child of two parents who were teachers. Participant 3 was very much aware that teaching school was not a 9:00 am to 3:00 pm, Monday to Friday job. The challenges and difficulties stemmed from being too kind and understanding of the students at the beginning and would be taken advantage of because of it:

'Being kind and understanding has bitten me in the ass. The kids think I'm too nice. They tell me you're too nice. I'm fighting battles every day; the same battles with the same kids. I keep saying if these are the most difficult kids I ever have in my career at least I got it out of the way early'. (Teacher, gender undisclosed, date unknown)

Participant 3 stated how challenging one student was, but much of it came from the home life rather than how or what P3 was doing in the class:

'I don't know how we [novice teachers] could have been better prepared as teacher candidates. I think about my students and what they're facing at home. I have a student who is a total jerk because his mom is a recovering drug addict and abandoned him. Now she's fighting his dad for custody of him and the kid is really angry. I know why he's a jerk and want him to make better choices in school, but

I completely understand why he's not making good choices. So, no, I'm not prepared. If there are 25 kids in each class and at least four of those kids come to school with a story like that it's an emotional burden to know all this stuff about these kids and not be able to help them because the classroom has to be conducted in a certain way and one kid might be melting down and you completely get the reason why but he's still disrupting everyone else'. (Teacher, gender undisclosed, date unknown)

Participant 3 felt that the school administration has not effectively supported the teachers who experience challenging students in that there is no follow through when discipline issues arise which exacerbates the problems. Participant 3's notion of added apprenticeship experience with more hands-on teaching and less theory would better prepare teacher candidates to transition into their novice year of classroom practice. The practicum experience is always based on the particular subjects the candidates specialised in throughout the program. Teacher candidates only teach those subjects when they go out to the schools for their practicum experience:

'I was prepared to teach English. I can plan and teach an English lesson in my sleep, but will I ever teach English as a new teacher? Not likely, but I did get an English class last semester and one this this semester. I am now teaching four other classes outside of my subject area without any preparation time built into my day. This is an issue at the school district and Ministry of Education level not the teacher education program'. (Teacher, gender undisclosed, date unknown)

Participant 3 would like to see more opportunity to learn about and practice assessment strategies in the teacher education program. The development of rubrics and being able to convey to the students what the assessment means and how the student can improve to attain the next level on the rubric scale would be beneficial.

Participant 3 values and enjoys the positive relationships even with some of the most challenging students. The student or teacher connections and relationships help with learning leading to success to some degree for most if not all students.

The connection and relationship also extend itself to peers for which P3 was fortunate in her novice year to have a mentor with 17 years of classroom experience.

Participant 3 referred back to the idea of apprenticeship in that the experience is not real until one is in the room to experience the classroom dynamics. Participant 3 thought case studies are interesting but commented on being with the students whilst gaining real classroom experiences whilst having the safety net of a co-operating teacher mentoring teacher candidates for longer periods of time before the teacher candidate moves onto the novice classroom teacher in their own classroom.

Participant 3 mentioned the local school district TOC booklet that provides information on every different school could be better organised. The 1 day P3 signed in as a TOC the school had a fire drill, but none could find out the muster point for P3's class to wait out the fire drill exercise.

Participant 3 also added the need for EA roles and responsibilities to be explained in greater detail in teacher education programs along with the teacher's responsibility as the EA's direct supervisor to better prepare novice teachers. The principal in P3's school is really available and part of the team along with the office staff, but not all schools operate like this. P3 finished out the interview with mentioning the optional mentorship program in the school district. Participant 3 took advantage of the program and signed up with a mentor who was in the same school. Participant 3 described the experience as:

'It has been great. A couple of other novice teachers from my cohort are in the mentorship program, but they haven't had the same experience as me because the teacher hasn't been at the same school so they've had to arrange meetings. I haven't had that issue because I can just go up to my mentor in the prep room or I get to eat lunch with my mentor every day. He's been great. He has been a resource that I can tap into whenever I have any question'. (Teacher, gender undisclosed, date unknown)

■ Participant 3's (P3's) letter to pre-service teachers

'In my first year of teaching, I wish I'd had more knowledge about webmail; there is a ton of good information in there if you know where to look. It would have been extremely useful if I'd had experience during the program with teaching content other than what I'd developed. It would also have been helpful to have had experience teaching outside of my area. New teachers barely get to teach in their area, we get what we call a dog's breakfast. A schedule that entails all the classes the experienced teachers don't want. Some experience with teaching Planning or Family Studies would have been useful in my first year. I wish I knew how to assign a detention when I started teaching. I wish I'd had some working knowledge of assessment and how to do it. Above all, what I lacked – and am still slowly building are effective classroom management skills and strategies'. (Teacher, gender undisclosed, date unknown)

■ Participant 4's (P4's) interview

Participant 4 believed the learning experienced in the novice year of teaching was amazing because of the opportunity to go into many schools and work with so many teachers and students in the district as a TOC. Participant 4 truly felt that everyone should substitute for a period of time after completing the teacher education program in making the following statement:

'I almost had a narrow mindset thinking I want to do English and History as these are my subject areas. I love them so and I feel passionate about them, but it was good to be forced out of my comfort area to see what other subjects are like and how teachers are teaching them. I can now honestly and comfortably say that I would be happy to teach any subject except for Math and French. I feel like I was married to English and History subjects because I spent my entire undergraduate degree being engrossed in those subjects and then in my practicum experiences. P4 was offered teaching contracts and turned them down to stay with the TOC experience for at least another year'. (Teacher, gender undisclosed, date unknown)

It took P4 time to mature as a person to realise that teaching is what they wanted as a career choice. Participant 4 acknowledged the different professional roles and responsibilities that are expected of full-time or contract teachers compared to TOCs. However, like anyone in a classroom, learning how to manage behaviours and productivity is always a concern for teachers as it was for P4 with the supporting thoughts:

'If you're not able to manage the students you cannot teach them so behaviour management is almost the first thing you have to master and I'm not good at it. I'm still working on it. I think every new teacher almost want to be nice because you want students to like you, but you have to understand that you are in a position of authority. If you are too nice then you will get taken advantage of'. (Teacher, gender undisclosed, date unknown)

P4 believes the preparation for the role as a novice teacher depends on the co-operating teacher and how they determine what your experiences will be and how to navigate and learn to be a good educator as a teacher candidate. The 3 month practicum was essential in shaping P4's teaching ability and comfort in the classroom. P4's co-operating teacher or mentor was as extremely helpful and was able to demonstrate how to question effectively, how to maintain a group discussion, how to look at materials and critically analyse materials that would challenge students in a good way. One wish P4 requested was for future teacher candidates to become familiar with the school district's grading computer program during the teacher education program.

A TOC moves around to all the different schools and is issued a TOC Handbook that provided details such as district contact information, payroll process, general protocol when working in schools and other information pertinent to teachers. An absolute missed opportunity for P4 as a TOC was the offer of the mentorship program that was not sent to TOCs. The optional mentorship program was offered to contract and full-time teachers. P4 has taken the opportunity to seek out informal mentorship in the various schools across the district:

'I've gotten familiar with the staff at all the schools. I think it would be beneficial to be part of the mentorship program, but I don't know how they would do it as I teach in so many classes in so many schools. I think being introduced to the secretaries at each school is huge because they can make or break your day'. (Teacher, gender undisclosed, date unknown)

A suggestion from P4 to increase the length of the practicum experience with a reduced amount of theory content would better prepare teacher candidates to transition into their novice teacher role in the first year of their career:

'Time in the classroom is truly what prepares you to be a good teacher and talking to other teachers. The conversations with my supervisor, co-operating teacher, other staff members provides insight to being the best version of yourself because you are always learning. I know that there was this suggestion of having a mentorship program with other new teachers so, if I am TOCing and notice a student teacher in my school I approach them to have a conversation of how they are doing while they feel more comfortable talking with me without having that professional mask and can ask questions they might not ask of their supervisor or co-operating teachers'. (Teacher, gender undisclosed, date unknown)

P4 expressed the feeling of not having enough time in the classroom with the long 3-month practicum described as a *sink* or *swim* experience that the lack of preparation was at the forefront. P4 felt that finding a peer network in each school relieved some of the anxiety that helped with adjusting as a novice teacher. P4 helped in the realisation that the next five years will be a huge learning curve and that mistakes will be made, but one must learn from those mistakes:

'The one thing my teacher education program really, really taught me was reflecting on mistakes made and realizes there will be mistakes, but the reflection is about what do you do when you make those mistakes. The real question is: How are you going to learn from those mistakes to you know making that transition to your co-operating teacher and all those good things. Teaching is *trial by fire'*. (Teacher, gender undisclosed, date unknown)

Participant 4's (P4's) letter to pre-service teachers

'To All Novice Teachers

It has become wildly obvious in this past year that the idea of being an Educator and actually being an Educator, are two very different things. The truth is, once school is over and you receive that degree you worked so hard for, the learning journey of being a lifelong Educator has only just begun. Depending on the person, this reality is either incredibly exciting or terrifying. In my experience, I was a mixture of both and I am happy to report that my first year of being a novice teacher was a success. I attribute my positive progress to the fact that I valued three very important aspects of being an Educator: frequent reflection, networking with other teachers and making time for self-care.

Yes, vigorous reflection whilst in the education program felt like a tall task and the thought of keeping a journal to record all of your inner thoughts on your performance or emailing a co-operating teacher strategies on how you can "do better next time" makes you want to roll your eyes and not finish reading this letter. However, there are major benefits to keeping up with this practice and mindset! For me, the way I reflected changed (no journals or obligatory emails - thank goodness). It is easy to know when a lesson did not go well or if you had a poor interaction with a student or colleague. Your gut tells you so. Sometimes it is instant and sometimes it happens on the drive home when you finally have a moment to digest the day. It is these moments that you need to address what went wrong and how you would deal with it differently next time or how can you turn the situation around if it is ongoing. It is also in these moments that you need to acknowledge that you will make mistakes and will continue to make mistakes throughout your entire career. It is how you choose to deal with those mistakes that will propel you forward.

Part of your reflection process can also involve other teachers in the building. In all honesty, talking about what is going on in your classroom with other teachers is the most effective form of reflection. Also, whether you like it or not, sharing your experiences and asking questions to other teachers is the best way to network. The benefits of opening a line of communication and admitting to being a novice teacher to your colleagues are that many of them can relate to that

time in their career and may share their resources, offer alternative ideas that you would have never thought of, etc. Opening up to your fellow comrades can also establish a safe place for you to share your challenges with at work so you do not carry that stress home. It is easy to stay in your classroom and avoid making relationships with the people you work with. All the same, it does not take much to join your fellow staff members in the lunchroom and make some connections that will more than likely help you out in the long run.

When thinking of yourself lasting a long career, self-care is vital. The hard reality is that teaching is exhausting, time-consuming and can take a toll on your mental health. Whilst reflecting on your practice is crucial, there is a difference between reflecting and dwelling. Sometimes we need to let the little things go in order to selfpreserve. Part of being an Educator is that there will always be bad days. When I have those days, I acknowledge that I did the best I could with what I had in that moment, I survived. There is nothing wrong with that. I remember self-care was stressed quite a bit to us whilst in the Teaching Program but I sacrificed a great deal of myself to be successful and found myself constantly exhausted and feeling defeated. Truth be told, I had quite a bit of self-doubt because I did not focus on anything but teaching and forgot to take care of myself in the process. I began to constantly worry about small details and had a high level of anxiety that was making being in the classroom unenjoyable. I kept measuring my success with an unattainable standard and was incredibly hard on myself. As a result, I have developed the mentality to "enjoy the climb" rather than dread it. I will often remind myself that I actually love my job and find happiness in all aspects of it and could not imagine myself doing anything else. The constant worries that I previously had begun to fade and I find myself a better teacher today for allowing myself to not plan out every single detail of the day. The best moments occur candidly and allowing them to happen authentically is key. Self-care is allowing yourself to think on your feet and to not stress over what you could do better. There's always next time.

At the end of the day, being a novice teacher has its challenges. Many former students of the education program might not feel prepared for that first year "out there". However, it is truly experience that will drive young Educators forward and it takes time to get there. I am not a perfect teacher and probably never will be. I hope I always continue to try new things with my students and to learn from them on how I can improve for next time or even better, right there with them in the

moment - what can I do to make this work? If I am not trying new things, I am not learning how to be a better teacher. My biggest piece of advice is being open to making mistakes and learning from those mistakes. This career is meant to be fun! So, have fun with it!

Sincerely

P4 (a first-year survivor)'. (Teacher, gender undisclosed, date unknown)

■ Conclusion

The four participants' interviews clearly indicated themes or the areas of concern or similarities when reflecting back on their first year of teaching. The following themes emerged throughout the interview process as: teaching is hands-on and often is experienced as a trial by fire; the teacher education programs can improve the teacher candidate learning through extended practicums and less theory or content driven; positive relationships at all levels of the school system enhances success for all; informal and formal mentorship programing is valuable for novice teachers: teacher education programs need to focus more on the classroom management and assessment strategies that are applicable in practice along with learning the day-to-day computer programs used for grading and email; there is a need to improve TOC experiences with a better booklet with practical information that is applicable to each school; lastly, the most valuable learning in the teacher education program took place in the practicum placement classrooms.

Research implications

The implication of this study is to inform education stakeholders in the K-12 school system of the value additional hands-on practicum experience can have for the professional growth of teacher candidates transitioning to the novice teacher role. The message was loud and clear that greater emphasis should be paced in formal mentorship programming with training for the

mentors and mentees as a priority for teacher future retention, development and effectiveness. The study revealed the lack of priority of mentorship programming in this particular school district which left novice teachers to seek out mentors on their own or start their own peer network as peer mentorship.

Rigour, relevance and structure

Teacher attrition, amongst novice teachers in particular is an issue often reported (cf. Hans-Vaughn & Scherff 2008) and raising concern from the vantage points of the interest of the teacher concerned, the teaching profession as well as schools and students. This problem has not spared South African education; furthermore concerns are frequently expressed about rigour in South African (pre-service and in-service) teacher education (cf. CDE 2015; Wolhuter 2019). This study reported in this chapter is not, as the first chapter, an illustration of rigorously conducted relevant research, but points out to the need for in-service teachers and designers or instructors of inservice teacher education programmes, programmes for novice teachers in particular, to have available a body of knowledge produced by rigorous scholarship, and packaged or structured in a way so that it could be easily and fruitfully tapped into by such novice teachers and instructors or designers of in-service teacher education programmes alike. Not only teachers in their individual capacities but also collectively as professional groups reflecting on their practices - a need which the research subjects in this chapter pointed out, connecting to the conclusion reached in Chapter 2 regarding teachers handling overcrowded classrooms.

Chapter 4

School health promotion coordinators' perception of caring leadership provision by principals

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■ Abstract

Caring lies at the heart of effective enhancement of healthy school environments and good school leadership. This is evidenced by health policies wherein principals are indirectly obliged to act ethically and morally. By so doing they assume their caring role that will enable the development of human

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capital which will shape and improve their schools as healthpromoting institutions. This chapter develops the idea of caring leadership based on the Kantian moral theory by investigating what would qualify principals of schools implementing health programmes to be caring leaders in Kant's sense. This was based on their provision of care to teachers who were coordinators of health promotion programmes. This study was conducted in schools in two provinces in South Africa with principals, school management team members and coordinators of health programmes as participants. This was a qualitative research study that included two rural and two township schools with 16 participants. As this was an exploratory, phenomenological study, data were gathered using multiple collection tools: narratives, interviews and shadowing. Data were analysed through the lens of ethics of care, in particular, caring leadership. The findings indicated signs of caring leadership in the actions and interactions of the principals and coordinators; principals and community members and principals and other external stakeholders. Communal orientation of principals in participating rural schools enhanced the provision of caring leadership towards coordinators. Some participants observed caring for the health programmes rather than for the coordinators per se. This chapter, as the first two, demonstrates rigorous and relevant research that places the outcome of such scholarship in a structured framework of school improvement.

Keywords: Health promotion; Moral theory; Care; Ethical leadership; Caring environments.

■ Introduction

School leadership is an important precursor for school level adoption and implementation of school health promotion strategies. School health promotion is an internationally recognised approach that connects health promotion and education in a planned, integrated and holistic way. South Africa adopted the health-promoting school (HPS) concept in 1994 in an

attempt to address historical imbalances in both educational and health services (World Health Organization [WHO] 2013). The health promotion policy and school health promotion programme were thus progressively institutionalised and integrated between 1994 and 2000. The four distinct but interrelated pillars of school health promotion in South Africa are: healthy school policies, supportive learning environments, strong community links, personal skills development and the provision of appropriate education support services (University of Western Cape 2006). Programmes that are developed from health policies are coordinated by teachers who are at the forefront in ensuring that learners in their schools benefit from this nation-wide initiative. A continuous search for factors that can contribute to the competence of such coordinators needs to be embarked on. For instance the results of a recent study by Brunette (2017) suggest that 'personal health beliefs of teachers may only be a small factor' in coordinators' effectiveness and have more to do with structural factors that define and support them. Such roles may have less to do with inherent feelings about health and more to do with the structural factors that define and support them. The pivotal role of teachers in shaping and improving the HPS concept in their school communities is one of the drivers for healthpromoting schools in many countries (St Leger 2000).

The school principal has an obligation to provide everyone within the school with a healthy working environment. This compulsion is derived from the South African Constitution (South Africa 1996), which states that each person has the right to work in an environment that is not hazardous to his or her health and wellbeing. However, achieving and sustaining school-wide implementation continues to pose a challenge to the advancement of school health promotion and research shows that principals do not play a caring leader role. For instance, a research conducted by McIsaac et al. (2015) revealed that schools that were stimulated by jurisdictional vision and provided with relevant HPS support exhibited enhanced HPS functioning through the implementation components. Furthermore, Johnson and Lazarus (2003)

postulate that the school staff requires guidance and assistance especially with new innovations such as health promotion.

■ Problem statement

The health-promoting schools framework comprises programmes that are to be implemented by each school that has obtained a health-promoting status. The difficulty lies in encouraging staff members to coordinate health promotion programmes. acceptance and embrace the concept of HPS. Coordination and acceptance of a programme according to Gugglberger (2011) and Ingemarson et al. (2014) are crucial to its integration into the everyday core business of a school, which in turn makes positive health-related change more likely. Programme implementation according to Clarke, O'Sulivan and Berry (2010), De Meij et al. (2012) represents a complex interaction between the characteristics of the innovation (school health promotion), the providers (teachers coordinating health programmes) and various aspects of the organisation and functioning. Coordinators are often concerned with seeking practical solutions and gaining new knowledge that meets their situational needs, organisational circumstance and stage of growth (Boot et al. 2010) which makes synchronisation challenging. Macnab, Gagnon and Steward (2014:174) emphasise the importance of leadership in programme implementation which can help to embed the program in the structure and life of the school. If the negative impact of the implementation becomes too challenging, it may hinder programme development and decrease coordinators' motivation. Coordinators are effectively 'the drivers for change' or agents of change and such an understanding is central to the HPS model. Moreover, schools have education and not health as their mission; therefore, these teachers may also experience a conflict of goals (Viia & Wold 2005).

The findings of a study conducted by Jourdani et al. (2011) indicated that the majority of the participants interviewed mentioned that the programme implementation created tension

amongst staff. These pressures were linked to the fact that the school health programme approach is not shared by the whole staff. The strained relationships may lead to withdrawal of staff members from the programme, thereby reducing the support for the programme implementation and leaving the coordinator on her or his own without any kind of assistance. This situation could generate potential failure in the implementation in other contexts (Deschesnes et al. 2014). Such forces from within the school and amongst the teaching staff also mitigate attention for caring leadership in support of the coordinators.

The involvement and provision of leadership by teachers in health promotion has always been classroom based. The multipronged approach (policy development, community engagement, programme development, health and social welfare sector collaboration, a focus on enhancement of healthy physical and social school environments) to health promotion in schools suggested by the World Health Organization (WHO) proposes that teachers become more proactive outside the classroom in working with other key stakeholders in the school communities (St Leger 2000). Day (2000) advocates for teachers to be assisted in sustaining their enthusiasm for and commitment to their work in school health promotion, and one of the ways for supporting teachers could be the endowment of a caring leadership. The principal is the most powerful person and can shape the organisational conditions necessary for the success of health programmes and can be pivotal in enforcing teamwork more than just a teacher.

Studies that focus on caring leadership especially with regard to health promotion in schools are sparse. For instance, the research conducted by Louis, Murphy and Smylie (2016) which intended to propose a conceptual framework for caring in schools and caring school leadership focused on caring principal leadership to school-level supports for student academic learning. There is a vast body of literature available on caring about and caring for learners (Ellerbrock & Kiefer 2010; Louis et al. 2016). It is for such reasons that this research focuses on caring for support

of coordinators to contribute and advance the current understanding of how coordinators can be supported in order for them to be effective in their actions. Although much research pertaining to the ethics of care in education focuses on teachers and learners to improve teaching and learning, the researcher believes that it can be extended and enacted in school health promotion. In this research, I argue that teachers who are coordinators of health programmes are care givers who also need to be cared for. If coordinators are not cared for themselves they might be overwhelmed with the realities of caring for learners and caring about the health programmes they are responsible for.

In light of the above problems, the question that comes to mind is: how can principals provide leadership that can fully support health promotion programme coordinators? The objective of the research was to determine the nature of caring leadership enacted and the essence of experiences of being provided with caring leadership. The important concepts and a theory that formed a framework for this research are elaborated below.

■ Conceptual and theoretical framework

In promoting healthy school environments, the WHO suggests a model that advocates the whole-school approach. This approach includes a top-down process especially in the development of health promotion policies employed principally to address significant health issues identified by national or local agencies; health promotion programmes that are developed from policies; involvement of staff members and learners in the implementation of programmes and community engagement by means of collaborations and partnerships. A bottom-up approach has also been used in many instances to introduce the concept of HPS using a single health issue of local relevance (Macnab & Kasangaki 2012). Such an approach in South African schools has

allowed for the implementation of adopt a learner (Kwatubana & Ebrahim 2019), a programme of informal adoption of vulnerable learners including those from child-headed households by teachers, gardening projects and others. Macnab and Kasangaki (2012) also maintain that with successful implementation of a program to address an identified issue, schools are expected to take ownership of their program, identify additional health topics of relevance to them and expand their HPS activities.

Health programmes are led and coordinated by a teacher who is usually elected in a school meeting. The chosen coordinator of a programme has to be assisted by other teachers who will form a committee that is responsible for implementing the health policy and the programme the committee is responsible for. The policies can be nationally developed or school-based. The coordinator's responsibility is to convene meetings with the committee members and make sure that every member understands what the role of the committee is and what processes are to be followed when implementing the policy. Motivation of committee members and other volunteers and effective communication by the coordinator is a given requirement. In a study conducted by Viig and Wold (2005), participants indicated that school coordinators and planning group are important in operating health promotion programmes in schools. The most important responsibilities of a coordinator in this study were regarded as 'passing on information to the participants of the programme, organising, systematising and coordinating the health programme'. A study by Kwatubana and Nhlapo (2020) found that support for the programmes was key and that there needs to be clear communication about processes so that everyone understands his or her role. In such situations, the school principal acts as an overseer of the programmes within the school. He or she is the accounting officer who takes the responsibility for the failure or the success of the programme. His or her role in the implementation of health programmes is delegated to the coordinators whom he or she has to care for, guide and support.

The ethics of care in this research is taken from Gilligan's (1982) and Noddings's (1984) approach that was more on relationships and in particular with regard to 'needing to care' as a response to the individual being cared for and about. Caring according to Weissbourd et al. (2014) refers to a concern for and acting on behalf of others and to kindness, fairness and the pursuit of a common good. Caring as postulated by Noddings (2005) is not only what one does but also how and why one does it. Van Direndonck and Patterson (2015) contend that caring involves observation and assessment of identification with, and response to situations, needs, interests, joys and concerns of others. Caring is grounded in motivation towards the betterment of others (Lawrence & Maitlis 2012). In order for caring to be effective and benefit teachers burdened with the responsibility of school health programme implementation, it has to go beyond feelings of concern and sentiment to actions to achieve particular aims on behalf of others as indicated by Aarjoon (2000). Caring is particularly important in school health promotion as teachers' experiences of being cared for can help them learn to be caring as Luthans and Youssef (2007) postulate: caring begets caring. McKamey (2011) argues that the two most important concepts of caring are: caring for and caring about. Caring for on one hand involves the day-to-day interpersonal interactions that attend to a person's needs at a specific time. Caring for in this research would encompass coordinators caring for learners that are the beneficiaries of the programmes they are implementing and principals caring for both the coordinators and learners. The interactions in caring for are private and attend to specific individual situations of learners and coordinators. Caring about on the other hand denotes an action or interaction that attends to a more general principle, concept or policy. In other words, the act of caring about has implications that are greater than any one interpersonal relationship. Caring about is sometimes associated with social or hierarchical positions of power, and in other instances, it can be associated with communities of practice. The processes of caring about are often attributed to people in positions of power in schools; hence, this research focusses on the principal as a leader. Consequently, the basic assumption of Noddings's (1994) ethics of care is the reciprocal relationship between the one caring and the one cared for, where the former feels obligated and responsible to empower the latter (Owens & Ennis 2005).

In school health promotion, the processes of caring for and caring about cannot be separated although they are distinct concepts. Principals, because of their position in the hierarchy are expected to care for coordinators of health programmes and about health promotion in general. Paying more attention to one of the concepts and processes at the expense of the other would be detrimental to the school. Coordinators deserve to be cared for and the caring about their wellbeing is a prerequisite as one is responsible for leading a team of people that drives a school health programme forward. Providing care to teachers who are caregivers themselves would intend to address their particular needs in order to promote their functioning, success and their general wellbeing.

Caring leadership requires particular competencies of which according to Smylie, Murphy and Louis (2016) are: knowledge which is the authentic understanding of others and their needs; understanding the relative efficacy of approaches and strategies that address the needs and concerns of others; knowledge of self and the ability to develop the capacity for caring and knowledge and skills for developing caring amongst others and creating contexts even beyond the school which are conducive to developing and expressing caring (Lawrence & Maitlis 2012). In his theoretical study, Van der Vyver (2011) discussed the three determinants of principals' care: psychological. organisational or workplace and management. The emotional intelligence as a psychological determinant is linked to the notion that an emotionally intelligent school leader has the ability to show empathy, be optimistic, build morale and motivate (Harms & Credé 2010); these abilities are directly associated with care. The school leaders' duty therefore is to ensure that a conducive environment in which the wellness/health coordinator operates is also provided. Coordinators of health programmes teach first and foremost, they have the same teaching load as all the staff members in a school in South Africa; leading a health programme is added on top of what they are responsible for. Providing necessary resources and capacity building can contribute to commitment to their work. Darling-Hammond (2003) argues that despite being recognised as agents of change in schools, teachers are not experts in health promotion, therefore they need all the assistance they can get to be effective in leading health programmes. The principal leadership determinants in this situation would pertain to issues such as empowerment, providing leadership and support and the caring leader should be an understanding listener (Kroth & Keeler 2009).

Kant's moral theory guides this study. Kant (1785) believes that our deeds must be unconditional, not expect something in return as we are ethically compelled to act out of good will. People are motivated to act morally by obligation. An act that is performed because of feeling duty bound as opposed to personal desires and intentions can be regarded as universal, and thus, acceptable to all. 'The moral value is established by the intention of the person acting' (Kant 1785). Kant (1963) puts a leader at the forefront not in terms of power but with regard to their interactions with their followers that should be guided by moral rules. Following these moral rules has to do be done out of one's own free will and be motivated by doing good.

This research intended to explore by means of empirical research how school leaders provided caring leadership to teachers that were heading health programmes in public schools in South Africa. The objectives were to determine the nature of caring leadership enacted and the essence of experiences of being provided with caring leadership. I made use of both the existential and transcendental phenomenologies; both can be applied in search of foundational structures of experience,

thought and reality (Edie 1964). In using existentialism, I wanted to focus on the nature of caring leadership that was provided to the coordinators by the principals regarding what is perceived, sensed and known from the participants' experience as implied by Moustakas (1994). By using transcendental phenomenology, I was going to be able to get data on the essence of the lived experiences of the participants (teachers) with regard to the caring leadership provided. The empirical research conducted, the results and the findings are elaborated below.

■ Empirical research

This study made use of a qualitative approach that enables researchers to empathise with participants and discover how they see the reality of a particular situation (Kreuger 2009). Phenomenological design was preferred as the aim was to describe as accurately as possible the phenomenon of a caring leader from the perspective of the participants, refraining from any pre-given framework, but remaining true to the facts.

Participant selection

Prior to the start of a four-year project on: Organisational Development and Change Management and Promotion of Healthy Physical School Environments that involves researchers and students from three provinces in South Africa, a pilot study was conducted in two of these provinces. Regarding the selection of schools for the project the criterion was based on schools with more than 1500 learners. The assumption was that in such schools it would be more challenging to promote healthy physical school environments. This preliminary study was conducted in schools that were not selected for the project in both provinces but had almost the same number of learners. However, both schools in the Free State were part of another research project. Working with the same group of teachers overtime gave me an opportunity to build a relationship and understand the context of

the schools better. I was able to observe patterns of events that occurred and reoccurred over time because of the 'hanging out' as suggested by Luttrell (2010). The selection of participants was guided by the objective to understand the perceptions of the participants with regard to how school leaders provided caring leadership to coordinators of health programmes. To better understand the elements that make up action and interaction caring for and about coordinators, I purposefully selected principals, teachers and coordinators of health programmes in the Free State and Limpopo provinces of South Africa. As suggested by Kruger (1988), I looked for participants who had experience relating to the School Health Promotion.

Two schools in the Free State and two in Limpopo participated in the research. I had a mixture of township (in a peri-urban area of the Free State) and rural schools (Limpopo) in the sample. All the schools were non-fee paying and relied on the subsidy from the Department of Education. These schools had enrolment from 890 to 2000 learners from disadvantaged communities. This places a huge burden on the schools in terms of care and support. I had a sample of four principals, eight coordinators and four school management team members (deputies and [HODs]) (n = 16). In the Free State as in Gauteng, two coordinators from each school participated. Most of the leaders were women (n = 6)whilst principals were mainly males (n = 3). To elicit teachers' perception of enactment of caring leadership by principals to facilitate or deter their leadership of health committees. I listened to their own descriptions of the development and implementation of the programmes as discussed further.

Data collection strategies and processes

Three methods of data collection were employed: narratives, individual interviews and observations. First, each coordinator had to provide a narration about caring leadership or lack thereof during the development and implementation of a health programme he or she was leading. The narrations of school

principals, deputies and HODs were based on their provision of caring leadership to teacher leaders during implementation of programmes. The prompts for both groups included: development or implementation of programme and enactment of care, enabling and restraining factors to provision of caring leadership, care needs during development/implementation of programmes and impact of provision or lack on individual leadership.

Individual face-to-face interviews were conducted after data were collected by means of narratives. As the semi-structured interviews followed a conversational format (Patton 2002), an interview guide was developed for teacher leaders and for school managers from the gaps identified from the narratives. Interviews with principals only focused on how they provided caring leadership for coordinators, what factors enabled the provision of caring leadership and which did not. The individual interviews with teacher leaders were based on their experiences of being cared for, the nature of caring leadership provided and how the latter influenced their own leadership of health committees. Participants were interviewed in their classrooms and offices where they were most comfortable. The interviews at schools were conducted after the teaching time when learners had already left. I conducted one interview of an hour and a half with each participant.

One day was dedicated to each participant for focused shadowing of each individual teacher leader of health committee. Shadowing was done as a means of observation. Shadowing according to McDonald (2005) is a research technique which involves a researcher closely following a member of an organisation over an extended period of time. As both the school managers and teacher leaders were shadowed, I had to spend 4 days in each school for this. Shadowing helped in revealing what the participant does, and also how the participant interacted with other people (teacher leader versus principal and vice versa). I chose to shadow on days when the teacher leaders were involved in programme implementation or development, but the

observation was also focused on other duties of the teacher leader. The shadowing was done after the data were gathered using two data collection tools. The reason for this was the acknowledgement that my presence as a shadower might change the behaviour of the participant being shadowed and set a stage for what she or he wants me to see. I had a fairly good understanding of what the situation was with relation to the provision or lack of caring leadership in the participating schools based on the data I had collected.

After each phase, I transcribed the data and at the end I had three sets. I then started with the initial analysis which included familiarising myself with the data by reading the transcripts several times to acquire a general feeling for the experience.

Data analysis

Content analysis was conducted to analyse the textual data gathered by means of narratives, interviews and shadowing. Following steps in analysing phenomenological data I extracted the significant statements pertaining to the phenomenon in each set of data. I then formulated meanings of the segments of statements I had extracted. I grouped these segments under different categories. The themes were formed from the clustered categories and were validated with the original text to identify experiences common to all participants. Contradictory themes were also considered for their relevance. The section on results presents a description of the experiences of the participants, developed through empirically derived themes.

Trustworthiness

Data were gathered from multiple sources of data, integrating multiple methods which also pertain to complimentarity, and documentation of different perspectives on the phenomenon of provision caring leadership to teacher leaders of health committees reduced researcher biases. Trustworthiness is enhanced when two or more methods of data collection that have offsetting biases are used to assess a given phenomenon, and the results converge or corroborate (Scandura & Williams 2000).

Ethical considerations

After ethical approval of the project by the university, I applied for permission to conduct research in schools from the Department of Basic Education, of which it was granted. Ethics applications in each of the provinces had to be sought for the schools to participate. Participants signed informed consent forms for participating in the research and other consent forms for being shadowed. The meetings about the project processes and procedures provided an opportunity for relationship building before the preliminary study commenced, enabling data collection and the understanding of the school context.

■ Results

The results of the data gathered by means of narratives, interviews and shadowing are presented. Coordinators in Limpopo will be indicated with LT, principals with LP and other school managers with LM. Participants in Free State will be identified as FT, FP and FM. The excerpts from the notes taken during shadowing will be indicated as LS (Limpopo) and FS (Free State).

Leadership in health promotion programmes

Leadership and management of the committees who are responsible for the implementation of health programmes are held together by the teachers. Teachers in a school democratically select a leader of a health committee in a meeting. This person is responsible for keeping the committee focused on their role by having meetings with them about what has to be done and how

it should be done. Other programmes that the teachers were leading were linked to other government departments of which teachers had to liaise and collaborate with. The administration of the school health programme is the sole responsibility of the committee concerned:

'Planning is done by the committee, the itinerary is then submitted to the school management for approval and for their own planning in terms of time and resources'. (FT4, gender undisclosed, date unknown)

'I work with the trainers (other teachers) to organise activities within and outside the school'. (LT2, gender undisclosed, date unknown)

'I am responsible for a programme that supports vulnerable learners. I have to liaise with other government departments to garner support for the programme especially the department of health and social development'. (LT3, gender undisclosed, date unknown)

Participants stressed the importance of having committees for the programmes and electing the right people to lead them. As this role included operating health promotion programmes, management tasks (planning, organising, monitoring and evaluation) were important to embark on. Leadership and management at this level differ from that of school managers as it only focuses on one programme. Participants also mentioned the importance of having a committee leader who loves leading the programme:

'Leading the programme must not be regarded as a burden otherwise there will not be progress. The person leading the programme must love it and also be able to work with committee members'. (FT3, gender undisclosed, date unknown)

'At our school the leader is allowed to choose committee members'. (LT4, gender undisclosed, date unknown)

'Committees are important in making sure that plans are implemented and the school benefits from the programme'. (FP1, gender undisclosed, date unknown)

'Without a leader there is no committee and the programme will fall flat'. (FM2, gender undisclosed, date unknown)

'A leader has to be visionary, a person who puts health promotion on the agenda always'. (LP1, gender undisclosed, date unknown)

The school managers comprising the Principal, Deputy and HOD provided resources for the school-based programmes whilst others are funded at national or provincial levels. The provision of resources at the school level by the principal included allocating funds for attendance of workshops organised by the district, buying equipment for learner activities, supporting planned activities by actually being involved and/or motivating learners, teachers and parents to participate. These funds come from the money allocated by the ministry of education to each public school. Schools in poor communities that are classified as Quintiles 1 or 2 (based on the socio-economic environments in which the schools reside) get more funding as learners in these school do not pay school fees. Communication with external agencies is done by the principal on behalf of the teacher responsible for the programme and communication with external bodies is done with or through the principal. Responsibilities of principals and other school managers included management and providing leadership to all health committees within the school, they played a role of overseeing programmes:

'The principal is responsible for the implementation of policies including those that deal with learner wellness. He sets up the committees and make sure that each of the committees is led by people that are committed and capable. Generally, a committee has to be in place for three years then new elections are done'. (LM2, gender undisclosed, date unknown)

All participants indicated that the health programmes would not be sustainable without the support of the principals. They emphasised the importance of a positive attitude towards the programme by the principal and the impact that might have on keeping the programme going: 'The principal is the engine of the programme, without her support everything collapses'. (LT1, gender undisclosed, date unknown)

'It makes a difference when the principal provides motivation, to me as a leader'. (FP2, gender undisclosed, date unknown)

'That authority is needed to push things a bit (LM1); the principal cannot watch from a distance, he must be able to see for himself or herself if things go well'. (FM1, gender undisclosed, date unknown)

Restraining factors that were indicative of teachers' care needs

There were challenges that were related to resources that were indicated as beyond the authority and power of the principal to deal with which had a negative impact on how the committees functioned. These pertained to the lack of time for the programme and its implementation and finding assistants for teachers who lead programmes during the time when they have to be fully involved in the health programme:

'We are not afforded time to focus on the programme, we do it when we have time, this becomes a problem'. (FT1, gender undisclosed, date unknown)

'The only time when one can focus on the programme is after teaching time in the afternoon, although we are tired by then we force ourselves to work on the programme'. (FT2, gender undisclosed, date unknown)

'The school cannot afford to hire an assistant teacher, this has to be the school governing body post, it happens in schools that are not in poor communities where learners pay fees'. (FM1, gender undisclosed, date unknown)

'We have shortage of water and this becomes a serious concern regarding the feeding scheme, drinking and washing of hands'. (LT3, gender undisclosed, date unknown)

Most challenges that were highlighted by participants encompassed lack of resources. The support needs were revolving

around these issues. This challenge was supported by both school managers and leaders of committees in both provinces. All participating schools were in poor areas where community members were themselves struggling. The priority for health programmes in such areas is to deal with social issues first and foremost, then the little resources that are left can be used for health programmes. Even the challenge of shortage of material resources seems to be out of control of the schools. The interventions are top in the list of the health committees and participants indicated that there is no progress that can be made with regard to the programmes unless the basic needs are met, then, the maintenance, the beautification of the school and the focus on the physical environment and others. The situation was even worse in schools in the rural area where there was no running water:

'There is shortage of equipment, there are not enough dustbins that makes it easy for learners to litter'. (LT2, gender undisclosed, date unknown)

'The drummers' uniform and equipment is expensive'. (LT4, gender undisclosed, date unknown)

'We do not have a sick bay, learners have to be taken to the local clinic by teachers who have to abandon their classes to attend to a sick learner. This is the situation with all schools in rural areas'. (LM2, gender undisclosed, date unknown)

There was an indication of unequal treatment of committees especially with regard to the allocation of finances. The school managers indicated the importance of prioritising when allocating resources. There seemed to be a lack of understanding between managers and the teachers with regard to which committee gets more money and why. The criteria is not communicated to teachers leading committees. This situation leads to uncertainty and lack of satisfaction with the procedure:

'Finances are not equally distributed among the committees, you can see that they are not treated equally, more support is given to others'. (FT3, gender undisclosed, date unknown)

'The reasons that are given are that the favoured committees have more learners and learners need them more than the others, my opinion is that learners need a healthy environment as much as they need feeding scheme, to me the two are equally important'. (FT4, gender undisclosed, date unknown)

Rapid changes in education in South Africa have led to new challenges for teachers. The new curriculum and its demands, the behavioural problems of leaners and teachers, the rising number of learners in need of educational support who demand for a degree of adjusted teaching and more individualised teaching make it difficult for teachers to focus on health programmes. More attention is given to classroom activities and least time is afforded for health promotion. Teachers in both provinces indicated that the contact time with learners in primary schools is 5 h and 6 h in high schools but teachers have to be at school for 7 h. The extra 2 h in primary schools and an hour each day in high schools is for development and planning. The work related to health promotion is supposed to be budgeted for in the extra time but some participants indicated otherwise:

'We have no time for to focus on the health programmes, I love being involved, and contribute to the health of learners but there is no time'. (LT3, gender undisclosed, date unknown)

'It is a struggle to do justice to the health programme, but we try, there is no time'. (LT1, gender undisclosed, date unknown)

'There is time in the afternoon after teaching time, the two hours that is allocated for development, I have to I choose between giving my struggling learners an extra class, sit with a learner who seems to be encountering problems to provide counselling or focus on a health programme. One is faced with such tasks daily'. (FT4, gender undisclosed, date unknown)

'If you love something you sacrifice for it, I make time in the afternoon after class and in some weekends'. (FT2, gender undisclosed, date unknown)

Being cared for was non-existent in both provinces, perhaps it was because of the forces exerted by the socio-economic

conditions of the communities the schools were in. All resources had to be pulled to meet the most basic needs of the learners, leaving no room for showing concern for the leaders of committees:

'When we report to the principal pertaining to the problems we encounter as a committee he tries his level best to attend to them, but he is more concerned about the outcomes of the programme than us'. (LT1, gender undisclosed, date unknown)

'He helps the committee by making follow ups with the departments of health and social development when we are not getting response from them. He also recently visited the local clinic to request them to give learners priority when they visit the clinic especially if they are with teachers and in school uniform'. (FT1, gender undisclosed, date unknown)

'We talk to him about our problems and he helps where he can, but I think it is because of the programme not us most of the time'. (LT2, gender undisclosed, date unknown)

■ Factors that enabled caring leadership

Assistance by school managers included collaborations and individual endeavours to make things work by providing the necessary resources that enable effective implementation of programmes:

'When learners are punished for late coming they clean the surroundings supervised by the Heads of Department'. (FT2, gender undisclosed, date unknown)

'I take it upon myself to involve the community to supply water to school, I also involve public works to assist in cleaning the school'. (LP2, gender undisclosed, date unknown)

'Learners come with water from home so that they can wash hands, drink and wash utensils after their meals'. (LM1, gender undisclosed, date unknown)

'He hires the services of local people with light delivery vans to supply the school with water and hire people who clean the toilets'. (TLE, gender undisclosed, date unknown)

'The principal usually ask for donations of flowers to plant in the school'. (TLC, gender undisclosed, date unknown)

'The principal requested parents to assist us with the tree felling and chopping of wood but the problem of wood being stolen could still not be solved'. (FM2, gender undisclosed, date unknown)

'The principal organises prisoners to clean the surroundings and take care of the garden'. (FT3, gender undisclosed, date unknown)

The two schools in Limpopo have no running water as they are situated in rural communities. Support from the school principal becomes essential in such circumstances. Whilst sharing some characteristics with schools in the township, these schools had strengths. Teachers leading committees mentioned a close working relationship between them and the principal and between the school and the community. This was so because of the daily struggles that they were faced with, of which they realised that sharing the burden works better than working individually:

'Parents are willing to assist with whatever they can, even if they do not have much in terms of resources, they offer their services'. (LT3, gender undisclosed, date unknown)

'The principal is very close to the parents, they support the school because of this good relationship, he tries to support us in every way he can'. (LT4, gender undisclosed, date unknown)

'We are a team, there is no way that you can make a difference in these schools on your own, we are compelled to work together'. (LT1, gender undisclosed, date unknown)

'It is difficult to see if they are coping if you are not involved'. (FP2, gender undisclosed, date unknown)

Principals in the rural schools of Limpopo, despite being in deep disadvantaged communities exhibited signs of caring for the programmes and providing caring leadership, knowing that it would be impossible for teachers leading committees to do it on their own. This situation was similar to that of the township schools in the Free State. Principals of the two schools in the

latter province knew everything about the programmes, what the challenges were and what they needed to do to improve the situation. They emphasised the importance of having the programmes and their benefits to the whole school community. They would also motivate:

'The principal asks about the progress, you could see that he is concerned, he wants to assist'. (FT4, gender undisclosed, date unknown)

'I do not hide the problems I encounter with the programme, she knows about them and she is always willing to assist'. (LT2, gender undisclosed, date unknown)

'The principal organises the resources even before the start of the school year for the following year, he thinks ahead'. (FT1, gender undisclosed, date unknown)

'I work closely with committee leaders, they are responsible for the programme but I am the accounting officer, if things do not go well I am the one to account'. (FP1, gender undisclosed, date unknown)

'It is my responsibility to assist with the project, I make time to get the resources they need, besides, teaching and leading a programme is real hard work especially in our communities'. (LP2, gender undisclosed, date unknown)

Discussion

The findings of this research indicate signs of caring leadership in the actions and interactions of the principals and teachers; principals and community members and principals and other external stakeholders. The caring leadership that was observed by some participants was for the programmes and the leaders of committees. There were, however, some participants who felt that the care was more for the programmes than them. The ethics of care theory helped in understanding the nature of support that was provided to coordinators of health programmes. The stance taken in this research is that caring should be performed and that it is more than just provision of support but it enriches it.

Caring leadership in its nature occurs through actions and interactions where tasks and activities can be filtered through a lens of caring leadership. Several building blocks of caring leadership are indicated in the literature. Those that were found in this study included organisation of material and human resources, trustworthiness, accountability in matters programme development and implementation, support and cooperative work. The resources were allocated specifically for the support of the programmes, teachers might have benefitted indirectly as their stress may have been reduced by being supported. Provision of resources in support of health programmes can be regarded as a perfect duty in health promotion, the one that school leaders must perform at all costs. The organisation of human resources by mobilisation of community members, other teachers within schools and other external bodies to support the programmes was an indication of caring for the programme. It can be argued that the principals felt responsible and duty bound even though it might have been because of external coercion (being accountable because of the position they were holding) to provide these resources. Thus, whether the principals could be viewed as moral worthy and caring would depend on their motive: if they acted because they regarded it as their duty to do so. The principals had a duty to be concerned about the health programs' success. Being motivated by duty in performing certain actions is in line with Kant (1785) who is against being motivated by outcome. It can also be argued that the provision of resources, involvement of principals in some activities, involvement of parents (Limpopo) and monitoring of the programmes were some of the enabling factors that formed a support structure for the coordinators.

There was also an indication of attentiveness to the needs of the coordinators as one principal indicated understanding of the challenges the coordinators encountered. Being attentive to the needs of others and taking responsibility are regarded as elements of care in the literature. However, people executing such deeds in a school could have ulterior motives other than just the 'good will' Kant (1785) advocates for. According to Kant, moral acts are performed because they are good in themselves. However, Noddings (2002) would argue that there is a sign of motivational displacement in such actions as the caring behaviour of principals was largely determined by the need of the cared for (mainly the socio-economic needs of learners form poverty-stricken communities in which the schools were placed).

The second finding indicated enactment of caring which might have been triggered by communal orientation. In rural areas, community members and teachers who grew up in such communities tend to be communal oriented. Communal orientation is defined by Clark (2011) as general inclination to be sensitive to the problems of others, and to help others primarily in response to their needs and out of concern for their wellbeing. Principals were concerned about the success of the programmes, they were aware of their benefits to learners. They worked together with the teachers in a way that reflects their understanding of the difficulty of the tasks especially under such harsh conditions of lack. When there is emotional engagement in the actions of the carers, their acts are regarded as authentic. Caring that is authentic as opposed to the one that rises out of superficial concern requires an emotional investment in human caring where engagement creates a culture of care (Walumbwa et al. 2008). According to Atwijuka and Caldwell (2017), this can be regarded as authentic leadership as it is inherently both an individual and a collective responsibility. This behaviour could facilitate better social bonds that are of good quality. Working together on several activities, responding to the needs of the learners and the school could result in closer relationships. Kant would 'endorse the respect that is afforded to the needs and values' of the coordinators (Bowie 2000). These actions also reflected their eagerness to address the needs and interests of the teachers to the benefit of the learners. The personal wellbeing of teachers and learners seemed to have been a motivator. They were prepared to do everything in their power to support the programmes. According to Kant (1785), this could have been an indication of a moral duty towards others.

The principals' caring leadership was boosted by their communal orientation. Communal orientation is associated with caring in the literature (Bryan, Hammer & Fisher 2000). Because of the shared problems, teachers and community members were brought together to work towards meeting the existential needs of the learners and to a lesser extent to programme implementation. The activities of the committees were mainly focussing on interventions rather than the cleanliness of the surroundings, the beautification of the school and the greening of the environment. Thus, promotion of healthy school environments in the actual sense was at the bottom of the list in the participating rural schools. The intended or actual consequences of actions are not important to Kant, instead, the moral worth should be based on the motives of principals. teachers and community members. The constraints in the communities where the schools resided provided few opportunities for the schools to move beyond the limits imposed on them by their disadvantaged background in terms of health promotion. As much as rural schools were in deep disadvantage with regard to resources, they were much more able to draw essential support on social and community resources than their township counterparts.

Conclusion

It can be concluded in this research that although there was not much focus on caring for teachers who were coordinators of health programs, the attention afforded to learners and their needs and the programmes the leadership provided was based on authentic knowledge and understanding of the cared for (learners) and their needs. Principals were attentive and responsive to the needs of the schools they were leading and engrossed with the learners. It is a concern that the teachers benefitted indirectly when human and other resources were mobilised. As the caring actions of the school leaders were

motivated by advancing the success and personal wellbeing of learners, they could be regarded as moral.

The heading of health programmes by teachers is a practice all over the world. It is a trend that will continue for years in South African schools because of the economic status of the country (developing as opposed to being developed) which does not allow public schools to hire people who will take responsibility for the health programmes. The participants in this research concurred by mentioning the difficulty in hiring substitute teachers to man the classes whilst coordinators focus on the programmes is not feasible in public schools. In order for programmes to succeed and teachers to show willingness and commitment in coordinating them, they have to be cared for. There is a need for principals to be attentive and aware of their actions towards the coordinators of programmes, they can however do so if they understand that it is their duty to care and that it is important for them to provide caring leadership they have to provide. Caring leadership provides a favourable contextual school atmosphere for the promotion of healthy environments. The principal can, by signalling support for coordinators and revealing caring leadership, influence the health programme implementation in a positive way.

It is recommended that the School Health Promotion concept be promoted in the Continuous Professional Teacher Development workshops to build capacity. Principals would have an opportunity to understand what their role is with regard to health promotion, what caring leadership entails and its importance and be taught about the ethics of morality. It is only then that principals can be held fully accountable for the mission of school health promotion. Strong leadership is important for the success and sustainability of School Health Promotion initiatives. Professional development must be the 'cornerstone of any reform efforts designed to increase teachers' capacity', and 'can enhance each dimension of school capacity'. 'The key is that schools advance dimensions of

capacity by pursuing comprehensive school-wide professional development that is focused and sustained over time' (Fullan 2004:n.p.). Continuous Professional Development is about the support of teachers throughout their careers. It is now the responsibility of the South African Council for Educators to ensure that teachers engage in professional learning about school health promotion and its implementation.

Rigour, relevance and structure

This chapter presents, as the preceding two chapters, rigorously conducted qualitative research on a very relevant topic. School health promotion and leadership are some of the key elements indicated in the literature as contributing to school improvement and consequently, school effectiveness. The school is made up of a myriad of intervention points of which school health promotion is part which have to be improved in order to enhance and facilitate better learning including levels of achievement and wellbeing.

Chapter 5

Comparative and international education and the quest for relevance, authenticity, structure and responsiveness in research in education

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■ Abstract

This chapter defends the thesis that the field of comparative and international education can make an invaluable contribution to the revamping of education, to comply with the demands of

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authenticity, responsiveness, rigour, relevance and (re)structuring. The chapter commences with a survey of the structure of the educational Sciences, in South Africa in particular. This survey culminates in an identification of the need for authenticity, relevance and responsiveness as three pressing needs in the fields of education sciences. Then the field of comparative and international education is surveyed: its historical evolution, subject and scope of study and its objectives and significance. In conclusion, the place of the role or potential of the field in serving as scaffold for the reconstruction of education sciences, with rigour, relevance, restructuring, authenticity and responsiveness as signature features, is highlighted.

Keywords: Comparative and international education; Education scholarship; Relevance; Rigour; South Africa; Structure.

■ Introduction

In the first chapter to this volume, it has been explained that education as it features in institutions of education in the present world, such as schools and universities, is in need of serious rethinking, in responding to the contextual imperatives of the beginning of the 21st century. The field of scholarly endeavour analysing, reflecting on and guiding education in schools and universities, education and its sub-fields, should be re-vamped too. The thesis that the major overhaul required in the scholarly field of education could be summarised based on three terms. namely rigour, relevance and re(structuring). This chapter links up with that statement, and also adds two imperatives of authenticity and responsiveness. The thesis of this chapter is that the field of comparative and international education can make a significant contribution to the revamping of education, to comply with the demands of authenticity, responsiveness, rigour, relevance and (re)structuring.

The chapter commences with a survey of the structure of the educational sciences, in South Africa in particular. This survey

culminates in an identification of the need for authenticity, relevance and responsiveness as three pressing needs in the fields of education sciences. Then the field of comparative and international education is surveyed: its historical evolution, subject and scope of study and its objectives and significance. In conclusion, the place of the role or potential of the field in serving as scaffold for the reconstruction of education sciences in South Africa, with rigour, relevance, restructuring, authenticity and responsiveness as signature features, is highlighted.

■ The structure of the educational sciences

The Oxford Dictionaries (2018) give the meaning of the term 'structure' as 'the arrangement of and relations between the parts or elements of something complex'. Research or scientific knowledge is defined as 'methodically acquired, verified, systematised knowledge' (Stoker 1968). The *systematised* part of this definition lays down the requirement for any scholarly field to have a structured edifice. Such an edifice is also necessitated by more than one of the constituting steps of the research process or cycle. The research process includes, amongst others, the following steps (cf. Wolhuter 2015a):

- Identifying a problem or formulating an aim. This problem or aim should serve the purpose of filling a lacunus in the existing corpus or structure of knowledge.
- A literature study. The outcomes of this study should be structured, in a coherent synthesis.
- The study or research should be placed within a theoretical framework. The Merriam-Webster Dictionary (2018) describes a theory as 'a plausible or scientifically acceptable general principle or body (i.e. structure, author) of principles offered to explain phenomena'.
- At the end of the research project, the researcher should build his findings in the existing frame, or structure of knowledge.

As has been explained in Chapter 1 of this volume, one of the problems besetting the fields of educational sciences is the lack of a coherent structure. This lack of structure is equally strongly present in South Africa; in fact, a set of historical-contextual forces have aggravated this problem.

■ The need for authenticity in the educational sciences

A second deficiency in the educational sciences is that of authenticity. The lexical definition of authenticity, referring to the pure, or original thing in contrast to the fake or the imitation of something, is here used in the sense of theory building by scholars in the educational sciences, using the empire of education as a source material. In identifying 10 crises besetting the field of comparative and international education, Wolhuter (2015b) identifies the absolute lack of autochthonous theory as one of the 10 crises facing the field of comparative and international education. The most common paradigms or theoretical constructions employed in the field have been erected by scholars not in the field of comparative and international education. Socio-economic reproduction theory stems from the publications of two Harvard economists, Sam Bowles and Harry Gintis, world-systems analysis from economist André Gunder Frank and structural functionalism from sociologist Talcott Parsons. The same statement could be made of other fields of education scholarship too. For example in the field of educational psychology, Sigmund Freud, Erik Eriksen, Jean Piaget or BF Skinner were not scholars attached to the Schools or Faculties of Education of universities. A feeling of an existential crisis can easily develop, the question as to what right of existence a field of scholarly enquiry has, if it has no theory(ies) of its own?

■ The need for relevance and the need for rigour in education research

In Chapter 1, it has been explained that despite the neo-liberal economic revolution, the rise of Mode 2 knowledge and the shift

from search for knowledge-driven research to needs-driven research, there is a nagging feeling that much education research is still cut off from the realities of everyday educational institutions, classrooms and policy formulation rooms. An equally pressing need in education scholarship, as explained in Chapter 1, is the need for rigour in education research.

■ The need for responsiveness in education research

A final deficiency in education scholarship, education scholarship in South Africa included, is that of responsiveness. Responsiveness means the quality of being quick to respond or react appropriately or sympathetically (Merriam-Webster 2018). Whilst research in education may at times be relevant, such research often still lacks responsiveness. The following example will suffice. Learner discipline constitutes a major problem in South African schools (cf. Wolhuter & Van der Walt 2019). At least since 2002, this issue has been the subject of extensive research by South African scholars of Education. Several South African scholarly journals have had special editions on the issue of learner discipline in schools, including KOERS (2003 and again in 2013), Journal of Educational Studies (2009), Tydskrif vir Geesteswetenskappe (2008) and Tydskrif vir Christelike Wetenskap (2010). The biggest challenge identified in research is that, in the current legaleducation system context, South African teachers are at a loss as to determine effective methods that could be used to maintain sound learner discipline (cf. Wolhuter & Van Staden 2008). Yet no research project can be found in the corpus of scholarly literature on an intervention programme in schools steered by research, that is a programme such as the Nebraska Positive Behavioural Interventions and Support Home developed by Prof. Michael H. Epstein at the University of Nebraska (a rare example of autochthonous scientific development within education, but these are few and far between).

De Wet and Wolhuter (2007) explains how Education Policy authorities worldwide tend to ignore research or use only findings

fitting in with preconceived ideas, when formulating policy, a phenomenon South Africa is not spared, as De Wet and Wolhuter (2007) illustrate with the introduction of outcomes-based education and language-in-education policy in South Africa.

With these deficiencies pertaining to structure, authenticity, relevance, rigour and responsiveness, within the scholarly fields of Education, the question is what contribution the field of comparative and international education can make to alleviate matters. Before answering this question, the concept of comparative and international education will first be clarified, followed by an enumeration of the purposes or merits or significance of the field.

■ Comparative and international education: Conceptual clarification

Comparative and international education is a complex field: there is no easy and unanimous reply to the question as to the definition, nature and purpose of the field; as a scholarly field, it is ever testing new ground (Wiseman & Wolhuter 2019).

No unanimity exists regarding the definition of comparative education (for the range of definitions of comparative education, cf. Manzon 2011:153–183). Comparative education can be defined as having a three-in-one perspective on education (Wolhuter et al. 2018):

- an education system perspective
- a contextual perspective
- comparative perspective.

In the first place, comparative education has as its subject of study the education *system*. However, the subject of study of comparative education exceeds just the narrow parameters of the education system as such. The education system is studied as embedded within its societal context, and is taken to be shaped

by, or as being the outcome of societal forces (geographic, demographic, social, economic, cultural, political and religious). Not only is the shaping influence of the societal context on education the subject of study but also the converse: the societal outcomes of education, that is the effect of education on the economy (e.g. the effect of education on economic growth), or on the social system (e.g. the effect of education on social mobility), et cetera.

Thirdly, comparative education is not limited to studying one education system in its societal context alone. Different education systems, as they are the outcome of forces extant in by their societal contexts, are compared; hence the comparative perspective.

Because of changes in both the worlds of scholarship and in education, there has recently been a contention that the field should have its name modified to comparative and international education. The term international education stretches back far into history and has had many meanings attached to it (and for an overview of this diversity of meanings the interested reader is referred to Wilson [1994] and to Phillips and Schweisfurth [2014: 53–71]). However, here international education is used as defined by Phillips and Schweisfurth (2014:60); namely, that international education is a name for scholarship focussing on education through a lens of a global perspective. With the scholarly field of comparative education then being transformed to comparative and international education, the theorem is that single/limited unit studies and comparisons then eventually build into an all-encompassing, global extent exploration of education.

■ Significance or purposes of comparative and international education

The purposes or significance, functions or uses of the scholarly field of comparative and international education, as outlined in

the scholarly literature, can be enumerated under the following headings (Wolhuter 2019):

- 1. description
- 2. understanding/interpretation/explanation
- 3. evaluation
- 4. application
 - educational planning
 - teaching practice
 - in other fields of educational study
 - ° the comparative method
- 5. motivating and teaching students to conduct research
- 6. promoting the philanthropic ideal.

Description

The most rudimentary function of comparative education within the family of scholarly fields of education is to describe education systems or teaching-learning organisations, within their societal embeddedness, driven by the thirst for knowledge which is a built-in part of human nature.

Understanding: Interpretation/explanation

At a following level, comparative education also fulfils the human need of understanding, that is firstly the understanding education of systems (as the outcome of societal forces) and secondly the understanding societies (as they are in turn shaped by education systems). In his seminal volume on the 5000-year history of Chinese education, *Cultural Foundations of Chinese Education*, Go Mingyuan (2014) explains how American education (cf. the decentralised nature of American education, the large amount of power and autonomy vested in individual school districts and individual institutions) offers a glimpse into the extreme individualism (shaped by pioneer conditions over a large continent, and the fact that the first immigrants hailed from a

variety of countries and religious beliefs, which militated against a communal spirit) as one characteristic feature of American society. Similarly, Dewey's ideas on education and its effect on American education makes the understanding of the pragmatic nature of American culture possible (also shaped by the exigencies of frontier conditions).

Evaluation

A third purpose of comparative education is to evaluate education systems (cf. Wiseman 2012:3), that is one's own, domestic education system as well as a more holistic, global evaluation of education systems. In times of a competitive globalised world, the assessment of the own, home education system takes on ever greater urgency – therefore, the proliferation of studies such as the PISA test series conducted by the OECD, the IEA test series, such as the TIMSS tests and the international rankings of universities. The universal or holistic evaluation of education means evaluating how well the education systems of the world respond to the challenges of the 21st century world as well as an estimation of potential societal impact of education. Examples of the latter include:

- 1. Can education be used to effect economic modernisation?
- 2. Can education serve as an instrument to stamp out unemployment?
- 3. Can education entrench or secure a democratic culture?
- 4. Can education be a means to foster intercultural tolerance and intercultural sensitivity in a multicultural society?
- 5. Which country has the best education system in the world?

Application (i): Education system planning and reform

Comparative education can also serve the function of assisting in the de novo design education system, to plan education and to reform education systems (cf. Bray 2014:22-25; Wiseman 2012). In reforming or improving an education system – or in responding to an educational issue, challenge or problem – one nation can benefit from the education experience of others.

Application (ii): Improving teaching practice

In recent years, publications have appeared where it is argued or demonstrated that comparative education can concretely contribute to the improvement of teaching practice of teachers (e.g. Bray 2014:19; Planel 2008). Comparative education scholars can reconstruct the trajectory of particular teaching methods in particular contents. This may be of use to teachers, for example in improving their own teaching practice in multicultural classrooms, as Planel (2008) shows in her comparative study of pedagogy in English and in French classrooms. For teachers, an understanding of comparative education literature aids reflection on issues of concern in their classrooms, such as diversity, conflict/peace, pedagogy, curriculum and classroom organisation in a wider global context, and for learning from the innovations, experiences and practices of other teachers, schools, countries and regions (Hayhoe, Manion & Mundy 2017:2; eds. Kubow & Blosser 2016).

Application (iii): Serving other fields of educational studies

Comparative education is also of value to other disciplines in the family of educational science (and even beyond to adjacent fields of social sciences). With respect to the Philosophy of Education, for example, comparative education can reveal the benefits and disadvantages of the implementation of particular philosophies of education in certain locations at certain periods in history (e.g. see Hayhoe & Li 2017, on the outcomes of Confucianism as philosophical basis of the education systems of East Asia).

Application (iv): The comparative method as research method in education research

A particular role of the field of comparative education within the family of education sciences is the development and employment of the comparative method as an instrument for these other cognate fields of education scholarship. For too long, scholars in the macro scholarly field of education have overlooked the value of one of the constituent fields right in their midst, namely comparative and international education with its trade tool, the comparative method, in addressing serious challenges facing their fields and in dealing with critical topics of research in pertaining to their subjects of scholarly inquiry (Wolhuter 2019).

Researchers in the various sub-disciplines of education have at their disposal the entire set of research methods of the humanities and the social sciences. This statement can be substantiated from published content analyses of education journals, where scholars have enumerated the research methods used by authors of publications, for example Wolhuter (2008) and Rust et al. (1999).

Robson (2011) classifies these research methods into three groups or levels, namely:

- Methods of data collection.
- Methods of data analysis.
- · Methods of data interpretation.

Various research methods in the social sciences and humanities, classified in these three categories, are listed in Table 5.1. The research process begins with the collection of data. Once collected, the researcher has to analyse the data mass, in order to reduce it to sensible proportions, that is to summarise and to order it. A researcher cannot be contended with an analysis of data. After having turned the data mass into proportions allowing him or her and others to work with it, the researcher then moves

towards attaching a particular meaning or understanding or explanation to the processed data. For this purpose, numerous methodological tools to equip him or her to interpret the data are available to him or her. A particular research project typically involves all three operations (in fact, in view of the definition of research and of scientific knowledge proffered above, it can be argued that each of the three operations are indispensable for any research project), and in such cases, three methods can be discerned in a research project. However, it is not unusual that a researcher employs more than one method at any of the levels. In their survey of 605 comparative and international education articles published in scholarly journals, Foster, Addy and Samoff (2012:717) identified 1229 methods, indicating the multiple approaches commonly employed.

On the set of methods available to the educational researcher. a few remarks are apt. Firstly - without in any way claiming that Table 5.1 contains a complete list of all the methods of educational research - the researcher's choice of methods seems to move from the plane of data collection to that of data analysis to that of data interpretation. Secondly, the methods are getting more complex and demanding at the higher levels. Whereas methods of data collection (e.g. measurement by means of standardised tests) or data analysis (e.g. application of statistical tests such as the *t*-test) are often mechanical applications of techniques (once a method has been decided upon and is justified), methods of interpretation demand more input on the part of the researcher. Here lies the first anomaly in the literature on educational epistemology: most of the standard books on social science and humanities research methods, as well as those on educational research methodology, concentrate on the methods of data collection and analysis, to the neglect or even total absence on methods of data interpretation (e.g. see Gall, Gall & Gall 2007; Kerlinger & Lee 2008; Leedy & Ormrod 2016; Neuman 2014; Wiersma & Jurs 2009). One of the main constituent disciplines of education appears to have one of these methods in its name, signalling its unique trade to ply within this family of

TABLE 5.1: Research methods in the social sciences and humanities.

Method level	Research methods
Data interpretation	Comparison
	Critical ethnography
	Historical narrative
	Hermeneutics
	Contextual analysis
	Evaluative research (Michael Patton)
	Critical/emancipatory research methodologies (e.g. Habermas, Brian Fay, Critical Feminism)
Data analysis	Descriptive statistics
	Inferential statistics
	Correlation and regression analysis, cluster analysis, factor analysis
	CAQDAS (computer-aided qualitative data analysis software, e.g. ATLAS)
	Columbia school (Lazarfeld's concept measurement method)
	Ethnography
	Phenomenology
	Phenomenography
	Content analysis
	Discourse analysis
	Social cartography
	Description
Data collection	Observation
	Participant observation
	Measurement
	Testing
	Questionnaires
	Interviews
	Unobtrusive research (Eugene Webb)
	Focus group discussions
	Document survey
	Literature survey Ethnomothodology
	Ethnomethodology
	Autobiography

fields of educational research. That discipline is comparative and international education. And here the second apparent anomaly is apparent: even amongst those few standard texts on educational research methodology which do devote coverage to research methods available to interpret data, the method of comparison is totally absent (e.g. Gall et al. 2007; Wiersma & Jurs 2009). In the fifth edition of his standard text on research methods in the social sciences, Neuman (2003:402-437) does include a chapter on historical-comparative research. However, in the most recent edition of this volume (Neuman 2014), that chapter is entirely omitted. With this apparent anomaly in mind, firstly, this chapter discusses below the comparative method in research; secondly, the field of comparative and international education will be surveyed with the aim to determine the potential value of that field in supplying a method of data interpretation to educational researchers and the final aim then is to address some of the challenges faced in the field of education, as identified above.

■ The comparative method in research

Comparison is a method, with remarkable assets and with the potential for application in virtually any research project employed in the social sciences, humanities and natural sciences (cf. Neuman 2003:402-404). Azarian (2011) encapsulates the essence of the comparative method in science as follows:

Comparison as a scientific method refers to the research approach in which two or more cases are explicitly contrasted to each other regards to a specific phenomenon or along a certain dimension, in order to explore parallels and differences among the cases. (p. 113)

The aims of such an exercise then are to derive a typology based on the identified differences and similarities amongst cases, even though better comprehension of singular cases is a major goal in many comparative studies (Azarian 2011:113). The sheer complexity of social phenomena, too costly and ethically too

problematic to reproduce and to manipulate by means of experimental research, makes the comparative (comparing real situations in society) an attractive option in the social sciences. In the current age of diverse societies and means of instantaneous communication, the comparative method becomes all the more appealing. Comparison can serve one of two (or both) purposes of highlighting the peculiarity or uniqueness of particular instances or identifying convergence or generalisations (Azarian 2011:214-216). As such, comparative analysis is a powerful tool in the social sciences, studying questions such as: how and why did major societal changes take place, what fundamental features are common to most societies, why did developments take a certain course in certain societies and another path in other societies (Neuman 2003:404). In this way, comparative studies can strengthen conceptualisation and theory building (Neuman 2003).

■ Teaching students to conduct research

In an age when even undergraduate education students are increasingly required to develop and demonstrate research proficiency, Crossley (2016:44), in a recently published book on the teaching of comparative and international education, singles out training in the comparative method as a particular value that comparative and international education can add to teacher education programmes.

The philanthropic ideal

The philanthropic ideal expounded by the founding father of the field Jullien still remains the noblest assignment of comparative and international education. Ameliorating and bettering the living conditions of humanity is in the current age of a global village more pressing than ever before – that is by cultivating a global citizen, geared with a creative, critical, caring predisposition (cf. Wolhuter 2017).

■ The uneven history and chequered pattern of comparative and international education at universities worldwide

Comparative education has for slightly over a century figured across the world in teacher education programmes and therefore enjoyed a presence at universities. Wolhuter et al. (2009) portray the historical evolution of the presence of field at universities, as consisting of a pre-historic phase, followed by the following five phases:

- 1. Phase I: Early years 1900s-1910s.
- 2. Phase II: Classic years: 1920s-1930s.
- 3. Phase III: Expansion versus Constriction: 1950s to mid-1970s.
- 4. Phase IV: Contraction versus Revitalisation: mid-1970s-1990s.
- 5. Phase V: Proliferation: 2000s.

Prehistory

The field has a prehistory before the onset of the 20th century. outside the walls of academe. Throughout the 19th century, there were travellers, in most cases government officials who made a study of educational systems of and reforms in foreign countries. with the idea that such studies would result in the selective borrowing of ideas, insights and practices to improve their own education systems. A well-known example is Victor Cousin (1792-1867), at one time Minister of Education in France, who undertook a study tour to Prussia in 1831, the report of which led to the Guizot Law of 1833, which set up the French system of primary education. Other well-known examples include the American 'cultural borrowers' who went to Europe to learn about schools: John Griscom, Calvin Stowe, Horace Mann and Henry Barnard. In 1837, the State of Massachusetts created the Massachusetts Board of Education and sent the Board's first secretary. Horace Mann, on a 6 months educational fact-finding mission to Europe. These activities were carried in the halls of universities when sir Michael Sadler, director of the British 'Office of Special Inquiries and Reports' delivered his famous Guildford lecture in 1900: 'How far can we learn anything of practical value from the study of foreign systems of education', in which he took up the issue of educational borrowing, and with which he too showed the way to the paradigm which would characterise the first generation of comparativists at universities.

Within universities, rudimentary comparative education activities existed in various forms. Scholars learned from foreign education systems, either when studying abroad, or by purposefully studying foreign systems of education. Education associations studied foreign education. For example, a significant activity of the Hrvatski; Pedagoŝji-Književni Zbor, an education association founded in 1871 in Croatia, was the popularisation of the educational experience of foreign countries (Vrcelj 2008:36). Education journals and books published at universities, often published articles of educational activities abroad. For example, the Czech Encyclopedia of Education (1891-1909) had over a 100 essays on national education systems from all parts of the world (Walterová 2008:42). The education journal Pedagogische Studiën in the Netherlands dedicated since in inception in the 1920s, a lot of attention to education in other countries (Boerma et al. 2008:96). At the threshold of the 20th century, two very important books - Charles H. Thurber's Principles of School Organization: A Comparative Study Chiefly Based on the Systems of the United States, England, Germany and France (1899) and Michael Ernest Sadler's How far can we learn anything of practical value from the study of foreign systems of education? (1900) significantly contributed to laying down the foundations of university comparative education. Some university courses contained comparative elements. They did not carry the name 'Comparative Education' but were incorporated into general subjects such as education or pedagogy (cf. Takekuma 2008:229). According to Brickman (1988:6), the 19th century ended with a large body of literature and university courses, which laid the foundation for comparative education at universities. However, it could be assumed that these courses did not contain the

theoretical, conceptual and methodological bases of comparative education.

■ Phase I: The beginnings: 1900s-1910s

James E. Russell, in the spring of 1900, at the University of Columbia, taught the first ever course in comparative education in the world (Steiner-Khamsi 2000). Comparative education also appeared at Manchester University, where Isaac Kandel began a comparative education course in 1905 (Hans 1949:44) and Southampton University, where Fred Clarke's course also began in 1905 (Lauwerys 1966:15).

The emergence of comparative education at universities at the beginning of the 20th century was facilitated by the fact that many other fields of comparative scholarship had already been established in academe: Comparative Anatomy, Comparative Linguistics, Comparative Literature and above all - Comparative Sociological Studies (eds. Wolhuter et al. 2008:323).

■ Phase II: The classical years: 1920 and 1930s

Isaac Kandel's came from England to the United States of America (USA) in 1908 and commenced with a comparative education course at Teachers College, Columbia University, which became the lodestar in the USA after 1920. Some alumni of Teachers College, Columbia University laid the basis for comparative education at other universities in the USA in the 1920s, for example Thomas Woody at Pennsylvania, William Clark Trow at Michigan and Paul Hanna at Stanford (Wilson 1994:462). During the 1920s and 1930s, comparative education courses were taught by Robert Ulich at Harvard University and by Isaac Kandel, James Russell, William Russell, John Dewey, Paul Monroe, Thomas Alexander and George Counts at Columbia University. A noteworthy event in the university evolution of comparative education was the Eastbourne Conference held in 1931 and

chaired by Paul Munroe, then Director of the International Institute, Teachers College, Columbia University. The conference was mainly focused on examinations but one of the decisions taken was towards introducing comparative education courses at teachers' colleges and institutes.

Peter Sandiford, author of the book *Comparative Education* (1918), relocated from Columbia University to Toronto in 1913 to become the vanguard of comparative education at Canadian universities. He remained at the University of Toronto until 1941.

Meanwhile in Europe, comparative education courses were established in the 1920s by G.W. Young and Nicholas Hans in London, and by Sergius Hessen in Prague and Warsaw. Important steps to preparing and offering courses on comparative education were also taken in Bulgaria, Croatia, Czechoslovakia and Norway.

In the 1930s, comparative education commenced formally as a stand-alone course at Beijing Normal University and Zhongsham University in China (Bray & Gui 2001:454). The grounds for teaching comparative education were also laid in Germany by Friedrich Schneider, in Croatia by Albert Bazala, Franjo Mandiě-Higy and Stjepan Pataki, in Norway at the University of Oslo and in Mexico by Ezequiel A. Chávez. Jean Piaget contributed to setting the basis of comparative education in Switzerland in the early 1930s by establishing a strong link between the University of Geneva and the International Bureau of Education. In the 1920s and 1930s, comparative education was acknowledged as an academic field in Japan because of the studies and efforts of Shigetaka Ale, Choichi Higuchi, Kenichi Hida and Masunori Hiratsuka. In Uganda, the teaching of comparative education commenced in 1925 at Makarere University (at that stage the only university in Sub-Saharan Africa, apart from South Africa). In 1940, comparative education was started in Brazil by Antonio Carneiro Leão and in Cuba at Havana University by Emma Pérez Téllez.

The classical phase of comparative education at universities can be correlated with the rise of nation states, and the harnessing of national education systems to achieve their (states') objectives.

Aptly then, comparative education was invariably taught in the 'factor and forces' paradigm of Sadler, Kandel, Hans and Schneider: national character shapes education systems and determines their particularities.

■ Phase III: 1950s-mid-1970s: Expansion versus constriction

The decades of 1950s till the mid-1970s were typified by two contradictory trends in various regions of the world.

In the countries of the Western block and in the developing world, comparative education showed a spectacular rise. These years of human capital theory (see Sobel 1982), of a limitless, optimistic belief in the societal elevating power of education (see Engelbrecht & Nieuwenhuis 1989) in times of structural functionalism and modernisation theory, and an unprecedented expansion of education worldwide (see Coombs 1985:74) were very favourable for the growth of comparative education. Being in the social science phase (see Noah & Eckstein 1969) amidst these favourable circumstances and with foreign aid, including education aid to developing countries a major export product of the USA, comparative education at universities flourished with comparativists such as C. Arnold Anderson and the Comparative Education Center at the University of Chicago. In Canada, the Ontario Institute for Studies in education was founded by David Wilson and Joseph Farrell in 1969. Western Europe too experienced times of growth for comparative education at universities, with eminent comparativists such as Edmund King and Brian Holmes in England, and Friedrich Schneider in Germany. In Japan, the first professorship of comparative education came into being established at Kyushu University in 1952, the first incumbent was Masuko Otake. In the 1950s and 1960s, chairs were founded at Hiroshima University, Kyoto University and Tokyo University. As many developing countries attained independence, the belief they had in education as the main agent of development and the role they assigned to education in the

nation-building project, led to massive education expansion projects. These developments bode well for comparative education, which secured a firm foothold at universities in countries such as Korea (see Park & Hvun 2008:242) and the countries of Southern Africa (see ed. Wolhuter 2006). Although gaining a firm foothold at universities, the world-system of knowledge (which had its nerve centre in Western Europe and North America) (see Altbach 1982; Arnove 1982) had an inhibiting effect on comparative education scholarship at the universities in the developing countries; this did, in fact, impoverish comparative education in the developed world too (see Biraimah 2006). In the extreme case of South Africa, the pernicious effect of isolation from the international academic boycott waged against scholars in that country c. 1960-1990 (see Harricombe & Lancaster 1995) meant that by 1990, comparative education - as practical at South African universities, was still fossilised in the inter-war 'factors and forces' paradigm (see Bergh & Soudien 2006).

In the countries of the Eastern Block, on the other hand, the totalitarian dispensations had a severely hampering effect on the field during the years 1944-1989, reversing the promising interwar events. In these repressive and stifling circumstances, when even the faintest interest in Western education was condemned as being an offence, comparative education torch bearer, Prof. Christo Negentzov, quit Sofia University (Popov 2007:105), Verv much reduced interaction with the outside world had the same damaging consequences for comparative education in the Czech Republic (Walterová 2007:91). In China, comparative education went through a comparable history. Comparative education was terminated as a field of study in the 1950s after the People's Republic of China came into being in 1949. The new rulers looked at comparative education as a 'bourgeoisie pseudoscience that worshipped and had a blind faith in things foreign' (Chen 1992:5). More socio-political convulsions in the 1960s with the cultural revolution in the 1966 got China into a 10-year period of withdrawal from the international world (Manzon 2007:113). In the Soviet Union, during the 1950s-1970s, the inclusion of comparative education in programmes of teacher education was obstructed (Wolhuter et al. 2009:326).

Phase IV: Mid-1970s-1990s: Varied trends: Contraction versus proliferation

In this phase too the field of comparative education had different degrees of progress and regress in different parts of the world – although almost the opposite of its fortunes in the preceding decades: dwindling in North America and Western Europe, but a revival in regions parts of the world where a wave of democratisation occurred.

The receding trend in North America and Western Europe should be seen against contextual forces. The spectacular educational expansion of the 1960s failed to yield the expected benefits. For example, instead of promoting social mobility, Jencks's (1972) extensive empirical study showed that education was no major determinant of social mobility. Moreover - Bowles and Grintis's (1976) landmark study, ushering in the paradigm of socio-economic reproduction concluded that education actually served to entrench and to reproduce socio-economic stratification patterns. Other factors that have contributed to a change in the status of comparative education at universities were the decrease in the numbers of student teachers (Sutherland, Watson & Crosslev 2007:159) and the reform of teacher education programmes (Altbach 1991:492; Schweisfurth 1999:94). In the case of the USA, conditions were aggravated by the inward turning of America after the Vietnam War, leading to a more inward-orientation amongst Americans, a trend not boding well for comparative education at universities.

In countries that underwent democratisation, on the other hand, comparative education flourished, for example in Greece (Karras 2007:66). After Mao Zedong's demise in 1976, China's opening its doors to the world outside China marked a re-birth of comparative education. Research on education abroad became

valued in the context of this new open-door policy and reform. Institutes of foreign education were created at Beijing International University, East China Normal University in Shanghai, South China Normal University, North East Normal University, Hangzhais University and Fujean Normal University. In the 1980s, a government policy document named comparative education as a part-discipline of education, an obligatory component part of teachers' education in the third year of initial teacher education programmes (Manzon 2007:117). At Hong Kong University, the Comparative Education Research Center created by Mark Bray in 1984, eventually became a prolific source of comparative education publications.

In the post-1989 context, comparative education in Bulgaria entered a boom period. All political prejudices and threats evaporated and, notwithstanding the lack of abundant opportunities for carrying out comparative education research because of lack of funds, the situation for networking with scholars aboard was much more favourable. As from 1997, in terms of Bulgarian higher education requirements, comparative education has been included as a compulsory part of all university teacher education programmes (Popov 2007:107). Similarly, in Croatia, comparative education is currently taught in all three faculties which educate teachers (Vrcelj 2008:41). After 1989, comparative education became part of teacher education at Czech universities in all of the nine Faculties of Education (Walterová 2008:43). In post-1990 Russia, comparative education also gained a new lease of life from teacher education reforms (Golz 2008:115), whilst in Kazakhstan comparative education started to be taught at the Masters level, after independence in 1991 (Kussainov & Mussin 2008:238-239).

Phase V: 2000s: Dwindling presence versus increasing relevance

During the 2000s, comparative education at universities is characterised by a dwindling presence (in the core of the world

education system: Western Europe and North America) and an increasing relevance (worldwide) (Wolhuter et al. 2009). The fizzling-out of comparative education infrastructure and programmes at universities in Western Europe of the final decades of the 20th century carried on. Notable exceptions to this downward trajectory include Switzerland, Norway and Spain.

In the developing countries, comparative education still holds tenaciously to its infrastructure and place in programmes acquired a few decades ago, although there are some major exceptions to this pattern. In Latin America, comparative education never regained its position lost at universities in Brazil in 1969 and in Chile in 1973. In the Asian region, there are signs of receding interest and marginalisation of the field in Japan (Takekuma 2008:233-234), Korea and Malaysia. In the case of Korea, a lack of specialists and language constraints adds up to a lack of student interest in the field (Park & Hyun 2008:257). Malaysia also reports a shortage of trained personnel (Meerah & Halim 2008:257). As for the African countries, Rwanda (Nzabalirwa 2008:291), South Africa and Uganda seem to exhibit some decline in the teaching of comparative education. In South Africa, comparative education lost its prestigious position at universities as a corollary of the post-1994 reform of teacher education (see Maarman & Wolhuter 2006: Wolhuter 2006), although the belief that, at many universities, the way comparative education was taught supported the then government's policies of segregation in education might also have been a factor (see Bergh & Soudien 2006). In Uganda, the only university offering a Masters in Comparative Education witnessed a drop in applicants, with some years having had not a single applicant (Kagoire 2008:313).

At the same time, a number of global trends make comparative education ever more relevant, significant and even indispensable. Globalisation and its attendant forces have a series of consequences for comparative education, for example to understand global education forces and how these have impacted domestic or national education systems/projects, which Walterová (2007:92) lists as one of the objectives of comparative

education programmes at universities in the Czech Republic. The increasing effect of international development agendas, such as the Millennium Development Goals, has resulted in both widespread study and persistent critical analysis (Sutherland et al. 2007:166-167). Global competitiveness and international comparability, in a flat world (see Friedman 2006), measured and monitored by studies such as IEA and PISA, gave rise to a new attachment of value to comparative and international dimensions in education courses, as highlighted by several comparativists discussing the place of comparative education at their universities and in their national settings (Holik 2007:137; Karras 2007:78; Schüssler & Leutwyler, 2008:129; Waterkamp 2007:147).

Regionalisation is another imperative impacting comparative and international component in teacher education programmes. Regionalisation is most salient in the nations of the European Union. It is essential for education students to be totally cognisant of for example the Bologna Declaration or the Lisbon Goals, in order to comprehend their own national education system. Initial teacher education programmes at the University of Athens currently have a module 'European Integration: An educational challenge' (Karras 2007:69) whilst that of the University of Egeo, Greece, contains a module: 'Comparative Education: Education in the European Countries' (Karras 2007:73), and initial teacher education programmes in the Czech Republic place special emphasis on European values, European citizenship, the Lisbon strategy in education and the European Union's educational programmes, strategies, objectives, principles and policy (Walterová 2007:92).

The growing multicultural, multilingual and multireligious composition of student corps at schools too makes a case for the inclusion of a stronger comparative education component in teacher education programmes. What is relevant here is Noah's (1986:156-157) comparative education being a touchstone to culture and Broadfoot's (1999:21) view that comparative education studies acquire more worth because of its role in to relating individual perspectives to societal contexts, and to group culture,

and to bringing together individuals and institutions in an intellectually coherent manner that will promote learning. Research on Irish students' experience on their comparative education course revealed that the most important reason why they were glad they did the course was that it helped to prepare them to teach in multicultural classrooms (Wolhuter, Maarman & Sullivan 2007).

Finally, the increased need for Global Citizenship Education in schools (see Mundy et al. 2007) generated an additional case for the inclusion of comparative education in teacher education programmes. With schools more and more required to equip students for global citizenship and the teaching and learning of a global outlook in education institutions (in curricula, textbooks, the attitude of teachers and students towards the world, the building of a national and an international identity, rather than the historical scope of schools concentrating on national themes and portraying the world through the national outlook), there is a commensurate need for a global dimension in teacher education programmes.

The above forces have led to the situation where comparative education content is not covered under that name but subsumed in a host of other courses at universities, a process Larsen, Majhanovich and Masemann (2007:22) referring to the Canadian context, call the 'broadening of Comparative Education'. Examples of courses under which comparative education is subsumed, taught as part of teacher education/graduate education programmes, are: education systems and school management, education and human rights, democracy and civil education and education and development.

■ The roller coaster ride of comparative and international education at South African universities

Comparative education first secured at South African universities during the 1960s (Bergh & Soudien 2006). It became most

conspicuous at the historically white Afrikaans and historically black universities. At these institutions, it appeared not only in stand-alone undergraduate and post-graduate programmes but it also had - compared to universities in every other part of the world - an exceptionally strong institutional infrastructure (as measured by Departments of Comparative Education and staff exclusively specialising in comparative education) (cf. Wolhuter 1994). However, in the years after 1994, its fortunes waned. When outcomes-based education was introduced a resultant change in teacher education programmes took place, whereby the basic sub-disciplines or sub-fields of education (such as philosophy of education, history of education, educational psychology, comparative education and the like) no longer formed the constituent structural units of teacher education programmes but where the competences deduced from the seven roles for teachers spelled out in teacher education policy/roles/competences, teachers informed modules to be part of teacher education programmes (cf. Wolhuter 2010). In this scheme of things, comparative education disappeared from one programme after the other. Comparative education departments universities were likewise closed down. Stand-alone comparative education courses were removed from teacher education programmes and comparative and international education has since been subsumed in a wide array of courses. including but not limited to, educational change policy; education in Africa: issues in South African education; democracy and civil education; gender and education; human rights education; the context of schooling; identities and social justice; peace education; justice, democracy and education; democracy education; social justice and education and lifelong education (Maarman & Wolhuter 2006).

Regarding the content of comparative education courses taught at South African universities is the international academic boycott to which the country was subjected during the decades 1960-1990 (cf. Harricombe & Lancaster 1995) meant that up to 1994 comparative education courses fossilised in the mould of

the 'factors and forces' paradigm, in the vogue in pre-Second World War Comparative Education globally (cf. Maarman & Wolhuter 2006), leaving South Africa(n students) far behind developments in the rest of the world in the field (cf. Wolhuter 2015). Compared to global trends, the field as taught at South African universities eventually became wholly outdated or anachronistic. There is also an accusation that comparative education as taught at that time at South African universities lent credibility to the segregation policies of the government of the time (cf. Wolhuter et al. 2013:355). However, after 1994 new paradigms, themes and theories in line with recent global developments in the field were brought into courses. Here comes to mind for example frameworks of socio-economic and cultural reproduction, dependency theory, world-system analysis and critical ethnography.

A change in teacher education policy occurred when, on 19 February 2015, the Minister of Higher Education and Training proclaimed the Revised Policy on the Minimum Requirements for Teacher Education Qualifications (MRTEQ) (Republic of South Africa 2015). This Policy Statement specifies that 50% of credits of teacher education programmes should consist of modules in the phase/subject area specialisation of the student, and 40% of credits should be in foundations of education (such as philosophy of education, history of education and sociology of education), general pedagogy (instructional science) and situational learning (learning in specific situations, such as classrooms, schools and in the community). The remaining 10% is left to the judgement of the particular teacher education institution. This development sets the table for a revival of comparative education in standpre-graduate as well as post-graduate education programmes. At the country's largest university, the University of South Africa (a distance education university, with some 300 000 students), a new course is being developed in the BEd Hons programme, combining history of education and comparative education, focussing on decolonisation of education (cf. eds. Seroto, Noor & Wolhuter 2020). This new programme also reflects the trend in higher education in South Africa to decolonise curricula following widespread student protests in 2015 against colonial vestiges in university curricula and also highlights the possibilities for comparative and international education to continue advancing both education and equity in South Africa, and perhaps beyond (Wolhuter 2019).

If the teaching of the field at universities ebbed the years after 1994, the vibrant organisational infrastructure of the field and its forceful reconnection with the international comparative education community was impressive. On 15 August 1991, the Southern African Comparative and History of Education (SACHES) was established. In 1994, SACHES became a constituent member of the World Council of Comparative Education Societies (WCCES). The founding president of SACHES, Harold Herman soon after rose to the position of Vice President of the WCCES, and some 15 years later, another member, Crain Soudien, became President of the WCCES. Apart from the SACHES President, who ex officio sits on the Executive of the WCCES, three other SACHES members (i.e., Crain Soudien, Aslam Fataar and Charl Wolhuter) serve on the Executive of the World Council. Since its inception, SACHES organises an annual conference in various parts of the Southern and Eastern African region and has founded a journal Southern African Review of Education, currently, in 2019, in its 25th year of existence. In 1998, SACHES hosted the World Conference of Comparative Education in Cape Town.

Whilst the organisational side has emerged strongly in the year 1994 and the teaching side seems poised for renewal in the new future, several aspects of research in comparative and international education are concern raising. Weeks et al. (2006) noted in their survey of the field that whereas comparative and international education in the pre-1994 period was characterised (at least by scholars not attached to the historically English and the historically black universities) by robust criticism of the sociopolitical dispensation of the day, after 1994, these critical voices fell silent. This is part of a general pacification or docile complicitness that affected the entire gamut of social sciences in

post-1994 South Africa, a criticism graphically explained by Gumede and Dikeni (2009). In the major education reforms in South Africa in the past 25 years, such as the introduction of outcomes-based education and the successor policy, the Curriculum and Assessment Policy Statement (CAPS) of 2011, the restructuring of the higher education landscape in the years after 2000 or the two major re-draftings of teacher education requirements, the comparative education scholarly community was marginalised and overlooked in the provision of guidance or expertise. Furthermore, in major international studies, such as the IEA Civic Education survey, or the Teaching and Learning International Survey, the South African Comparative Education scholarly community is absent too, meaning South Africa is omitted from these surveys, arguably to the detriment of both South Africa and the wider world (Wolhuter 2018). In current education issues, such as the reconsidering of the powers of school governing bodies, or the issue of free university education, the comparative education fraternity is equally absent from the public discourse and official drafting of policy as well.

■ Conclusion

It has been explained in the first part of this chapter that education scholarship is in dire need of relevance, authenticity, structure and responsiveness. In the second part of the chapter, the concept, focus and significance of the comparative and international education has been explained. The question that now arises is how much ameliorative potential can be found in the field of comparative and international education regarding these needs in education scholarship.

As to relevance, comparative and international education is uniquely placed to guide a scholarly pursuit whereby a country or national education system can benefit from foreign experience, both in identifying the relevant and in planning response. It is in the foreign experience (i.e. the situation in countries other than the own) that the scholar can gain a more complete comprehension

of a particular education issue, the full scope of the issue, its possible consequences, possible causes and contributory factors. Moreover in the foreign experience, approaches to address that particular issue become visible, also the track record of each approach and its chances of success in particular contexts. Appropriate methods to research particular education issues will also become transparent.

In enhancing authenticity in education research, the field of comparative and international education too has an invaluable role to fulfil. One essential feature of the malady of the lack of autochthonous theory in education is that theoretical constructs are anchored in related fields, for example learning theory is typically anchored in Psychology. To build autochthonous theory, the minimum requirement would be for learning theories such as Skinner's behaviouristic theory to be placed and interpreted within the setting of education, with all its role players or actors, dynamics and forces. Comparative and international education, having derived from its focus of investigation a theoretical framework of the education system (with the national education as the most extensive education creation by society) (cf. Steyn, Van der Walt & Wolhuter 2015) offers an appropriate theoretical construct for this exercise of interpreting any derivate theory.

Regarding the structuring of knowledge of education, two remarks on the value of comparative and international education are apt. Firstly, the theoretical framework of the education system once again provides the most extensive theoretical edifice for the packaging and ordering of education knowledge. Secondly, bearing in mind one of the imperatives of the creation of scientific knowledge is to arrive at statements universal or as close to universal as possible, then Teichler (2014) could be cited, where he points to the value of comparative education research in deconstructing, challenging and disrupting that which, hailing from very parochial knowledge constructions, are taken as universal and the only truths. Thus scholars in comparative and international education are well placed to explicate the contextual limitations or specificities of statements or conclusions arrived at

by scholars in other fields, whilst at the same time use these to proceed to the most general of statements regarding education. In this way, comparative and international education serves as a scaffold in building a general theory of education from the findings arrived at by other fields of education scholarship by:

- Identifying and explication contextual contingencies when generalising constructing authentic theory.
- Benefitting from foreign experience both in identifying the relevant and in planning response.

What the comparative and international education scholarly community should do, in South Africa in particular, is to rise to the occasion, to seize the opportunity provided by the new framework for teacher education programmes.

Chapter 6

A practice-based approach to teaching the screening, identification, assessment and support model in learner support

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Abstract

As a teacher educator, working within the field of learner support. I am concerned about the fact that student teachers are not always able to translate the theory they learn in the lecture room into effective practice. Adopting a self-study design, I researched my own practice in order to improve my understanding of how I could help the students close the theory-practice gap through adopting a practice-based approach in my teaching. I presented a module to third-year student teachers who had to learn how to provide support to learners through the application of the SIAS model. I generated data through the transcription of purposeful discussions with colleagues who had taught the module previously, observations by student teachers of learner support activities with six Grade 1 learners and critical reflection on my practice in the form of detailed entries in my reflective diary. I learnt that a practicebased approach, taught through a collaborative learning strategy, was effective in helping students to understand the concepts of the SIAS model to inform their professional practice and improve their capacity to provide learner support. My explanation of how I came to make this claim to knowledge may be helpful to other teacher educators who have similar concerns about making their teaching more relevant to their educational context. The research reported in this chapter is an example of the academic rigour of self-study research and its value for generating theory that contributes to the SoTL, whilst directly benefitting the professional development of student teachers who are then better equipped to deliver quality education to Foundation Phase learners.

Keywords: Evidence-based practice; Learner support; Practice-based approach; Self-study teacher research; Scholarship of teaching and learning; SIAS process; Teacher education; Theorypractice gap.

Introduction

As a teacher educator in the field of learner support, my concern is that student teachers learn theory but are not always able to translate this learning into practice. It concerns me because I believe that theory-based practice is at the core of successful teaching. Levine (2006:25) warns us that 'one of the biggest dangers we face is preparing teachers who know theory and know nothing about practice'. Teaching is a profession in which theory is embedded in practice (Gravett 2012; Schön 2017) and therefore student teachers need to learn to integrate it into what they teach in a meaningful way. In addition, the importance of collaboration between schools and universities, to lessen the theory-practice gap, has been highlighted by several researchers (Dean, Lauer & Urguhart 2005; Korthagen, Loughran & Russell 2006; Valencia et al. 2009; Zeichner 2010). The OECD has been calling for closer partnerships between schools and teacher education institutions for over a decade (OECD 2005), a call that is reiterated by leading scholars in education (Darling-Hammond 2006: Louden & Rohl 2006).

The gap between theory and practice is also a concern to me because I am committed to educating teachers who are able to ground their pedagogical decisions in theory, resulting in effective implementation in practice of what they have learnt in the classroom setting. I also see the potential of student teachers, who work in this way, being able to educate the in-service teachers they work with during their teaching practice. I work at a rural campus of a university in South Africa, where learner support is much needed in primary schools to promote academic success for learners who mostly live in poverty-stricken communities. My personal teaching and learning philosophy is learner-centred, implying that the student teachers in my class should feel at ease and be comfortable contributing to activities in class, be it demonstration, discussions or critique of my practices. Their curiosity should be aroused and they should have

the opportunity to experience teaching their subject in a real-life setting. However, I face some challenges in the realisation of my philosophy in my teaching of these students. Firstly, the teaching and learning have to be conducted in English, which is not my mother tongue, nor that of my students. I have to ensure that we really understand each other and that they understand the key concepts we are discussing. Therefore, it takes time and effort to ensure we are communicating effectively. Secondly, our university is situated in a rural area with many challenges related to poverty. All my students are first-generation university students and most of them are funded by bursaries, implying that they also come from backgrounds of poverty. They themselves are products of a system in which rural schools, similar to those in which they do their practical work, lack resources, have overcrowded classrooms and where, generally, the learners have a high degree of povertyrelated barriers to learning (Du Plessis 2014; Mahlo 2011; Truter 2016). Hence the importance of teachers knowing how to translate the policy and theory of learner support into practice.

Learner support and the screening, identification, assessment and support model

Learner support interventions need to be adapted to the specific context of primary schools and successful implementation depends on the experience and know-how of teachers (Cook & Cook 2011). They also need to be culturally appropriate to the values, knowledge and skills of the parents, teachers and communities (Habib, Densmore-James & MacFarlane 2013). Since 1994, the focus in the South African education system has been on inclusion. The main policy directing this focus is White Paper 6: Building an Inclusive Education and Training System (Department of Education 2001:5). This document highlights the importance of learner support in primary schools, specifically in the Foundation Phase. According to White Paper 6, learners with barriers to learning should be included in mainstream classes. Thus, 'no

learner should be excluded from formal education because of physical, intellectual, social, emotional, language or other needs' (Department of Education 1997). This policy implies that all learners should have access to support when needed to enable each learner to reach his or her full potential to allow them to 'participate as equal members of society' (Department of Education 2001:5).

However, primary school teachers working socioeconomically deprived communities face multiple challenges in providing support to all the learners who need it (Du Plessis 2014). Teachers need to be able to adjust teaching strategies and materials to suit the learning styles and cognitive abilities of individual learners, many of whom are traumatised because of their challenging circumstances at home (Truter 2016), In 2005, a report on conditions in rural schools (Chisholm 2005) pointed out that young learners in rural areas are exposed to hunger and neglect, and have to travel far to get to school. Learners with learning barriers need individually designed instruction to meet their unique learning needs (Department of Education 2001). This type of instruction requires a teacher who thoroughly understands the content he or she is teaching, can assess where the learner is in the process of learning development and uses methods that support the learner's individual learning needs (Johnson 2015).

To support teachers in this regard, the National Strategy on SIAS school pack was made available to all teachers in 2008 to help them support all learners, except those who have severe cognitive barriers (Department of Education 2008). In 2014, the draft policy on SIAS was published (Department of Basic Education 2014) and this document shifted the focus from the individual learner to the support programme and the roles and responsibilities of the school-based support team (SBST). From 2008 to 2014, there was a paradigm shift in South Africa with regard to the implementation of inclusive education. This shift mirrored the global trend to move away from a deficit, remedial approach, where the learner was situated as the problem, to an

acceptance that the system must adapt to provide support so that no learner is denied the opportunity to reach their potential (Hay 2012). With this change, learner support is no longer a specialised area, as all teachers need to be able to implement it in practice. According to the policy (Department of Basic Education 2014), the SIAS process involves different role players but starts with the teacher who should screen all learners in their class in order to identify learners who need additional support. The *screening* involves the collection of background information about the learner and includes the learner's profile; holistic development: home background and the support needs assessment (SNA). Information about the learner's home background includes a home visit and parent interviews to gain knowledge about the learner's strengths, weaknesses and interests. The screening process is applied to all learners and provides information to the teachers about the identification of those learners that might be in need of support.

If the screening process results in *identification* of a learner with learning barriers, the teacher then scrutinises several documents to back up his or her observations. These documents include the learner's profile, a portfolio of the learner's assessment and information from other teachers, parents and caregivers. At this stage, each individual's challenges regarding his or her holistic development, home circumstances and academic skills (reading, writing and mathematics) are identified. All this information is used by the teacher to compile a diagnostic profile to enable the relevant stakeholders to make informed decisions to benefit the learner and provide opportunities for optimal development.

The assessment component of the SIAS process involves different stakeholders, such as the teacher, parents, members of the district-based support team as well as occupational and speech therapists, if needed. The child's cognitive, social and emotional as well as physical development is assessed. Circumstances at home are taken into account and then, based

on this assessment, an individual support programme for learners in need of support is developed.

In the *support* phase, decisions about the implementation and monitoring of the learner support are made. These include the practical component of learner support and involve aspects such as: how the learner should be supported, where the learner will be supported, what components should be included in the support as well as when the support will take place.

These demands emphasise the importance of equipping teachers to implement the policy to provide support, specifically in rural areas, where the services of psychologists, speech and occupational therapists are scarce (Barratt 2016; Janse van Rensburg & Du Toit 2016). The challenge for the teacher educator is to close the gap between theory and practice, to ensure that students understand how to practically implement their learning to develop and implement a support programme for each learner. I suggest a practice-based approach is useful in attaining this aim.

Practice-based approach

Kelchtermans' (2013) practice-based approach or enacted professionalism (Evans 2008; Frelin 2013) implies that the practices of the teacher educator are at the centre of studying teacher educator professionalism. Thus, teacher educator professionalism is considered to manifest in the teacher educators' actions and behaviour whilst teaching student teachers (Vanassche & Kelchtermans 2014). Whilst doing so, the relationships between the teacher educator and students, as well as the context where the teaching takes place are taken into account (Frelin 2013). Vanassche and Kelchtermans (2014) state that:

Teacher educators cannot but be in relation with student teachers. Furthermore, these relationships do not operate in a vacuum, but are always embedded in the context of a particular teacher training institute, that is characterized by particular structural (e.g., the available resources, organizational structure, student teacher

population) and cultural (shared assumptions about good teacher education) working conditions. (p. 118)

According to Vanassche and Kelchtermans (2014:119), the practitioner self-study is grounded in five questions:

- 1. What is happening?
- 2. Why is this happening?
- 3. What do I think about this and why?
- 4. Should I try to change this practice?
- 5. Why would this change be an improvement?

I used these questions throughout this self-study to reflect on my own practice. The same questions were used to guide the student teachers' in their reflections about their interaction with learners in the primary school.

As a teacher educator, I strive to model to the students the behaviour I expect of them once they are teachers. These practices include treating them with respect, engaging them in real-life activities, such as demonstrations or role-play, but most of all reflecting on my actions, asking: 'why am I doing this and how can I improve on my practices?' All these actions are underpinned by the practice-based approach (Kelchtermans 2013) and based on the work of Dewey (1922, 1928), Piaget (1936), Vygotsky (1978) and Bruner (1960).

Dewey (1922, 1928) held a pragmatic and democratic view of education. He was a proponent of progressive education that emphasises the need to learn experientially. Dewey believed that learning is more profound when we learn through doing and thus proposed that students should be given an opportunity to teach in real-life settings (Dewey 1922). Dewey's view of the classroom was deeply rooted in democratic principles, promoting equality of voice amongst all participants in the learning experience. Thus, as a teacher educator, I try to create a climate where the student teachers and myself respect one another, learn from each other and have equal chance to voice our opinions.

The reason why I engage in these practices is twofold. One, this practice reflects my democratic values and beliefs; two, I want student teachers to learn how to embody similar practices once they are teachers at primary schools.

Piaget (1936) contends that intelligence is not an innate characteristic, but is shaped by human experience, specifically interaction between the individual and his or her environment. Piaget (1936) identified basic stages of an individual's mental growth. At first, knowledge is represented in concrete actions and experiences. Thereafter, knowledge is represented in images that have an independent status from the experiences that they represent (abstract knowledge). Lastly, the knowledge is represented in stages of formal operations. These are the basic stages in the mental growth processes that regulate the basic learning processes of adults. The practice-based approach starts out with concrete actions, and through critical reflection leads to abstract thinking about practice in relation to theory, where the student is able to recognise strengths and weaknesses and take action to improve.

Vygotsky's (1978) socio-cultural theory, in which social interaction plays a fundamental role, promotes development and change. Like Piaget (1936), Vygotsky (1978) emphasised the role of social interaction in development. Vygotsky's (1978) idea of the zone of proximal development (ZPD) proposed that social interaction with more capable peers and with adults plays a central role in the development of the child. Vygotsky (1978) explained it as follows:

The ZPD is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (p. 86)

Thus, by demonstrating to students the practical implementation of learner support activities, I, as the more capable adult, could help them to better understand how to implement the theory of learner support in primary schools.

Informed by the theories of Dewey, Piaget, Vygotsky and Kelchtermans, I endeavoured to study how I taught knowledge and skills to student teachers which were connected to real-world issues in real-life contexts, to equip student teachers with practical skills relevant to learner support activities. Consequently, student teachers would be more interested in what they were learning, be more motivated to learn new concepts and skills and better able to support learners once they are teachers.

Overview of the module

To address my concern about the gap between theory and practice, and specifically how to help the students to operationalise the SIAS process in the classroom, I decided to collaborate with a primary school close to the university. This collaboration created an opportunity for the student teachers, the in-service teachers and myself to work together to provide learner support to a small group of Grade 1 learners. Together, we formed a learner support club. The teachers screened their learners, identified those in need of additional support and brought them to the university weekly, for 5 weeks. I demonstrated the assessment process to the student teachers and we collaboratively planned the learner support activities. These planned activities were executed by me. whilst the student teachers observed and then critically reflected on the activities, first in a collective discussion and then individually in writing. For the final assessment of the module, each student had to implement what they had learnt to apply the SIAS process with one learner at a primary school during their work integrated learning (WIL) period.

This process was grounded in two assumptions. Firstly, that demonstrations and hands-on, real-life experiences would allow student teachers to learn how to integrate theory and practice (Clark, Threeton & Ewing 2010). Secondly, that the practice-based approach (Kelchtermans 2013), which focused on reflection and collaboration within a supportive relationship, would enable me to improve my own teaching activities to support the student teachers to apply the abstract concepts of the SIAS model.

The final assessment took the form of a portfolio in which each student had to provide evidence of their learning from their experience of implementing the SIAS process in a real-life context – the classroom where they were to conduct their WIL. Students had to screen and identify a learner in collaboration with the teacher. Teachers were expected to help the students to screen the class and identify a learner for support, because the WIL period is only 3 weeks and they had to start with the assessment and support immediately, to allow for the assignments to be completed in time. The portfolio had to include an explanation of the activities they used to support the learners, as well as their reflections on their learning of implementing the SIAS process. Table 6.1 provides an overview of the module's learning outcomes, assessment processes and the pedagogical strategies I used to help students reach them.

To support the students with the compilation of this portfolio, I decided to use real-life learner support activities, which included demonstrations, modelling and hands-on experiences with six Grade 1 learners as explained in Table 6.1. According to Clark et al. (2010), practical activities and real-life experiences can improve cognition, because hands-on practice allows student teachers to integrate theory and practice. Furthermore, authentic learning experiences enable student teachers to experience success or failure, thus increasing their mental strength.

The holistic development of the young child, including physical, social and emotional as well as cognitive aspects, are important to ensure success in learner support (Kagan, Moore & Bredekamp 1995). The National Research Council (2008) emphasises important aspects to consider when teaching young children. These are their playfulness, their short concentration span and the use of developmentally appropriate activities. Thus, I provided the students with specific details on how to execute, play-based, developmentally appropriate, physical activities in more or less 40 min. Students were also informed about the importance of the choice of learning and teaching support material (LTSM) (to keep learners' interest), activities to build confidence as well as the variety of activities to accommodate the short attention span. Table 6.2 explains these activities.

 TABLE 6.1: Module information, assessment and pedagogical strategies to support students.

Information	Detail
Outcomes	Evaluate learning support processes and strategies in the school and in the classroom
	Demonstrate a well-rounded knowledge of the functions of institutional and support teams, and demonstrate the skills and attitudes required to work together in a team
	Demonstrate the ability to integrate knowledge, skills and attitudes in order to develop individual educational plans for learners who experience specific barriers to learning
Pedagogical	The learner support club:
strategies to support students: Real-life learner support demonstra- tions (with six Grade 1 learners)	 Two teachers, who previously studied at the same university, were teachers at a primary school, close to the university. They were asked to screen their classes and identified six Grade 1 learners in need of learner support with regard to reading and spelling These six learners became members of the learner support club. The teachers transported the learners weekly (five weeks) in the afternoon to the university to enable the teacher educator to demonstrate the assessment and support (the last two steps in the SIAS process) to student teachers. The teachers were involved in the activities to ensure understanding by means of translation because the learners were Setswana speaking and the teacher educator was speaking English. At each session, the activities, expected from the student teachers to complete the comprehensive portfolio, were demonstrated at the university, where we had access to a Foundation Phase classroom in
	the lecture hall Week 1: Pre-intervention assessment
	Week 2: Execute planned learner support activities and reflect on this session to plan activities for week 3
	Week 3: Execute planned learner support activities and reflect on this session to plan activities for week 4
	Week 4: Execute planned learner support activities and reflect on this session
	Week 5: Post-intervention assessment and final reflection, guided by the five questions of Vannasche and Kelchtermans (2014)

Table 6.1 continues on the next page \rightarrow

TABLE 6.1 (Continues...): Module information, assessment and pedagogical strategies to support students.

Information	Detail		
Assessment task: Com- prehensive portfolio	1. Permission and ethical aspects		
	Explain the assignment to the principal and get permission letter from the principal		
	Ask two teachers to identify three learners in each class who struggle with reading and spelling		
	Hand out letter of permission to learners for parents' approval		
	Collect letter of permission from the principal and parents		
	Compile the learner's case history, using information from the Learner Profile document		
	Conduct an interview with members of the SBST		
	Critically reflect on your experience so far		
	2. Week 1: Pre-intervention assessment		
	Conduct a pre-intervention assessment with regard to the learner's reading and spelling skills		
	Plan your intervention, based on the learner's support needs		
	Determine the available assets; identify role players and decide which LTSM you will use		
	Critically reflect on your experience so far (see questions above)		
	3. Week 2: Intervention - Meet with learner twice in the week		
	First contact: Execute planned learner support activities and reflect on this session		
	Second contact: Execute planned learner support activities and reflect on pre-assessment, learner's support needs, assets, role players and support activities		
	4. Week 3: One meeting with learner and post-intervention assessment		
	Third contact: Execute planned learner support activities and reflect on this session		
	Fourth contact: Conduct a post-intervention assessment with regard to the learner's reading and spelling skills. Use the same activities as preassessment to determine if progress took place		
	5. Final report		
	Report on your learner's progression, including evidence of the activities		
	Write a final reflection on your learning during this process, guided by the initial questions		

LTSM, learning and teaching support material; SIAS, screening, identification, assessment and support; SBST, school-based support team.

TABLE 6.2: Activities to provide learner support in 40 min for Grade 1 learners.

Allocated time	Activities	Purpose of activity
3 min	Sing an action song	Get attention and develop memory skills
5 min	Skipping ropes	Enhancement of larger
	Wheel barrow game	muscle development
	Obstacle course	
5 min	Exercises for eye muscles:	Develop smaller muscles
	marbles in a box	
	laser light on wall	
	Exercises for hands:	
	tear and crumble paper	
	play dough	
5 min	Visual activities:	Develop visual perception
	visual discrimination: differences or similarities in size, colour or shape	
	picture drawing: complete partially drawn pictures	
	visual memory games	
	correct letter formation: with finger paint over laminated letters	
	copy 3-D block designs with Lego or other building blocks	
5 min	Sequence of phonological awareness instruction and intervention (Schuele & Boudreau 2008):	
	divide sentences into words	
	divide words into syllables	
	initial sounds	
	final sounds	
	phoneme deletion	
	phoneme addition	
	segment and blend sounds	
	phoneme substitution	

Table 6.2 continues on the next page \rightarrow

TABLE 6.2 (Continues...): Activities to provide learner support in 40 min for Grade 1 learners.

Allocated time	Activities	Purpose of activity	
10 min	picture walk, discussions and predictions	Develop vocabulary, memory, and logical	
	reading the story	thinking	
	re-reading of the story on multiple days		
	re-telling of the story with the picture cards/book		
	dramatise the story		
	drawing a picture of the story		
2 min	Repeat the action song	Memory enhancement	
5 min	Calm down activities, choose one:	Calm learners down before	
	I spy with my little eye	they leave	
	memory game - cards		
	discussion: what did I enjoy today?		

■ Self-study as research methodology

Research to contribute to the SoTL has prompted different forms of educational inquiry (Hamilton & Pinnegar 2013; Loughran 2010). Scholarship of teaching and learning research has traditionally focused on enhancing the student learning experience (Fobes & Kaufman 2008; Trigwell & Shale 2004). However, Hogan and Daniell (2015) indicate that both students and teacher educators benefit from reflective practice, specifically if it is combined with self-study teacher research. Kemmis (2011) argues that educational action research contributes to each participant's ability to become critically reflective and craft their own SoTL. Ryan (2015) concurs, saying that self-study is a professional development approach that requires participants to closely interrogate their practice and environment, in order to grow, change and improve.

Cochran-Smith (2005) acknowledges that literature expresses doubt about the validity of self-study research because the researcher is too close to the research. However, she argues that self-studies provide knowledge about what student teachers learn, how they learn it, under what conditions and how this learning is translated into professional practice (Cochran-Smith 2005). Pithouse-Morgan and Samaras (2015) emphasise the usefulness and appropriateness of self-study in education, stating:

As self-study researchers, professionals understand that learning starts with the self, but does not end there. They identify questions that they are concerned, curious and passionate about and research those questions in their own professional contexts. (p. 1)

This knowledge can contribute to the learning of other practitioners. In addition, Berry, Geursen and Lunenburg (2015) emphasise the importance of self-study teacher research in the attempt to connect theory and practice, by studying individual practices to minimise the theory-practice gap. Thus, self-study research is an ideal methodology for generating knowledge that contributes to the SoTL.

Self-study teacher research enabled me to create 'vibrant living educational theory' (Pinnegar & Hamilton 2009:5) and to contribute to my personal and professional improvement (Samaras & Freese 2006). In the study design, I deliberately focused on the characteristics of self-study teacher research provided by Pinnegar (1998) and the key elements identified by Samaras (2011), because this was a personal inquiry into my own teaching, with critical collaborative inquiry to improve learning and professional practice. Pinnegar (1998:32) identified the following characteristics of self-study teacher research: 'selfinitiated and focused; aims at improvement; is interactive; utilises multiple qualitative methods; and provides evidence to validate the knowledge generated'. Samaras (2011) explains the collaborative aspect of self-study, when an individual researcher identifies a problem particular to them but works with others in cycles of action and reflection to address it. Critical collaborative inquiry is characterised by information-sharing with colleagues to induce improvement and growth.

I formed a critical enquiry group with three colleagues who had previously taught the module, to enable mutual learning. Table 6.3 provides an overview of the study design.

During *Cycle one*, I formed a critical enquiry group (Samaras 2011) with three of my colleagues, who previously taught the module. Samaras (2011) identifies such a team as a key component of self-study teacher research and emphasises the importance of

TABLE 6.3: Summary of the research process and data generation strategies.

Cycle	Participants	Data generation	Data documentation
Cycle one			
	Critical enquiry group (4 teacher educators)	Purposeful discussions (Leedy & Ormrod 2016)	Transcriptions of audio tape
and assessment		Reflective diary (Samaras 2011)	Hard copy of reflective diary
Cycle two			
In class teaching and learning activities	31 student teachers (5 groups with group leaders) 1 teacher educator	Reflective diary	Hard copy of reflective diary
Learner support club:	31 student teachers (5 groups with group	Reflections (Carl & Strydom 2017) during	Transcriptions of audio tape
Demonstrations	leaders)	discussions in small groups, feedback to	Hard copy of
Of learner support	1 teacher educator	the larger group	reflective diary
activities with 6 Grade 1 learners	2 Grade 1 teachers	Reflective diary	
Cycle three			
Assessment of the learning of	31 student teachers 1 teacher educator	Document analysis (of portfolios)	Portfolios of student teachers
students		(Henning, Van Rensburg & Smit 2011)	Transcriptions of audio tape
		Classroom discussions with student teachers	
Cycle four			
Final reflection	2 Grade 1 teachers	Purposeful discussion	Transcriptions of
session	5 group leaders	Reflective diary	audio tape
	(student teachers)		Hard copy of reflective diary
	4 members of the critical enquiry group		

trust and openness. We met twice during cycle one, once to discuss the perceived shortcomings of the module and the second time to review the adjustments that I made to try and address these issues.

Cycle two entailed my demonstration of learner support activities with six Grade 1 learners. Two teachers, former students at the university, from a nearby primary school, screened and identified (the first two steps in the SIAS process) six Grade 1 learners who were in need of learner support. This was done to cause minimum disruption to the Grade 1 class teaching and learning activities. In addition, 31 student teachers in a Grade 1 class would influence the behaviour of the young learners. These six learners became members of the learner support club. The teachers engaged spontaneously in the reflections after these learner support club activities and their contributions formed part of the data. The student teachers observed the activities. and later we reflected on what happened and discussed how I could improve. The reflections were done in small groups, reported to the whole class and written down and submitted by individuals. These observations and reflections informed the learner support activities of the following week.

Cycle three entailed the compilation and assessment of the portfolios. Once the student teachers completed the content of the module, observed the assessment and support activities at the weekly learner support club meetings, they had to apply the newly learned knowledge during their WIL. They had to compile a portfolio of evidence (cf. Table 6.1), which comprised all the activities involved in the SIAS process; they also had to indicate how the assessment influenced their planning of future activities. In addition, they had to provide evidence of the activities they conducted. The portfolio included an interview with members of the SBST to determine the challenges they had to face with regard to the context. Their written reflections were guided by the five questions of Vanassche and Kelchtermans (2014).

Cycle four was the final reflection with two groups. Group one comprised 31 student teachers, and group two had 11 participants: the five group leaders, two in-service teachers, the colleagues who had previously taught the module and myself. I decided on these two groups because one group of 37 participants would be too big for a purposeful discussion.

Once all the portfolios were marked, I had a class discussion with group one. This was done similar to cycle two where discussions took place in small groups and group leaders provided feedback to the class. These discussions focused on their experiences of doing the SIAS steps during WIL and about the compilation of the portfolio. The discussion with group two was done after my initial analysis of the findings and was used as a form of validation group. We reflected on the whole process and the findings.

Data analysis

Niewenhuis (2014) notes that qualitative data analysis is a nonlinear process, where data collection, analysis and reporting are intertwined. I made use of thematic data analysis, defined by Braun and Clarke (2006:79) as 'identifying, analysing and reporting patterns or themes within data'. I reflected on the data constantly, looking for themes that would answer the research question. At the end of each cycle, during the discussion, I asked questions in an attempt to probe for deeper meaning and also to clarify with my colleagues and the student teachers if they agreed to the way I interpreted the data. I tried to identify themes that would serve as examples for teacher educators in similar contexts (LaBoskey 2015).

Ensuring trustworthiness

As an action researcher, I played a central role to ensure trustworthiness (Patton 2005; Stewart 2010) and therefore I want

to state my position to enhance the trustworthiness and credibility of the data collection and analysis (Patton 2005). I have extensive experience in learner support at the primary school level and conducted individual, private tutoring for learners up to Grade 12. I believe that I should enhance the total development of the learner, including the emotional aspects and therefore, I create a loving playful atmosphere to provide learner support. In addition, I consider integrity, open and honest relationships as primary factors in learner support, but also in research. To ensure trustworthiness, I adhered to strategies identified by Creswell and Creswell (2017): member-checking for both data collection and interpretation; rich, thick descriptions to convey the findings; clarification of researcher bias; inclusion of negative or discrepant information; prolonged time in the field; peer debriefing to enhance accuracy and research review by an expert in the field.

Ethical considerations

The ultimate goal of the study was to improve the way in which I taught and assessed the module to enable student teachers to successfully implement theory about learner support and the SIAS process at primary schools during WIL. Thus, all my students did the work but they were asked to give informed consent for me to use their reflections and final portfolios as data. Letters of permission were obtained from the provincial Department of Education and the principal of the primary school. The principal obtained letters of consent from the parents of the six Grade 1 learners and the two teachers. All participants knew that they could withdraw their consent if they wished to do so without any undue consequences.

■ Discussion of the findings

The data indicated that the practice-based approach (Kelchtermans 2013) yielded some success and enhanced the student teachers' understanding of the activities to provide

learner support to Grade 1 learners. The findings will be discussed according to the cycles in the research process.

Cycle one: Identify the strengths and needs of the module

A number of authors (LaBoskey 2004; Pithouse-Morgan & Samaras 2015; Schuck & Russell 2005) indicate the necessity of a trusting community of critical friends and collegial dialogue for educational change and improved practice. I met with three of my colleagues, who taught the modules in previous years, to compare their experiences of teaching the module to mine. I provided everyone with a hard copy of the Study Guide to refresh their minds about the outcomes and content.

My colleagues agreed that the summative assessment, a portfolio of evidence about activities to support learners with learning barriers in the Foundation Phase, was a good and comprehensive assessment which reflected the outcomes of the module:

'I really feel that the composition of the portfolio is a true reflection of the students' ability or inability to ... really support learners'. (C1, gender undisclosed, date unknown)

However, they had also experienced that the students struggled in compiling the portfolio:

'It [the portfolio] resonates well with the outcomes, but the students really struggle to complete that portfolio. When I taught the module ... some of them ... really they did not have a clue what to do'. (C2, gender undisclosed, date unknown)

'The thing is ... students have no prior knowledge about how learner support should be done, even the teachers ... they complain that they do not know how to support struggling learners in overcrowded classes'. (C1, gender undisclosed, date unknown)

During previous years, students had also come to me and asked for advice about the portfolio, so I believed my colleagues' remarks to be valid and we continued to discuss the reasons why this would be so. Some of the reasons suggested were 'why do students find it so difficult?':

'If you look at the outcomes, it speaks to "learning support processes and strategies in the school". Currently, the processes involve the SIAS process, yet it is not addressed in Study Guide at all. So the students do not know how to use it'. (C2, gender undisclosed, date unknown).

'I want to add, guys, the content of the module does not address the problems teachers in our context have to face. Yes, they do need to be able to identify Autism, Epilepsy, Cerebral palsy, but the real problems that they have to deal with is learning barriers ... learners need support to read and write. That is what the portfolios are about, but the text book provides info on the medical stuff, the vocabulary... it does not add to the students' understanding, on the contrary, it confuses them and does that serve a purpose?'. (C3, gender undisclosed, date unknown)

'Something else ... our students cannot reflect and reflecting on the process is an integral part of the portfolio. Somehow, we should provide a structure or guidance on exactly what reflection are and how they should do it'. (C1, gender undisclosed, date unknown)

With regard to the content, the concerns were (1) the content included medical concepts and discourse (there were words like 'Arthroryposis, Osteogenesis, Agenesis and Post-poliomyelitis' that were used in a multiple choice test); (2) an explicit explanation of the SIAS process and related documents were missing; and (3) there were no references to specific, poverty-related barriers to learning needs (Du Plessis 2014; Mahlo 2011; Truter 2016), yet these were the types of barriers the majority of learners were likely to present with.

Concerning the performance of the students on the course, the main concerns were (1) inability to apply theory in practice, which is a common complaint in higher education (Gravett 2012; Levine 2006; Schön 2017); (2) lack of prior knowledge of learner support; and (3) lack of knowledge on how to reflect, which impacted negatively on their ability to compile a good portfolio.

Because the module was aligned across three campuses, implying that all students would have to do the same assessments, I could not immediately change the content. Yet, I could add an additional study unit on reading and writing support, which would ensure that the module content was a better fit for the rural context. Secondly, I decided to collaborate with a primary school close to the university to enable me to demonstrate learner support activities to the students.

When I met with my colleagues again to discuss my envisioned changes, they agreed that these adaptations could empower the student teachers to complete the portfolio successfully. However, they were worried that I would not be able to include all the activities in the 90 min allocated to this module weekly. After consultation with the timetable planners, the timetable and venue schedule were changed to double the contact time. Thus, there was ample time to teach the theory, have the demonstrations and reflect on the demonstrations.

I not only adjusted the content and learning material and planned for the semester but also included a detailed planning of the weekly activities to ensure that I had enough time for teaching the content as well as the demonstrations. On Mondays, I would meet the students to teach them and provide the theory and on Tuesdays, we would have the learner support club, followed by the reflection activity. The critical inquiry group agreed that these changes would be beneficial. I addressed these challenges and applied the changes in the following cycles.

Cycle two: Teaching and learning activities and the learner support club

With regard to the contact or lecture time with the students, I did the following: The content of the module was modified by the addition of short video clips to complement the prescribed textbook to enhance students' understanding of the medical aspects and characteristics of specific disabilities. I also explained the disability terminology explicitly, yet simply, to ensure that students understood what each word meant.

I added a study unit on reading and writing support in the Foundation Phase to ensure that the needs of the rural context are addressed because lack of basic literacy is a common problem in rural areas of South Africa (Du Plessis 2014; Mahlo 2011; Truter 2016). I specifically included artefacts, real-world examples and case studies drawn from rural contexts to address the lack of prior knowledge of the students. In addition, the SIAS (South Africa, 2014) document was provided on the electronic teaching platform and hard copies of the SNA forms were given to each group.

These SNA documents (SIAS 2014:29-30) are part of the SIAS document and should be completed when a learner needs support. After a discussion with the parents, the teacher completes the SNA1, which involves the teachers concerns, but also the strengths and needs of the learner. Based on these, an action plan is formulated to provide support to the learner. This process should be reviewed at least once a term to ensure that the learner benefits from the provided support. If the support does not yield positive results, the teacher will involve the SBST. The SNA2 form guides the SBST to review the teacher's identification of barriers and the interventions applied. Then the support is strengthened with an action plan and the help of inhouse specialists and/or more experienced teachers. This strengthened intervention should also be reviewed at least once a term to ensure that the learner benefits from the assistance. If not, the District-based Support Team is asked to assist and they complete the SNA3 form to guide their intervention. Firstly, they review the support previously provided and then determine the level of support needed for the learner and/or the school.

Though a comprehensive portfolio as an assessment instrument creates opportunities for student teachers to reflect, improve their current practice and learn for their future (Samaras & Fox 2013; Thorson & DeVore 2013), it is not without challenges. To provide support for the final composition of the portfolio,

I showed good examples from previous years and designed a rubric based on the expected Table of Contents. I was confident that the additional content and activities would empower the student teachers to successfully complete the summative assessment.

Dean et al. (2005), Korthagen et al. (2006), Valencia et al. (2009), Vick (2006) as well as Zeichner (2010) emphasise the importance of collaboration between university campuses and schools to cover the gap between theory and practice. In this study, the two Foundation Phase teachers, 31 students and myself worked together to improve learner support by forming a learner support club that met weekly.

This club provided multiple learning activities for the students. They could observe the demonstration of learner support activities but also learn about the social and emotional aspects of learner support. The students had the opportunity to improve their capacity to reflect on their learning because I modelled reflection with them in the learner support club after each demonstration (Vanassche & Kelchtermans 2014).

During my first meeting with the six Grade 1 learners, and being experienced in learner support, I realised that the teachers identified the six weakest learners in Grade 1. Two of the learners had severe developmental delays and would not necessarily benefit from reading and writing support. However, this provided me with the opportunity to reflect on the importance of screening and identification to provide individual learner support. The students also observed that the six learners had different levels of ability:

'That little girl, would it serve a purpose to keep her in the group? She does not have a clue, cannot even write her own name? Even, the smaller boy, should we not ask the teacher to replace them with other children?'. (S: 12, gender undisclosed, date unknown)

I explained the purpose and importance of the screening and identification to them, and how every learner needs to be supported at their current level, in order to experience success. We accepted the challenge and planned the activities for the

next week, differentiating between the different needs within the small group of six. In addition, it provided me with the opportunity to demonstrate Vygotsky's (1978) notion of scaffolding in practice. In our weekly reflections, we discussed the various learner's tempo of progress:

'The little girl, do you remember she could not skip? Then you did some rhythm exercises and use the bigger rope, the she could skip. That is an example of scaffolding, isn't it?'. (S: 5, gender undisclosed, date unknown)

'Have you noticed, how her ability to skip the rope successfully, influenced her confidence? She did not want to stop, but when you moved to the small muscle activities, she was so eager to participate. You always say: Success breeds success. I saw it today'. (S: 13, gender undisclosed, date unknown)

In addition, they could see the play-based nature of the learner support activities, observe how time management correlated with the young learners' attention span, but also the emotional aspects. Their remarks included:

'The way activities were spaced ... it showed me how to plan in a way to accommodate the young learner's playfulness and short concentration span'. (S: 3, gender undisclosed, date unknown)

'If I was not aware of the purpose of the games, I would have my doubts if any learning took place. The kids were really playing and enjoying every moment. Did you see how reluctant they were when they realised the session was about to end?'. (S: 17, gender undisclosed, date unknown)

'I now realise, what you always say is true. Bored children are naughty, you did not have any discipline problems, because they were engaged and activities followed without delay'. (S: 24, gender undisclosed, date unknown)

To me, a kind and playful atmosphere with developmentally appropriate activities, are important aspects of learner support in the Foundation Phase. Apart from the activities that they could observe, the student teachers became aware of the emotional

aspects involved in learner support. The students observed this playful, friendly atmosphere. This touched their hearts:

'One thing that I will always remember is that you stayed friendly, no matter how they responded. The friendly, playful, relaxed atmosphere...I will never forget that. How could you do that? (She shook her head) I don't think I am capable of that'. (S: 16, gender undisclosed, date unknown)

The students noticed another important aspect of learner support, that of building up the child's confidence and self-belief (Maclellan 2014):

'I noticed the importance of motivation during the learner support activities. You constantly made positive remarks and gave them high fives, even if they could not complete activities 100% correct. What I will remember is how you acknowledged their effort, by saying "Nice try".' (S: 12, gender undisclosed, date unknown)

'They were so excited when you took out the golden stars ... a small thing ... like a star, one could see their extra effort'. (S: 18, gender undisclosed, date unknown)

The collaboration between the teachers, who previously studied at this university, and the student teachers, was heart-warming. They really formed a team, because the teachers could still identify with the student teachers' challenges and the student teachers admired the teachers. Open, trusting relationship developed between the teachers and student teachers, manifested in collaboration and collective learning. From the third week, I noticed that more teachers, from the primary school, came to the learner support club, to observe activities at the learner support club. These 'additional teachers' would take care of the children, to allow the two teacher participants to be part of the reflections. The participating teachers also learnt from the activities:

'We are in this together... if we want to improve education, we will just have to work together'. (T: 2, gender undisclosed, date unknown)

'Only now do I realise how large motor activities support the development of the smaller muscles. I played the wheel barrow game, provided skipping ropes and within the three weeks I could see improvement in my learner's ability to write'. (T: 1, gender undisclosed, date unknown)

The two teachers reported that they also learned many skills, but specifically the importance of continuous reflection, the use of real objects, hands-on experiences and developmentally appropriate activities:

'Before, guys [she addressed the students], I followed the activities in the workbooks, rushing to complete, but now, I ask myself, why are you doing this? What are your children learning from this?'. (T: 1, gender undisclosed, date unknown)

'When I brought real objects from home, they were so excited and curious. I realised that successful teaching is dependent on integration. We have to integrate play and learning, but also integrate the real world with the classroom'. (T: 2, gender undisclosed, date unknown)

'Once you said: They should be playful, because they are playful. That really made me think, and honestly, since there is an element of play in my class ... they are not so disruptive anymore'. (T: 2, gender undisclosed, date unknown)

revealed that the practice-based The data approach (Kelchtermans 2013) within a partnership between the rural, university campus and primary school enhanced the student teachers' understanding of how the SIAS process is applied. Because the student teachers were involved in the planning and execution of learner support activities, they gained understanding about how to plan activities, based on previous assessment. After these demonstrations and reflections, before they went to primary schools, the student teachers were confident that they would be able to complete the final portfolio successfully. I provided a detailed rubric and they understood clearly what was expected.

Cycle three: The portfolio - Their explanation of the application of theory in practice

Although the students were confident that they understood the SIAS process when commencing their WIL at the schools, they still experienced many challenges in the application of the SIAS process.

The analysis of the portfolios indicated that the majority of students struggled to plan their intervention, based on the learner's support needs. Because they struggled with the planning, the implementation of planned learner support activities became a challenge. Although students were familiar with playbased, developmentally appropriate learner support activities, many of them seemed to lack the confidence to implement them and resorted to pen-and-paper activities to provide learner support. However, their reflection skills improved as they were able to identify the cause of their challenges:

'I struggled to get support from the school. Though the principal was very excited, when I explained the assignment to him and the teacher was quick to provide me with a learner, from there on, I was on my own. There were no assets or role players to support me, I struggled to get the learner's profile. I felt deserted'. (S: 10, gender undisclosed, date unknown)

'The teacher could not help me, because she had no time. Even, when I asked her to just have a look at the planned activities, she said that she is sure that I will be fine. I think if I had better support, I would be able to perform better'. (S: 17. gender undisclosed, date unknown)

'I could not conduct an interview with the school-based support team, because the team is still in the process of being established'. (S: 9, gender undisclosed, date unknown)

However, it seems they had learnt to work collaboratively because where there was more than one student at a school, they supported and motivated one another: 'All of us [three] worked with the one learner, who had severe delays in reading and writing. We reflected together, planned together and took turns to do what we planned'. (S: 7, gender undisclosed, date unknown)

'We worked together and motivated one another, specifically when we got discouraged or tired, someone else would come up with a new plan. For instance, I got the learner profile, but Lesego conducted the interview with the school-based support team'. (S: 11, gender undisclosed, date unknown)

Time was another concern, especially considering the importance of relationships and motivation:

'The time also, the 3 weeks during WIL is too short. You need at least two weeks to get that child to trust you ... you cannot just jump in and start with activities'. (Group 2, gender undisclosed, date unknown)

Marking the portfolios, it became clear to me that although students said that they understood the SIAS process better, they still struggled to apply what they learned without additional support. The main concern was that they felt isolated and overwhelmed when they were faced with reality, on their own, at primary schools. In the class discussion, they responded as follows:

'It looked so easy when I watched you, but, I think when we have the learner support club, we should work in groups and you should involve us more in the planning of the activities'. (Group 3, gender undisclosed, date unknown)

'Or let each group plan the activities, present to you, we discuss together and then you do it with the learners'. (Group 2, gender undisclosed, date unknown)

They suggested using the eFundi forum (electronic teaching platform) to ask for advice when they got stuck; '[w]hy not ... well, every group can put their ideas on eFundi and then we collaborate and share ideas to ensure that we decide on the best activities' (S: 7, gender undisclosed, date unknown).

We agreed that this approach will be followed in future. By noting their concerns, I would be made aware of what guidance they needed and then I could respond, also via eFundi. Utilising this electronic platform will ensure contact between the student educators and myself, no matter where in the country they would be for WIL.

Reflection is important in teacher training and played an important role in this study. The student teachers reported that the five questions of Vanassche and Kelchtermans (2014) provided clear guidance on what they should cover in their reflections. During the class discussion there was consensus that previously had not realised the value of reflection. The whole group laughed and applauded the following statement:

'With all due respect mam ... reflection is not such a big thing, as you make it. It is just thinking ... asking yourself, why am I doing this? What am I learning about this? And writing it down, to get marks'. (S: 18, gender undisclosed, date unknown)

The practice-based approach (Kelchtermans 2013) that included reflective activities and demonstrations of hands-on learner support activities enhanced the students' understanding of the SIAS process, but did not really improve their ability to implement their learning in practice. This is not surprising because they had not had much time to practice the learner support activities on their own. In future, I will involve the students in every aspect of the learner support club, from screening and identification, to planning and execution of the learner support activities. I will also allow a full year for completion. I will also use the electronic platform to monitor their support needs and give them more opportunity to work in small groups to design the intervention and support activities.

Cycle four: Final reflection

I invited the two Grade 1 teachers, the five group leaders and the four members of the critical enquiry group for a final discussion

and reflection on the activities of the semester. Before this meeting, I noted in my reflective diary how disappointed I was, because I did not think that the learner support club had had the desired effect on the students' ability to implement the SIAS process at schools. However, during the discussion, it became apparent that it had in fact had unforeseen benefits.

Firstly, the two teachers went back to their school, shared what they have learned with their colleagues and started to provide improved learner support at their school. They reported that the principal indicated that through their experience, all the teachers were empowered. These two (novice) teachers volunteered to be part of the SBST. In addition, they reported that, because the primary school was close to the university, the student teachers had started to visit the teachers and volunteer their services in the classes.

Secondly, the collaboration within this larger group and the enthusiasm generated about learner support encouraged all of us. From the onset, we arranged for two meetings of the critical enquiry group in phase one and then a final meeting in phase four, but my colleagues spontaneously became more involved, and visited the classroom during my contact time with the student teachers, observed at the learner support club. This enabled them to provide valuable input in a natural, informal way. Although previously we had caring and trusting relationships, we now moved to a level where we could provide more professional, collegial support to improve our professional practices.

■ Conclusion

The purpose of the study was to address the concerns within a specific module about learner support, which included the application of the SIAS process in practice. The findings indicated that the students' understanding of the SIAS process improved; however, they still struggled to implement their learning in practice, as they needed more support. However, the

demonstrations at the learner support club, as well as the reflections during and after the activities, based on the five questions of Vanassche and Kelchtermans (2014), helped the student teachers to learn how to reflect on their own practice and so enabled them to identify what further support they needed. In addition, the module sparked the students' interest and enhanced their awareness of the importance of learner support in the Foundation Phase.

This study also allowed me to develop a deeper understanding of the process of teaching and learning. The combination of selfstudy research (Samaras 2011), the practice-based approach (Kelchtermans 2013) and enacted professionalism (Evans 2008; Frelin 2013) contributed to the development of my personal reflection skills and teaching learner support at a rural university. I realised the specific needs of the rural context in which I work. Thus, the addition of the content to address the context-specific needs was an important contribution towards the student teachers' understanding of what learner support entails. I realised how important collaboration between universities and schools are in teacher education, specifically with regard to student support during WIL. I also underestimated the student teachers' prior knowledge and knowledge of the context and in future. I will engage the student teachers actively in every aspect of the learner support club.

The findings of this study are significant for teacher education at rural universities, where learner support regarding poverty-related barriers to learning is much needed. Such an educational context necessitates the need to translate the policy and theory of learner support into practice. This study confirms the benefits of collaboration between schools and universities to lessen the theory-practice gap. The research reported in this chapter is an example of the academic rigour of self-study research and its value for generating theory that contributes to the SoTL, whilst directly benefitting the professional development of student teachers who are then better equipped to deliver quality education to Foundation Phase learners.

Chapter 7

Family involvement in life skills development in primary school learners

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■ Abstract

The purpose of this chapter is to determine how families (including biological parents, foster parents, grandparents and other family members) can become more involved in the life skills development

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of primary school learners. As the declining family involvement is the order of the day, as was experienced at this specific primary school, with problems such as gangs, gang fights, violence, poverty, drugs and other conditions unfavourable for a child's development, it is evident that certain barriers prevent families to become more involved in the life skills development of their children. A qualitative research design was used, focussing on understanding and describing families' involvement through an interpretive paradigm and the hermeneutic phenomenological approach. Observation, semi-structured interviews, focus group interviews and document analysis were used in a particular school community to understand the impact of extra-familial influences, such as peers, the neighbourhood, the economic system and overarching beliefs and values, on life skills development of learners.

The study revealed that there was a considerable amount of barriers that prevented families from becoming more involved in the life skills development of their children, and these barriers include immigrant parents, financial hardship, domestic violence, unsafe neighbourhoods and children being raised by grandparents and other family members. It is necessary that the school, the community, other parents and support systems will become more involved in supporting families in need, empowering more families to become (more) involved in the life skills development of their children. More families should be enabled to benefit by the suggestions made on how to develop positive life skills through getting the school, the community, other parents and supportive services to work together in a team effort to assist families with becoming more involved in the life skills development of their children. In research on education, the role of parties outside the perimeters of school fences is grossly neglected. In view of the documented and powerful effect parents for example have on the learning and becoming of their children, it is essential that any structured edifice of education knowledge, particularly one aspiring to be relevant, duly grant space for the parent constituency. This is the value this chapter brings to this volume, drawing attention to value of parental involvement in the education of children.

Keywords: Life skills; Family; Primary school; Family involvement; Barriers to family involvement; CAPS.

■ Introduction

We are currently living in a South African society where financial hardship, domestic violence, unsafe neighbourhoods and children being raised by grandparents and other family members are the order of the day. The result of these issues is the declining involvement of families in the development of children, and hence the development of positive life skills of children is under threat (cf. eds. Gadsden, Ford & Breiner 2016). In the context of experiencing barriers such as immigrant parents, financial hardship, domestic violence, unsafe neighbourhoods and children raised by grandparents and other family members, the following question arises: How can families (including biological parents, foster parents, grandparents and other family members) become more involved in the life skills development of learners in primary school? The development of life skills is relevant for the South African society in which we are living in answer to the guest for responsiveness of the community to the education of its children. This is one of the ways by which an authentic education with the involvement of the family and, thus, the community as well can be attained. We are referring to families because, in the context of this chapter, several learners live with foster parents, grandparents, other family members or caregivers, who are not biological parents but form the intimate and stable group that provides for the child(ren). By using the term 'family' instead of 'parents', we intend not to exclude any form of family. This chapter reports on the experience of a teacher in a primary school where all the above-mentioned types are present.

■ Problem statement and research question

According to a report by the Moral Development Movement of South Africa. South Africa is 'sitting on a moral time-bomb' (South Africa, Government Communication and Information Services 2000:n.p.) because of the manifestation of situations such as murder, woman and child abuse, domestic violence, fraud, drug trafficking, the devaluation of people, a lack of the will to resist evil, corruption, dishonesty and the lack of moral guidance and role models in the teaching profession. The declining involvement of families in the development of children can be because of factors such as single-parent families, children who stay with grandparents or other family members, parents who have to work so hard to earn a living that there simply is no time left to spend with their children, parents who neglect their children, parents involved in criminal activities, child abuse and cultural variables, just to name a few. Considering the upbringing of children, especially in the development of the necessary life skills within this reality, the moral crisis of the South African society is highlighted even more.

In this context, it can be said that morals are the kind of behaviour that is approved by the society and that the above manifestations of the moral crisis are indicative of immoral behaviour as opposed to society's accepted code of behaviour. Life skills development in learners in primary schools, as set out in the school policy and described in the school subject life skills, can 'play an important role in equipping learners with knowledge, skills and values (physically, intellectually, personally, emotionally and socially)' (Department of Basic Education [DoBE] 2012:10) to help them behave in a moral way and deal with the immoral issues that they encounter in their lives. This is the ideal set out by the formal curriculum, but the reality is something completely different

The lack of involvement in some families is experienced by teachers at primary schools, with parents and families leaving young children unsupervised at school for hours before picking them up, and attendance at parent meetings diminishes every year. The decline in the communication between the families and the teachers is evident, especially when teachers' suggestions to parents (families) on how to improve learners' academics, behaviour and diligence towards schoolwork seem to go unnoticed.

As the family, as fundamental social institution, is breaking down in conjunction with all the societal problems, the school has a larger responsibility in the development of life skills in learners, but still the ideal is that families should be more involved in the development of life skills in primary school learners. This was the concern of one of the researchers, who is a teacher at a primary school. For the purpose of this chapter, the researcher took an insider perspective as point of departure in social action, aiming at understanding and describing human behaviour rather than explaining and predicting. Being a teacher, the researcher wanted to understand the processes and the social and cultural contexts underlying the behavioural patterns of the community she served and the learners in her class.

Therefore, the question is how families can become more involved in the life skills development of learners in a primary school. The different contexts in which the concept life skills is being used to gain a better understanding of the conceptual framework are focusses below.

■ Conceptual framework

This study analysed life skills in different contexts. The *first* context is where life skills are used amongst other related but not synonymous concepts.

Values, morals, character, life skills and behaviour are very closely related. For the purpose of this chapter, the different concepts are now briefly discussed and later followed Figure 7.1 in which they are illustrated. Values are not only desirable but

also essential for life, and they give meaning to our individual and social relationships (Department of Education 2001:9; Halstead 1996:5). Each person's set of values (good or bad) guides and directs the individual's thoughts, choices and behaviour when confronted with reality, thus acting as beacons navigating the human's life and helping him or her to live cooperatively with one another (Camiré, Trudel & Bernard 2013:188; Nieuwenhuis 2007:9–11). Values are different from one's principles (fundamental truths that form the basis of one's reasoning and action), but they are connected to one's convictions and beliefs. Values are personal, as they develop throughout one's life and add to the meaning of each individual's life. Values also guide decisions and the evaluation of behaviour.

Values and character are mutually dependent on each other. Character consists in the acting of a person upon his or her values (Elbot, Fulton & Evans 2003:1). According to Lickona (1991:51), good character consists of three interactive components, namely moral knowing (mind), moral feeling (heart) and moral behaviour (hand or action). He defines character as 'knowing the good, desiring the good and going the good' (Lickona 1991:51). Good character is acquired and develops over the lifespan through teaching, learning, life experiences and practising, although childhood and adolescence are the critical periods when the family, school and peers are most influential (Lake 2011:681; Sim & Low 2012:383, 384; Steen, Kachorek & Peterson 2003:10–13).

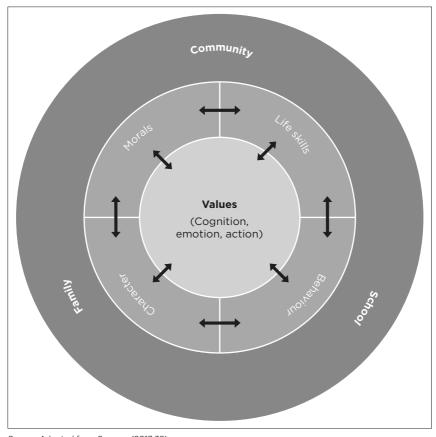
The next relating concept is morals, which are described as being concerned with goodness or badness of human character or behaviour, or with the distinction between right and wrong (see Conradie 2006), as well as concerned with accepted rules and standards of human behaviour and conforming to accepted standards of general conduct (cf. Conradie 2017:6 of 12). The meaning of morality is indeed to 'behave according to customs' (Conradie 2006:1–2) and, therefore, implies the judgement of persons, societies and behaviours. Both the theories of Piaget (1965) and Kohlberg and Hersh (1977) address the moral

development of the child by focussing on the development of a person's morality where it becomes clear how the cognitive development of a person leads to action. Morals (morality) are concerned with the judgement of the goodness or badness of human action and character (Nieuwenhuis 2007:243).

For the purpose of this chapter, it is also important to reflect on life skills as a concept, namely the skills that enable a person to succeed in everyday life and in different environments, such as life at home, at school and in the community. Life skills can be defined as behavioural (communicating effectively with peers and adults). cognitive (making right decisions), interpersonal (being assertive and self-composed) and intrapersonal (setting goals) skills. The WHO (1999:3) further notes that life skills are abilities, thus distinguishing life skills from qualities such as self-esteem and tolerance. Qualities such as self-esteem, sociability and tolerance are facilitated by learning their underlying life skills (e.g. selfawareness, dealing with conflict, respect and dealing with emotions). Life skills and values are closely related concepts, as some values such as co-operation, discipline, perseverance and patience can also be regarded as important life skills (Camiré et al. 2013:188; Danish, Forneris & Wallace 2005:49). Mulaa (2012:307) and Balda and Turan (2012:328) agree that life skills education focusses on teaching learners the knowledge they need to develop attitudes and skills that are necessary for healthy choices and positive behaviour to deal with the challenges of everyday life. The Curriculum and Assessment Policy for Life Skills Grade 4-6 (DoBE 2011b:10) acknowledges that life skills education deals with the holistic (cognitive, behavioural and emotional) development of the learner. Learners are equipped with 'knowledge, skills and values that assist them to achieve their full physical, intellectual, personal, emotional and social potential' (DoBE 2011b:10). The discussion of life skills as a subject in the primary school will follow further on.

Behaviour is determined by a person's values and will be consistent with the individual's values. Wringe (2007:13) agrees that a person's behaviour is not only connected to his or her values but is also driven by thought and emotion. The related concepts are illustrated in Figure 7.1.

As shown in Figure 7.1, values are viewed as the concept underlying the other concepts. Therefore, values are placed at the centre of the schematic representation, with the arrows pointing to the four different concepts. Values guide people's thoughts, emotions and behaviour, but cognition, emotion and action also play a primary role in character, morals, life skills and behaviour.



Source: Adapted from Spamer (2017:38).

FIGURE 7.1: Interaction of concepts.

Character, morals, life skills and behaviour are interdependent on one another. Character consists in acting of a person upon his or her values, but character also determines the moral decisions a person makes when choosing between right and wrong. Life skills are the abilities that enable a person to cope with everyday challenges where choices are made based on his or her character. Behaviour is the visible culmination of a person's values, character, morality and life skills. These four concepts are represented in concentric circles with arrows indicating their interrelatedness, as well as pointing to values, showing where each of the concepts stems from.

The second context is where life skills are addressed within the family. Mulaa (2012:313) writes that the family should 'be the first and last educator of the life skills to the children'. These skills need to be central to the family (Okeke 2014:1), and parental involvement in the process of life skills education of a child would. therefore, require active partners, where families have an awareness of the life skills education imparted at the school and a commitment to communication with the educators regarding this to understand fully on how to support and establish this component at home. Parental involvement is an important aspect of a child's school career, and one which should never be underestimated. The child's school career and the relationship between the family and the school, as well as with the parents themselves, benefit from the involvement of parents. Parental involvement should be beneficial to the development of life skills of the children. Apart from benefitting the child's academic performance, parental involvement may also lead to children staying in school longer and improving school attendance and children's attitudes, behaviour and mental health. Life skills, such as working independently, completing the work, punctuality and asking for advice when one does not know what to do, are instilled when the child is still young, thus developing independent learners in later years when some parents are 'no longer able to assist their children due to the complexity of the subject matter' (Singh, Mbokodi & Msila 2004:305). Parental involvement is also beneficial to the school-family relationship, as it strengthens this relationship; it also improves parent-teacher relationships, the morale of the teacher and the school climate (Hornby & Lafaele 2011:37). Furthermore, by displaying good relationship skills, the parents and families contribute to their children's life skills for maintaining healthy and rewarding relationships. Other elements that influence parental involvement are child, parent-teacher and societal factors. Child factors include the decline in parental involvement as children grow older, where children with disabilities, whether these are learning disabilities or physical disabilities, need parental involvement to receive individual educational help or programmes. On the other side, gifted and talented children can facilitate parental involvement as the parents enjoy attending school events. However, parents lose confidence in the school when they regard their own child as being more academically gifted than he or she is regarded by the teacher. Differences in the goals and agendas of the school and the family affect the degree of the parents' involvement in schoolbased activities. Schools may view parental involvement as a means to increase the learners' achievement or a method of addressing cultural disadvantage or inequality. Different attitudes of parents and teachers about schooling and education can affect parental involvement. The home-school relationship or partnership is often about rights and power, with the school directing the parents on how to engage with the school. Parents can become disillusioned by the difference between rhetoric and reality, resulting in poor parental involvement. Societal factors, including the demographics, that decrease parental involvement revolve around a larger number of households where both parents work, an increasing number of divorces and separations resulting in single-parent and re-partnered households, and parents' working hours.

The *third context* is life skills taught at the school, which is a unique and dynamic environment for children to acquire, practise and learn life skills. The value and contribution of the school as the context within which life skills are taught, developed,

experienced and acquired include that the teachers at schools are equipped with the material (textbooks, teacher manuals and resources) to present more challenging life skills, for example sensitive topics such as human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). Teachers can provide learners with the correct information on such topics. elaborate on important choices to be made and provide a safe environment where discussion can take place and the learners will feel free to ask questions. Another contribution of the school to life skills development involves the dynamics at school and the situation where learners of different cultures, socio-economic groups and religions are placed together in one class or group. thus acting as a good training ground for life skills that are not possible at home. These include group work, communication, interpersonal skills, coping with peer pressure, coping with bullying, relationships skills and so forth. School provides time for practising the life skills that learners have been taught at home. Handling conflict, making the right choices, respecting people even when it is difficult and time management are some of these skills to be practised in the classroom as well as during extra-mural activities (Muyomi 2012:307).

The fourth context is life skills in the national curriculum, that is the Foundation and Intermediate Phases as well as Life Orientation in the Senior and Further Education and Training (FET) Phases make learning life skills an obligation. The point of departure of both the current curriculum and the previous national curricula is still the Manifesto on Values, Education and Democracy (Department of Education 2001). After more than 15 years, the Manifesto has not been updated and its fundamental values and educational strategies are still valid and discussed. For the purpose of this chapter, the focus is on the strategies relevant to the development of life skills, namely nurturing a culture of communication and participation in schools and promoting dialogue in schools. The next strategy valuable for this issue is role modelling, and it is part and parcel of the context of life skills within both the family and the school, as parents and

teachers should be role models for the youth as part of their life skills development. Only 3 of the 16 strategies are mentioned, but all the strategies are regarded as valuable in assisting all educators, whether they teach the subject life skills or life skills by means of any other school subject.

The CAPS documents of all subjects (DoBE 2011a:5, 2011b:5, 2012:5) state the same general outcomes and aim to 'produce learners who are able to':

- identify and solve problems and make decisions using critical and creative thinking
- work effectively as individuals and with others as members of a team
- organise and manage themselves and their activities responsibly and effectively
- collect, analyse, organise and critically evaluate information
- communicate effectively using visual, symbolic and/or language skills in various modes
- use science and technology effectively and critically showing responsibility towards the environment and the health of others
- demonstrate an understanding that the world as a set of related systems by recognising that problem solving contexts do not exist in isolation.

The importance of these general aims is that they represent, when compared with the description of life skills, the life skills that teachers need to teach learners. These general aims are also in line with those five areas of life skills that are relevant not only to all subjects but also to all cultures, according to the World Health Organization (WHO) Department of Mental Health (WHO 1999:1).

Life skills as a compulsory subject in the Foundation and Intermediate Phases, followed by Life Orientation in the Senior and FET Phases, have certain specific aims. These aims are shown Table 7.1 as a way of giving the whole context of all the phases relevant to this chapter.

TABLE 7.1: Aims of life skills and life orientation.

Foundation phase	Intermediate phase	Senior phase
Physical, social, personal, emotional and cognitive development	Guide learners to achieve their full physical, intellectual, personal, emotional and social potential	Guide learners to achieve their full physical, intellectual, personal, emotional and social potential
Creative and aesthetic skills and knowledge through engaging in dance, music, drama and visual arts	Teach learners to exercise their constitutional rights and responsibilities and to respect the rights of others	Develop learners' skills to respond to challenges and play an active and responsible role in the economy and society
Knowledge of personal health and safety	Guide learners to make informed and responsible decisions about their health and environment	Teach learners to exercise their constitutional rights and responsibilities and to respect the rights of others
An understanding of the relationship between people and the environment	Develop creative, expressive and innovative individuals; develop skills such as self- awareness and problem solving	Guide learners to make informed and responsible decisions about their health, environment, subject choices, further studies and careers
Awareness of social relationships, technological processes and elementary science	Interpersonal relations, leadership, decision-making and effective communication	Provide opportunities for learners to demonstrate an understanding of, and participate in, activities that promote movement and physical development
	Provide learners with exposure to experiences and basic skills in dance, drama, music and visual arts, including arts literacy and appreciation	
	Allow learners to enjoy the health benefits of exercise and develop social skills through participation	

It is clear from the information given in Table 7.1 that there is a link between the specific outcomes of the subjects life skills or life orientation and the 16 strategies of the *Manifesto*. This illustrates the importance of the development of life skills of learners throughout their school career and the role that families may play in this regard.

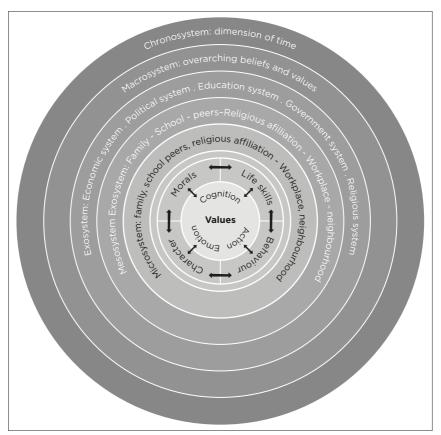
■ Theoretical framework

To place these concepts into a theoretical perspective. Bronfenbrenner's bioecological systems theory is used, where the child's development does not occur in a vacuum and is directly or indirectly connected to different levels of the society (Bronfenbrenner 1977, 1994). Bronfenbrenner's theory of human development has changed and developed since it had been first proposed in the 1970s as an ecological approach to human development. Rosa and Tudge (2013:243) divide the evolution of Bronfenbrenner's theory into three phases: Phase 1 (1973-1979), the initial phase when the theory was proposed; Phase 2 (1980-1993), when the theory was modified and more attention was paid to the conceptualisation of the environment and the developmental process and Phase 3 (1993-2006), when proximal processes were defined and placed central to the bioecological theory and the process-person-context-time was described as the appropriate research design for the bioecological theory (see Coscioniet al. 2018:363-373).

Figure 7.2 shows how values, morals, character, life skills and behaviour (of the first context) develop in the microsystem and are influenced by the meso-, exo-, macro- and chronosystems explained by Bronfenbrenner's theory.

In Figure 7.2, it is indicated how values, morals, character, life skills and behaviour develop in the microsystem and are influenced by all four of the other systems. The school that was used to conduct this research has some learners who have to live with gangsterism, drugs, poverty, violence in the community or even domestic violence.

Within this specific context, children may face challenges in Bronfenbrenner's microsystem that most probably have a negative influence on their motivation to acquire life skills such as motivation and creative thinking. Therefore, Maslow's hierarchy of needs was combined with Bronfenbrenner's bioecological theory to explain this difficulty and to give full insight into the situation within which some of the parents and children find



Source: Adapted from Bronfenbrenner (1977, 1994).

FIGURE 7.2: Development of concepts within different levels of society.

themselves every day. The importance of Maslow's needs hierarchy for life skills education is to raise awareness amongst educators and parents that children need to have at least the first two needs (psychological and safety needs) met before they can be motivated to develop their intrapersonal and interpersonal skills, and consequently their life skills, enabling them to cope in society amongst fellow South Africans. The relevance of Maslow's theory in a South African context is confirmed by Harper, Harper and Stills (2003:17): '... children of different cultures and countries have the same basic human needs'.

■ Empirical investigation

Aim of the investigation

The purpose of this chapter is to report on how families (including biological parents, foster parents, grandparents and other family members) can become more involved in the life skills development of primary school learners and also be responsive to the needs of the community and be relevant to a society in need of children that can act responsibly and demonstrate healthy life skills. To the researcher as educator it became clear that the educational practice and the worldview cannot be separated. Van der Walt (2014:450) agrees that there is a direct relationship between the educator's life concept and how she approaches the education of children. The researcher worked from an insider's point of view as teacher to understand the context within which these families live, the families' attitudes towards life skills development and the network of social rules that underlie the families' involvement in their children's lives. The worldview of the researcher is a balance between rigidity and relativism, and between the firm base of educational research, theories and findings over the years and the implementation and adaptation to modern challenges in education. As a result of this post-postmodern view, the research was conducted by using a qualitative research design with an insider perspective as the point of departure in social action, aimed at understanding and describing human behaviour rather than explaining and predicting it.

■ Research design

A qualitative research design was followed with the phenomenological and hermeneutic approaches, where human action and relationships are studied and interpreted. As a teacher, the researcher wanted to understand the processes and the social and cultural contexts underlying the behavioural pattern of the community and the children in her class. A researcher brings his or her own experiences, fore-meaning biases and prejudices

to the process of interpretation and critically reflects on the process of understanding human action (Carr & Kemmis 1986:87-89; Fersch 2013:88, 89). Diefenbach (2009:77) describes qualitative research as 'explorative', where new questions can emerge whilst investigating and where 'an increasingly better and deeper knowledge and understanding of the objects of reasoning and recognition of emerging patterns' develop. These approaches to interpreting and understanding are complemented by the research method that uses analysing, interpreting and understanding in a self-reflective way, namely autoethnography.

■ Research strategy

Autoethnography is, in the first instance, looking at oneself and positioning oneself as a researcher, but also, in the bigger social content of the culture in which the researcher was working, involves positioning oneself as a participant together with colleagues, parents and children with whom one is working, whilst making sense of the reality the researcher is studying. By using this strategy, the researcher was part of the group observed and, as Dyson (2007:39) confirms, 'both insider and outsider of my own research. I was not a participant observer: I was a complete participant, a part of the culture I studied'.

■ Research method

The study was conducted at a primary school where the researcher is a teacher. The population of the school is 884 learners, with a diversity of languages, races, cultures and socioeconomic circumstances. The sampling method used was non-probability sampling. By using this method, the findings and recommendations are limited to one primary school in one province and cannot be generalised to the whole population of South Africa. Purposive sampling was also used, where the sampling was performed with a specific purpose in mind. The researcher interviewed parents and caregivers who she thought would be able to provide her with the necessary information

regarding the life skills education (or the absence thereof) of primary school learners by their families.

The research was conducted over a period of three years in different phases. Some of the phases were executed simultaneously, for example the theoretical research, observations and interviews. The starting point (Phase 1) was to investigate the skills development framework that was being used at the school, as well as the CAPS document and school policy documents on rules and bullying as part of the document analysis. The school used The essential 55, written by Clark, where 55 rules are discussed on how to interact with people around us, how to speak to people and how to behave, in general, with the people around us, including classmates. The study of this document was completed at the same time as the document analysis of official documents of the Department of Education, namely the CAPS documents and appropriate school policies, for example those about rules, bullying and documents on supporting the children in need in the school (Anonyms 2016). During this phase, the researcher started to work on a theoretical framework of models of parental involvement, barriers to parental involvement and programmes for life skills education.

The observation (Phase 2) was performed by the researcher in two ways. In the first place, the learners in the school were observed in their day-to-day conduct – how they handled different situations, how they responded to conflicts and which life skills they displayed. The researcher also observed the parents or families whilst conducting the interviews in the next phase.

The next and third phase in the study was conducting the interviews. The first set of interviews was conducted in a semi-structured individual manner with four colleagues of the researcher who were willing to participate in the research. The second set of individual semi-structured interviews was conducted with various families (23). The participants from the families for the semi-structured individual interviews were selected by sending out letters to all the parents of the school

after which they were invited to discuss the life skills education of the learners of the school. Parents who could make an important contribution to the study were also identified, for example the caregivers who were known to take care of a family member. The five members of the school governing body were also interviewed in a focus group interview, as well as nine colleagues of the researcher in a separate focus group interview.

The interviews were thus organised into four groups. The first group consisted of the family, parents and caretakers of learners from Grade 1 to Grade 7. The selection criteria used provided for parents of different age groups, different cultural groups, different languages and parents of different marital status (i.e. widow/ widower, married/divorced). The second group of participants consisted of colleagues who were interviewed individually. These included the principal and the head of the department, as they are strong leaders and could unwillingly intimidate the rest of the focus group with their personality and leadership position. Another colleague who was chosen for a personal interview was the social services liaison teacher of the school to ensure that the valuable contribution she could make would not be lost in a group discussion where people interrupt one another and sometimes misunderstand the question, thereby leading the group in a wrong direction. The fourth colleague who was interviewed had a domineering personality. The third group was a focus group with colleagues, including those from the Foundation Phase, the Intermediate Phase and the Senior Phase. The fourth group comprised members of the school governing body consisting of parents and colleagues, both men and women and of a wide age difference.

■ Ethical aspects

Ethical clearance for the research was obtained from North-West University (Ethics number: NWU-00166-13-A2), and permission was also granted by the Western Cape Education Department to conduct the research. The principal of the school and every

participant signed an informed consent form. The researcher respected the participants and the site of data collection. The researcher had to make sure that the participants did not experience the interviews as a moral inquiry.

■ Findings and discussion

Participants' views of life skills

In the first place, it was important to determine what the view of the participants on life skills was (Figure 7.3), to ensure that the same understanding of the concept was used. The definition of life skills could indicate whether the school and the families were working towards the same goal in life skills development, which is important to know as the researcher wanted guidelines for life skills development to be suggested.

As seen above, two overarching skills, namely relationship skills and decision-making skills, stood out in the interviews as the two most important life skills. Respect as a skill or a value, as it was confused by some of the participants, was also confirmed by the documents studied, namely the *Manifesto on Values, Education and Democracy* (2001:19) and the *Essential 55* (Clark 2003:10), where respect, as a rule, was part of the 1-week life skills programme of every term:

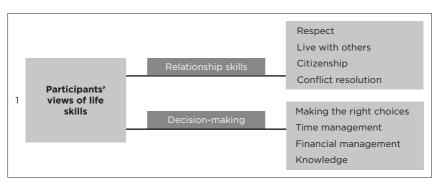


FIGURE 7.3: Participants' views of life skills.

'Respect for others is very important: respect your fellow pupils and respect your teachers. And then also their culture. We come from different backgrounds, everybody is different and you've got to respect that'. (Participant 21, Group 1, individual interview with a family member)

It is believed that the participants who regarded respect as a life skill were thinking about the relationship skills that accompany respect, such as communication skills, conflict resolution and understanding of socially acceptable behaviour.

The participants also viewed life skills as those skills necessary to live successfully with the people around one. The skill to live successfully with those around one is also one of the general aims in the CAPS document, namely to produce learners that can work effectively with other learners in a team. Colleague 2 described living successfully with others as follows:

'[T]hings like manners and how to conduct yourself, how to treat other people, being a decent human being: a functioning adult. Somebody that can be an asset to society and a liability'. (Colleague 2, Group 2, individual interview with colleagues)

Together with the skills necessary to love people around one, Colleague 1 (Group 2, individual interviews with colleagues) and Member 4 of the school governing body viewed being a good citizen as a life skill, once again most probably referring to the social skills that underpin good citizenship. The specific aims of life skills as a subject in the CAPS curriculum also provide for citizen education by stating that learners in the Intermediate (2012:12) and Senior Phases (DoBE 2011b:8) should be taught not only to exercise their constitutional rights and responsibilities but also to respect the rights of others.

Conflict management was important to a number of the participants. One of the family members taught her child the following:

'He must not fight with other friends, and if somebody swear [sic] he must come and tell me and then he must not fight back. He must tell

me if there is anything that is wrong or [if] somebody fights with him, he must just come to me and tell me'. (Family member, undisclosed gender, age unknown, date unknown)

It corresponded with the *Essential 55* (Clark 2003:15), which reminds the learners that they should not become angry when they lose a game – something very relevant amongst young children. Communication skills that include dealing with conflict are a part of the subject life skills of the intermediate phase (DoBE 2012:14), where learners are taught different techniques of dealing with conflict and dealing with their own emotions when they are angry.

Decision-making skills were also viewed as important to the participants. Colleague 1 regarded it as a skill to make the right choices, to choose to do the right thing, to choose to be on time and to choose to finish one's work. Some of the participants regarded responsible decision-making skills as their definition of life skills. The general aims of life skills in the CAPS document include that learners should develop the ability to 'organise and manage themselves and their activities responsibly and effectively' (DoBE 2011b:9).

Time management and financial planning, in other words working with time and money, were very important for some of the participants. It is also part of the Senior Phase Life Orientation curriculum (DoBE 2011b:10), but the researcher observed in class that learners had to struggle to manage time.

Being equipped with the knowledge to help children making the right choices was important to the participants, especially when it came to the children's safety. One participant said the following:

'Be careful, look around you, walk with someone from school, don't walk alone, stay in groups and let me know where you are. I want to know. When you feel uncomfortable in any situation, don't keep quiet'. (Teacher, undisclosed gender, age unknown, date unknown)

Some of the participants confused practical skills with life skills; for example, one participant viewed life skills as the physical skills one needs in one's job and office skills, such as operating a photocopy machine, or being able to make one's own sandwich, dress oneself, pack one's school bag, clean and tidy up the house, cook a meal and look after oneself.

Interestingly, the participants did not view self-awareness (assessing own feelings and strengths), self-management skills (regulating own emotions and motivating oneself) and social awareness skills (empathy) as important life skills. It will, therefore, be necessary to include a programme for parents and families to inform them of all the facets of life skills so that families can better equip their children in life skills development.

■ The kind of life skills the learners displayed in their current behaviour at the school

To assess what the parent-school partnership had to do to improve the learners' life skills development, it was important to know what kind of life skills the learners displayed. The interviews conducted and the observations revealed that the *learners displayed both positive and negative life skills* at school. The positive display of life skills encouraged the parents and educators that there was success in their educational attempts, whereas the negative display of life skills raised questions as to what could be done to rectify those negative skills.

The positive skills displayed by the learners are non-racism, respect for diverse religions and caring for family members. The learners grow up together, go to school together and choose their friends without any regard for racial differences. The ability of the learners to understand, accept and support the diversity of religious convictions was evident. The negative skills demonstrated

by the learners are survival coping skills, lack of motivation, conflict, egoism, bullying and bad decision-making.

The learners developed coping skills necessary for their dayto-day conduct in a very challenging environment where they grow up, as was mentioned by a colleague during the individual interviews:

'I think the only skill that they do have are coping skills. Because they have no choice. The skills they do have are very bad because they have that fight-or-flight skill because of their circumstances and where they come from'. (Teacher, undisclosed gender, age unknown, date unknown)

Together with the skills that accompany learners returning home in the afternoon to less desirable circumstances, a lack of motivation, a lack of interest in their schoolwork, poor co-operation and bad self-esteem, not expecting much of themselves academically, were also observed by some of the participants.

It was also evident that some learners also displayed the inability to handle conflict constructively. Conflict resolution, therefore, often ends up in verbal and physical fights. The researcher was once in a class where two girls started to fight, verbally at first, but soon enough one girl grabbed a pair of scissors to stab the other girl. When they were reprimanded, they were asked whether this was what they saw at home, expecting a 'no' answer. However, both girls answered affirmatively. Even though self-management skills and dealing with conflict are part of the teaching plan of CAPS life skills of the intermediate phase (2012:4) and that the learners are taught different ways of handling conflict and dealing with anger, there are still learners who have not yet developed this skill.

Egoism is another theme that emerged, as the learners sometimes only considered themselves in their dealing with conflicts. It was also seen in the way they dealt with the learners around them was viewed by some of the participants as the reason for bullying. As one parent said:

'Children are coming in today as like "I am the most important, you will listen to what I say", and they're being almost taught that at home'. (Parent, undisclosed gender, age unknown, date unknown)

Egoism led to bullying and destructive friendships because everything revolved around the individual learner. Only the learner's opinion was important; he or she bullied because it was about what was important to him or her and some learners dominated other learners so that they could feel better about themselves by making somebody else feel bad.

Another skill that needed to be developed was the learners' decision-making skill because it was found that learners make bad decisions on a daily basis. According to a colleague during the interview, some learners did not value their own lives enough, as there were children at the age of 13 who were already sexually active, drinking and smoking (Figure 7.4).

The fact that the learners displayed negative skills, as mentioned above, implicated the necessity of involving social services and even the police where necessary. Maslow (1943:372–382) states that safety needs have to be met before a learner will be motivated to learn the life skills that would enable him or her to succeed in everyday life and in different environments. The inability to handle conflict was evident in children who grew

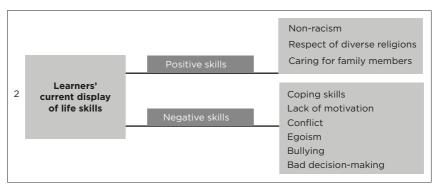


FIGURE 7.4: Learners' current display of life skills.

up in challenging circumstances, and the help of social services might be necessary, as the three most important exosystems influencing the development of children are the parents' workplace, family social networks and the context of the neighbourhood and community (Bronfenbrenner 1994:40).

■ The nature of the families' current involvement in the life skills development of the learners in the school

The nature of the families' current involvement in the life skills development of the learners in the school can be divided into two categories, namely parents in need of support, for example single parents and grandparents in the first place, and parents without a sense of responsibility in the second place.

The first category is single parents who try their best to teach their children all the right skills but do not have enough time to combine the responsibilities of work and being a parent. As one parent said:

'There's stress of traffic, then I must work whole day, then I come home and because I am a single parent I must cook. It becomes too much. You deal with so much conflict on the road, in your work, with your relationships at home ... sometimes it just get [sic] too much'. (Parent, undisclosed gender, age unknown, date unknown)

These parents asked for support groups that could help them out when they could not handle their responsibilities.

Then there were grandparents who were trying to teach their grandchildren about the dangers of drugs, sex and bad friends. Some children lived with their grandparents because their biological parents had given them to the grandparents to raise so that they could 'move on'. Others were raised by the grandmother or both grandparents because of the biological parents having a drug or alcohol addiction. The mothers of some children lived with the grandparents and so the children were raised by both the mother and the grandparents. They need help with the

curriculum as the curriculum today is much different from what they were taught previously.

Some of the parents needed help in the form of support from friends. Epstein (2010:85) suggests that meetings should be held in the neighbourhood so that families and schools can get to know each other better. It was evident from one of the participants' comments:

'[S]ometimes you might mention something stupid to somebody else and they're like: "Oh, when this happened to me this is what I did and it worked out quite well". (Parent, undisclosed gender, age unknown, date unknown)

Figure 7.5 shows the parents in need of support.

Another scenario is where parents do not want to accept the responsibility for their children or the development of their children's life skills. These are parents who will leave their children alone at home in the evening so that they can go out with friends or leave their Foundation Phase child waiting for hours before picking him or her up from school or parents who are reported because their children have been absent from school for extensive periods of time without a valid reason. They do not want to cooperate with the school or support the school in enforcing the school rules consistently in all of the learners of the school. An example of not supporting the school was when a grandmother was informed in writing that her grandson had been involved in a fight at school. She replied as follows:

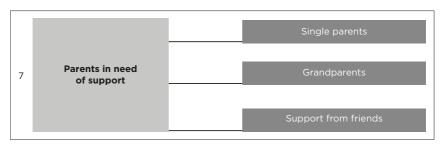


FIGURE 7.5: Parents in need of support.

'I'm sick and tired of complains [sic] against my grandson, if you got [sic] a problem with him make an appointment so that I can come and see you'. (Family member, female, age unknown, date unknown)

These caregivers tend to shift their responsibility as primary caregivers over to the school. Some families are not involved in life skills development, as they feel that it is the responsibility of the school.

The lack of responsibilities of some parents is shown in Figure 7.6.

These parents often needed parental guidance (formal classes) on being a parent, the associated responsibilities thereof and where to go for help. They have to be helped to understand their role as parents first, before they will be willing to become involved in life skills development.

Possible reasons for some families not being involved in the life skills development of the learners in the school

In the previous section, it is mentioned that some families shift their responsibilities as primary caregivers over to the school, expecting the school to take care of the learners' life skills development. It is important to establish the reasons for this behaviour. A possible reason why some families are not involved in the life skills development of the learners in the school is, thus,

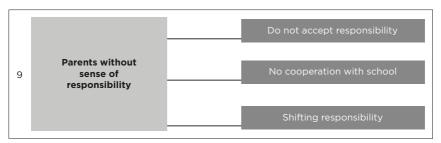


FIGURE 7.6: Parents without a sense of responsibility.

because they shift their responsibility as primary caregivers over to the school and are reluctant to become involved in the life skills development of their children.

Poor domestic circumstances, especially domestic violence or substance abuse, are also a reason why parents do not become involved in their children's life skills development (Figure 7.7).

It was evident during the study how all-consuming all of the above-mentioned circumstances were to the parents suffering in a destructive relationship or marriage. Some of these parents were so busy with their own problems that they had no energy left to worry about their children.

Another reason why families were not as involved as they should be was the unsafe neighbourhood in which they were living. Some learners had family members who were using or dealing in drugs; others were living in a neighbourhood where violence was almost a daily occurrence. There were also those learners who were growing up surrounded by gangsterism and, unfortunately, some learners viewed the gangsters as role models. It has been observed that learners in the school imitated gangsters' ways of talking and walking and even the way they wear their clothes (Figure 7.8).

Bronfenbrenner (1977:527) writes that in the microsystem within which the child develops, child abuse or maltreatment was found to be associated with mothers who had no support for

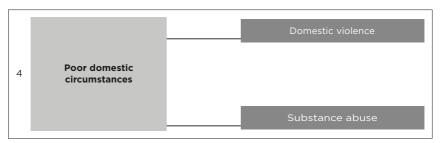


FIGURE 7.7: Poor domestic circumstances.

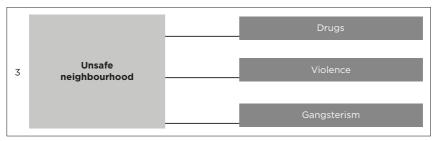


FIGURE 7.8: Unsafe neighbourhood.

parenting. Maslow's (1943) motivation theory also postulates that any person (child or adult) needs security and safety before they will be motivated to develop new life skills. These parents may need the support of social services, the police and, possibly, counselling before their safety needs are met to such an extent that they will be motivated to become more involved in their children's life skills development.

The barriers that prevent families from becoming involved in life skills development at the school

Apart from the reasons discussed above for families not becoming involved, there are also other barriers that prevented involvement by the parents or families. Barriers such as unsafe neighbourhood were already discussed in the previous section. Other barriers that parents and families experienced were financial difficulties and immigrant parents.

Parents experienced financial difficulties which prevented them from being more involved in their children's life skills development at the school. Some parents wanted to supply their children with the necessary stationery to do their work at school but could not afford it. There were also parents who wanted to become involved in their children's school work but could not afford to come to school for parent-teacher discussions. It is

important to distinguish between those parents who have limited financial means and struggle to provide everything the learner needs and those parents who are so poor that they cannot even provide their children with the proper school clothes and food. This called for a food and clothing project at the school. If the learners were properly fed and clothed, they could work better, focussing on critical and creative thinking skills, and their parents could teach them the relationship skills that are more of a reality to them (Figure 7.9).

Immigrant parents also faced barriers in their children's life skills development at the school. The first is a language barrier, as these parents have difficulty in holding a conversation in English, understanding the communication from the school and helping their children with their schoolwork. They are often without income and have, therefore, financial difficulties as well (Figure 7.10).

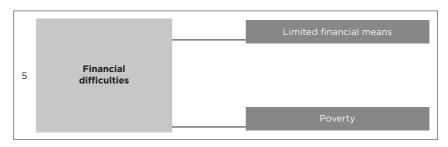


FIGURE 7.9: Financial difficulties.

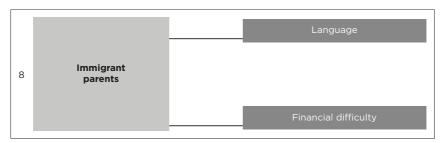


FIGURE 7.10: Immigrant parents.

These families needed support from another family, which was prepared to adopt a family. A family that 'adopts' an immigrant family can stay in contact with the immigrant family, explain communication from the school and help when the immigrant parents want to communicate with the school or the learner's class teacher. They can also help with the learner's homework, which is difficult for immigrant parents because of language barriers. Epstein (2010:85) suggests language translators as a sample practice for involvement in communication; however, in this school community, it will be necessary to take it a step further and find volunteer families that will take care of each immigrant family in need.

■ Recommendations

Guidelines that can be implemented to improve the involvement of families in their children's life skills development at school will now be discussed as recommendations.

The first guideline necessary to improve the families' involvement in the life skills development of their children is to ensure that the families and the school have the same understanding of what life skills are. The participants viewed life skills as relationship skills (respect, living with others, citizenship and conflict resolution) and decision-making skills (making the right choices, time management, financial management and the knowledge necessary to make the right choices). By knowing what families view as life skills, the school will know that the families do not know exactly what life skills entail and can provide education to parents as to what life skills are.

Support for parents also emerged as a theme necessary for parental involvement. Barriers that prevented parents from getting more involved were discussed. From this, it is evident that support for these parents will have to be taken into account. Another form of support needed by parents that will have to become part of the suggested guidelines to improve parental

involvement is parental guidance. Parents need guidance in the form of help by specialised people and information provided by the school, whether it is in the form of written information that accompanies the weekly newsletter or specialists on certain topics that can visit the school to talk to the parents.

Community involvement is also a guideline to improve parental involvement, for example involving police, medical doctors, dieticians and lawyers to talk to the learners. Parents are in need of information from experts on information evenings. Vacation programmes offered by the community should also be communicated to the learners of the school so that they can become involved. The learners themselves should also be encouraged to become involved in community projects so that they can get used to serving the community and being a part of it.

The last guideline is that the school should play a prominent role in the community with good parent-teacher communication; therefore, the school should be a binding factor in the community. The interviewees regarded communication between the school and the parents, as well as communication from the school to keep families involved, as important. It was also evident that the parents regarded the school as the stable, never-changing factor in the parent-school relationship. Therefore, the school has to be the binding factor amongst the families and the community, taking initiative, driving the life skills development of the learners of the school and keeping on inviting families to become more involved in the process of life skills development.

■ Conclusion

The study showed that one cannot merely start suggesting guidelines to improve parental involvement in life skills development. The starting point should be to support the parents first. Before parents can be helped to become more involved in the life skills development of their children, they have their own needs that have to be met. The enormous task faced by every

educator is also clear, as educators have to take care of the parents first to reach and teach their children, facilitating their life skills development. By doing just this, education will become more relevant, responsive and authentic.

In research on education, the role of parties outside the perimeters of school fences is grossly neglected. In view of the documented and powerful effect parents for example have on the learning and becoming of their children, it is essential that any structured edifice of education knowledge, particularly one aspiring to be relevant, duly grant space for the parent constituency. This is the value this chapter brings to this volume, drawing attention to value of parental involvement in the education of children

Chapter 8

Building a vision for social justice praxis for teacher education through service-learning

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Abstract

The primary role of education (on all levels) is to help learners understand the world that we live in and equip them with skills and knowledge to enable them to reach their potential within society, including the ability to live peaceably with others. Yet, our programmes in teacher education continue to foreground content knowledge and the transfer of pedagogical skills in a vacuum, where students do not engage with current social issues or experiences outside of their own middle-class reality. Living in a country like South Africa, where the gap between haves and have-nots is the largest in the world, this lack of critical engagement with social justice issues is a blatant weakness in pre-service teacher education programmes.

The purpose of this chapter is to explain how this problem could be addressed, through incorporating critical service-learning (CSL) as a pedagogical strategy to help student teachers develop social justice praxis. Grounded in literature, the inclusion of a CSL component into teacher education programmes will prepare better students for teaching in a world where social inequities impact negatively on the schooling of children, requiring the teacher to deal with myriad psycho-social barriers to learning related to poverty. An emerging framework for the development of social justice praxis through grounding in the principles and mechanisms of CSL will be discussed.

The development of social justice praxis is important not only in developing countries but also in the global North as the shifting human demographic and other social factors lead to the emergence of similar problems in developed countries, resulting in unequal access to quality education and/or less success within the schooling system. This situation demands teachers who are socially aware and sensitive to such issues, empathic in their approach and able to adopt inclusive and socially just education practices in diverse teaching settings.

To be true to the teaching-research symbiosis as a hallmark feature of a tertiary institution, educational research needs to inform teacher education programmes. Student teachers who will practise in an increasingly diverse and unjust society need to be given the opportunity to engage with social justice issues to enable the development of contextually relevant practice. This chapter outlines just how CSL as community-based research can be used to attain this end.

Keywords: Service-learning; Social justice; Teacher education; Collaborative learning; Diversity; Social justice praxis.

■ Introduction

I believe that education is the civil rights issue of our generation. And if you care about promoting opportunity and reducing inequality, the classroom is the place to start. Great teaching is about so much more than education; it is a daily fight for social justice. (Duncan 2009:1)

This quote is from a speech delivered by Secretary Arne Duncan during an address at the Summer Seminar for Teachers at the University of Virginia (Duncan 2009). With these words, Duncan stressed the immeasurable value of school classrooms as an ideal place for the pursuit for social justice in education. I¹ agree that great teaching is indeed a fight for social justice. However, as a young, white, female academic teaching English home language to pre-service teachers specialising in early childhood education, I often witness a lack of awareness and acknowledgement of diversity, especially where students also come from privileged backgrounds. Within South African schools, specifically those in disadvantaged communities, many poverty-related social injustices prevail. This situation gives rise to significant barriers to

^{1.} This chapter was written from the first author's research study and the second and third authors were critical friends who assisted; therefore, the chapter is written from a first-person account.

learning, as the consequences of living in such adverse circumstances enter into the classroom with the child. For example, children, about 60% in the 0- to 6-year-old cohort (National Development Agency [NDA] 2012) may come to school on an empty stomach (The World Bank 2018), have limited access to facilities for personal hygiene (UNICEF 2017) and may be experiencing different forms of personal trauma at home (Munene 2015:1–6; NDA 2012). Added to the problems children face, many schools lack teaching resources and have to contend with poor infrastructure (Rousseau 2015). These factors often contribute to high absenteeism and lack of engagement, on the part of learners (Hlalele 2012:111–118; UNICEF 2017).

Yet, many pre- and in-service teachers come from privileged backgrounds where they have not yet experienced social injustice (or the consequences thereof) and may be unaware of the realities that many children face daily to obtain education, a basic human right of all citizens (Van Deventer, Van der Westhuizen & Potgieter 2015:24–35). However, the Department of Higher Education and Training (DHET) stipulates that newly qualified teachers must 'understand diversity in the South African context for teaching' (DHET 2015:62).

I understand social justice praxis in education, a key concept in my argument, to be the quest to develop, through ongoing critical reflection, educational environments that foster diverse thinking and celebrate diversity (De Sousa Santos 2014). Critical service-learning (CSL) is one way of mediating critical reflection on social justice issues to develop a social justice praxis. Judgement informed by *critical reflection* on own previous assumptions as well as cultural, affective and normative considerations could advance social justice praxis (Rousseau 2015; Tan 2017:988-1002). Critical service-learning proceeds from a transformative paradigm that advocates social change, works to reduce power struggles, develops meaningful relationships between all participants and enables students to view themselves as influencers of social change through their teaching. Through critical reflection on their experiences, the participants become

more aware of, and sensitive to, the social justice issues that impact on the learners and their education and can make appropriate accommodations in their teaching to minimise the barriers and provide appropriate support (Kember et al. 2008:369–379; Mitchell 2015:20–28).

However, the failing South African schooling system requires a critical review of teacher education programmes as they currently 'set teachers up for failure long before they even enter the classroom' (Smuts 2018:1). The contribution of in-service (practising) teachers has been set aside for too long (Kwenda, Adendorff & Mosito 2017:139-159), and higher education institutions (HEIs) have neglected the opportunity to develop teacher education programmes that are more socially relevant by contributions (Cherrington 2017:72-86). excludina these Furthermore, the absence of learning opportunities for in-service teachers for continued practice development contributes to a low morale and a lack of feeling in support for teachers (Mashau & Mutshaeni 2015:428-434). The focus of teacher education should not only rest on the acquisition of pedagogical content for pre-service teachers but should also include a space for critical dialogue, co-creating knowledge and refocussing pre- and inservice teachers' development on learning to teach as agents of social change (Higgs 2016:87-101). South Africans need a teaching community (consisting of pre- and in-service teachers on various levels) that is dynamic, critical, engaged and relevant, and the most important is conversation with one another to develop praxis that will enable learning (Cherrington 2017:72-86).

The need for coherent and relevant teaching content and techniques is long recognised (Mashau & Mutshaeni 2015:428-434), yet, hardly visible in current programmes for teacher education. Currently, educational theories and the actual teaching practice in South Africa are polarised (Benade 2015:42-54; Ragpot 2017:a501). Programmes are still developed and presented in a contextual vacuum, mostly by academics from privileged backgrounds with little or no experience of poverty, social injustices or the lived experiences of those they are teaching. Service-learning is

incorporated into some programmes for teacher education; however, the aim and assessment thereof are not aligned with the educational purpose and processes of CSL (Petersen & Petker 2017:a479). There are only few reports on successful integration of service-learning in teacher education programmes in South Africa (Petersen 2018; Petker & Petersen 2014:122–135). Internationally, the inclusion of service-learning components into teacher education results in more engagement and participation by student teachers, contributing to the improvement of teacher education practices (Mitchell 2015:20–28).

Drawing from the successes of other service-learning programmes and the above ideas of developing social justice praxis for teacher education to make it more relevant to the South African context, the guiding research question for this chapter is: how can critical service-learning in pre- and in-service teacher education enable the development of a social justice praxis? I will argue for the development of a shared vision for a service-learning project rooted in the principles and values of CSL and social justice praxis through participatory methods. Firstly, I will explain the concept of social justice praxis and the role of CSL in teacher education. Next, I will present an argument as to how CSL could be used to promote social justice praxis in pre- and in-service teaching. The significance of the conceptual framework I present is that it has the potential to operationalise the theory about social justice through a service-learning model by providing opportunity for collaborative action. These actions must inform teacher education by reflecting on learning from real-world experiences, so as to develop a socially just educational praxis.

■ Social justice praxis as conceptual framework

It is not unusual for the term 'social justice' to appear in policy documents or to be used in discussions about diversity and equality (Arao & Clemens 2013). However, it is difficult to provide an exact definition of the term. The absence of social justice

implies that people have lesser social value because their person, abilities and living environment seem inferior to those of others (Manstead 2018:267-291). Yet, social justice can also be used in a positive denotation to imply equality (Rambiritch 2018:46-60). The interpretation of social justice for this chapter will be discussed below.

Defining social justice praxis

To understand social justice praxis, we first need to determine what social justice within the South African context refers to. As a developing country, South Africa faces challenges in providing all citizens with access to food, housing, safety and quality health care (The World Bank 2018). Secondary to this, South Africa also faces challenges and inequalities pertaining access to basic, as well as higher education and job opportunities (Lorraine & Molapo 2014:900-907). South African citizens should also enjoy the freedom of a non-discriminatory society in a post-apartheid South Africa; however, many people still experience inequalities and discrimination in their daily lives because of the economic. social, racial and political consequences of years of racialised oppression under the apartheid regime (Phasa & Moichela 2011). South Africa is one of the most unequal countries in the world, according to the World Bank, with polarisation between the advantaged and disadvantaged being the highest globally (The World Bank 2018).

People who are seen as disadvantaged within the South African context are people who are affected by chronic poverty, poor health care, limited or no access to education; are viewed as illiterate because they cannot express their thoughts in written English (global language) (Bennett 2007:151–169), live in rural or underdeveloped neighbourhoods; and are unemployed or work for minimum wage (The World Bank 2018). Consequently, people who were previously (pre-1994) seen as advantaged (mostly white people) disregarded people who were disadvantaged (mostly people of colour) as helpless, unknowledgeable and the

underclass of South Africa. Sadly, these perceptions still tend to prevail in South Africa today, including in education (Spaull 2013). The disregard of people living with disadvantages is consistent with abvssal thinking (De Sousa Santos 2014). Abvssal thinking refers to the socio-political and prominent divide between the global North (developed counties) and the global South (underdeveloped countries), with the global South being viewed as the 'side of the line that vanishes and becomes non-existent' (De Sousa Santos 2014:189). South Africa, as a hybrid of developed North and underdeveloped South, also displays this divide between 'relevant' and 'irrelevant people' (Phasa & Moichela 2011, De Lange, Khau & Athiemoolam 2014:748-766). Spaull (2013) explains that the South African public school system is still split into two. The smaller and better performing system accommodates 20%-25% of South African learners, also the wealthiest. The majority (75%-80%) of learners have limited access to educational resources, and thus the divide is perpetuated and worsened over time, as these learners are unable, for the most part, to escape from the cycle of poverty (Moses, Van den Berg & Rich 2017). As a marginalised section of the community (parents and learners), they are seldom included in policy decisions (Botman 2016:48-67; Department of Education 1996; Teise 2013). Such a divide in public education is unacceptable as learning and living in a marginalised group further increase inequality and decrease connectedness (Botman 2016:48-67), resulting in a form of Sousa Santos 2005, 2014). epistemicide (De (2007:151-169) explains that epistemicide occurs when knowledge based on ideologies different to the dominant epistemology is silenced; such knowledge remains untaught in schools, universities and society. The continuous disregard of people because of their socio-economic status results in the rejection of their knowledge, skills and suggestions for the improvement of education and other social issues. Consequently, this leads to the development of learned helplessness - the repeated exposure to uncontrollable events (Maier & Seligman 1976:3-46). Learned helplessness results in decreased resilience and lack of self-determination and instils notions of reliance (Mohanty, Pradhan & Jena 2015:885–895). The people who are seen as the *underclass* in South African education are those who do not hold 'valid' or 'accredited' qualifications, causing an unspoken divide between who can contribute to improvement in education and those who cannot – resulting in feelings and stereotypes of subordination (Jansen 2009; Botman 2016:48–67).

The South African history of colonialisation since 1652, the years of British authority from 1806, the apartheid regime from 1948 and the years of democracy and recovering from apartheid since 1994 (Van der Westhuizen, Greuel & Beukes 2017:3) perpetuated this abyssal worldview in the governing, policies and practices of the country (Ntuli & Van der Westhuizen 2017). Within South African education, the experiences, local knowledge and abilities of people are still viewed as irrelevant and unvalued, which is not an uncommon phenomenon in many societies the world over (Owen 2016). As the deliberate exclusion of knowledge based on the idea of social class and superiority conforms to colonial notions, our education system creates further inequalities and isolation (Cochran-Smith 2010; Bondy et al. 2017). Hence, social justice, in terms of education and for the purpose of this chapter, refers to the advocacy for acknowledging and infusing our education programmes with diverse knowledge, experiences and worldviews to create equal, open, peaceable and enabling learning spaces (De Sousa Santos 2014; Van Deventer et al. 2015:24-35).

The next main concept that will be discussed is *praxis*. Freire ([1970] 2005:51) defined praxis as 'reflection and action upon the world in order to change it'. The combination of reflection and action is what differentiates praxis from practice. *Reflection* on action enables the generation of new knowledge informed by thinking through making connections with existing knowledge and experience. This allows us to develop new understandings and imaginings of the world and our place in it (Austin & Callen 2018). *Action* as part of praxis refers to change that advocates for

social transformation, informed by the reflection on experiences and knowledge (Mezirow 1990). The aim of praxis is to generate new, authentic, socially relevant and contextualised theories (Botman 2016:48-67; Furman 2012).

Therefore, social justice praxis can be described as critical reflection on experiences of social (in)justice to inform relevant, and contextualised action (change sustainable transformation) (Van Deventer et al. 2015:24-35). Critical reflection in this context refers to challenging the authenticity of pre-determined assumptions (Mezirow 1990) of diversity, social injustices and presumptions of people from different backgrounds. Critical teaching praxis grounded in social justice is more than just being aware of social justice; it is rooted in a social justice intent and informed by reflexive thinking about happenings in the schools and classrooms, understanding 'competing agendas', making educational decisions and the formation of relationships with colleagues, learners, families. communities and social groups (Cochran-Smith 2010:454). Through the development of social justice praxis in education, power relations can be made more equal, access to education widened and local knowledge acknowledged and valued (Ntuli & Van der Westhuizen 2017). For knowledge to be useful, relevant and responsive to situated needs, it has to be generated by those living in specific contexts, as Botman (2016:51) suggests: 'Teacher education programmes should prepare teachers to engage in processes of knowledge and knowledge creation with their learners and communities'. Therefore, I advocate for the advancement of social justice praxis for teacher education in South Africa.

■ The significance of social justice praxis in South African education

Stakeholders in South African education are calling for more relevant and socially just education practices (Botman 2016:48-67; Geduld & Sathorar 2016), as many of the global

approaches are not suitable for developing countries (Spaull 2013). Education, as one of the public service sectors whose mandate is to provide quality education to all, irrespective of the level thereof, lends the opportunity for educators to advocate for social justice in their classrooms and lecture halls. In South Africa, equal and free access to basic public education (grades 1-9 of public schooling) is mandated as a basic human right (South Africa 1996). The right to free and quality education necessitates teachers to be critical and reflective about their own beliefs and bias to enable them to be teachers who infuse their teaching with relevant and contextualised knowledges and social justice praxis (Bondy et al. 2017). Currently, South African preand in-service teachers seldom (if at all) partake in opportunities to reflect on their practice and to discuss what they learn through experiences (Geduld & Sathorar 2016) even although reflective practices have shown to be advantageous (De Lange et al. 2014:748-766; Petersen 2018; Petersen & Petker 2017:a479). The MRTEQ policy stipulates that teachers should learn from practice. in practice and for practice (DHET 2015), although the provisions for this learning are not fully utilised by current teacher education institutions (Geduld & Sathorar 2016). Higher education institutions are critiqued for implying transformation through technical compliance (meeting requirements on paper but not in actual practice) in their teacher education programmes, rather than drawing from the experiences and knowledge the students and community teachers bring to class (Maistry 2011). Wilmot (2017) notes that the cause of poor teaching in South African schools lies with the undemocratic and untransformed teacher education system that produces teachers. Technical compliance should not be the objective for meeting transformational and socially relevant needs in education, as South Africa is in dire need of contextualised teaching programmes (Pillay 2017).

I believe technical compliance with policy as opposed to real transformation in teacher education programmes contributes to the disconnect between theory and practice in South African education. With the traditional banking method of learning (Freire [1970] 2005), theoretical assumptions inform the practices of teachers. In South Africa, many teachers enter practice reliant on educational theories and with limited experience of practical teaching, especially in contexts different from their own background (Chambers & Lavery 2012). The reliance on theory can be because of the overemphasis on theoretical underpinnings about teaching rather than the contextualisation, adaptation and development of theories for education informed by authentic teaching experiences (De Lange et al. 2014; Romm 2018). To enable the development of educational social justice praxis, teachers need to understand and question their own presumptions and limits of their knowledge to develop and strengthen their own practice (Butin 2015). In relation to social justice praxis, Westheimer and Kahne (2004) identified three schools of thinking within democratic education:

- Conservative-individualistic focus: Emphasis on individual responsibility and accountability in reaching own goals for education.
- Progressive-participative focus: Emphasis on collaboration and contributing to general civic and societal goals.
- Leftist justice-orientation for societal change: Emphases on advocating for justice and delivering of critique to enable social and societal change.

The experiences, realities and knowledge (or lack thereof) will determine the view an individual has on democratic education, consequently informing their pedagogical practices (Dover 2015). Teachers and teacher education programmes that advocate for a sole, universalised and global teacher preparation programme that will advance their individual goals of democracy are uninformed about teaching in a diverse society and the importance of social justice (De Lange et al. 2014:748–766). Hence, holding a single worldview and frame of reference as the only truth limits the opportunity for learning from and with other people, as is the case currently in South African education (Romm 2018).

Diversity, social education and social injustices

South Africa according to the constitution (South Africa 1996) is a multilingual, multicultural, multireligious, multinational, multiracial, multi-ethnic, country, where freedom of choice is paramount (The World Bank 2018). I believe there is no singular definition of South African citizen. Nevertheless, as a white, Afrikaans girl born in the early stages of transitioning from Apartheid to a democratic South Africa, I grew up in a privileged middle-class environment where it was common for people to be stereotyped, for example: illiterate black people; confused and impoverished coloured people; rich and materialistic Indian people - and they were terms commonly used in the social spaces I frequented. For many people. these stereotypes became part of how they perceive themselves and other people around them (Jansen 2009). I experienced (and still experience) a challenge with being white in South Africa; it is generally assumed by other white and non-white people that you resonate with the mentioned stereotypes; and other white people experience this as well (Romm 2018). Since I can remember, I have rejected these stereotypes as they are outdated and unacceptable in 21st-century educational spheres, as literature also suggests (Arao & Clemens 2013; Botman 2016:48-67). Schools are the 'contexts in which social class inequalities are reinforced' (Manstead 2018:271). Not only do such predispositions favour the learners from middle-class backgrounds in terms of social expectations, a recent study indicates they also negatively affect the academic performance of learners from low-income backgrounds (Darnon et al. 2018). Yet, we are still educating for a homogeneous, idealistic context where all learners speak the same language and operate from a middle-class set of values and life experiences. The exclusion of locally generated knowledge and skills for teacher education in South Africa leads to further isolation from the lived reality on the ground. Consequently, this enlarges the gap between the curriculum for teacher education and the realities of teaching in South African communities.

The socio-economic circumstances, living spaces, political views and access to services for people living in South Africa are very diverse (Scheepers 2010), which suggests that South Africans will have different lived realities. A person with limited experience with diversity is more likely to develop a myopic and isolated understanding of the world. Chisholm (2015) proposes that the myopic discourse in education should be questioned as it disempowers democratic practices that challenge conditions of oppression and exploitation in education. Therefore, the citizens of South Africa cannot afford to be taught in an education system. that is rooted in a singular worldview (Francis & Le Roux 2011). Teacher education institutions cannot risk that their programmes exclude the local knowledge and experiences of the diverse communities they serve. If the prevalence of epistemic knowledge (refer section 'Defining social justice praxis') in teacher education continues to enlarge the gap between theory and practice, it will reduce the quality of the teachers HEIs produce, consequently withholding young learners from learning experiences that are contextualised and advance the notion of social justice (Botman 2016:48-67; Chisholm 2015; Sayed 2016).

Many South African teachers report insufficient preparation for teaching in multicultural and diverse teaching landscapes during their initial teacher training (Ezeonachwusi, Chimbala-Kalenga & Jaffe 2016). Some teachers also indicate that even though they had experience with social injustices such as prevailing discrimination, poverty and inequalities at schools during their initial teacher training, they feel uncomfortable and inadequate to teach learners who face such challenges (Sayed 2016). This is because of their own lack of social education and pressure to conform to societal expectations (Sayed 2016). The often-unspoken norms and expectations of society determine socially (un)acceptable behaviours that influence the decisions we make (WHO 2009), including ideas on acknowledging diversity and whom we should engage with (Jansen 2009). Discomfort with diversity and the lack of skills to teach in diverse circumstances lead to further segregation and disconnect with the realities of other people. Unsurprisingly, this results in inaccurate dispositions (Bondy et al. 2017), further inequalities and prejudices in the understanding of access to basic human rights (Manstead 2018:267-291), of which education on all its levels is the biggest (The World Bank 2018). Apart from the immediate implications, further isolated 'existence' of people in a shared geographical space (South Africa) limits the opportunities for honest and respectful sharing of knowledge about sensitive and controversial issues (Arao & Clemens 2013) and encourages discriminating behaviour.

■ Role of teachers and teacher education for developing social justice praxis

Cevher-Kalburan (2014) suggests that teacher education programmes should not only include experiences of teaching at the schools close to the university or institution but in the broader communities as well, including schools situated in unfamiliar contexts for the pre-service teachers. Teaching practice should also be informed by the lived realities of community schools, which should serve as guide for theoretical underpinnings in education. 'Post-abyssal thinking' (De Sousa Santos 2014:57) requires a person to construct knowledge in such way that it enables social justice through the inclusion of various epistemologies. I believe the basis for generating socially relevant knowledge and theories for teacher education in South Africa is to acknowledge that there are myriad experiences to learn from within our diverse communities of teacher education.

The role of teachers and teacher education to enable the development of social justice praxis relies on the acknowledgement and acceptance of diversity. I will explain the acknowledgement of diversity by drawing on contrapuntal reading analysis (CRA), a term used in music to indicate two harmonious melodies played at once (Bilgin 2016:134–146). Edward Said, a philosopher and scholar in the field of postcolonialism, developed the idea of CRA (Jansen 2015 & Hess 2016) to explain the need for inter-existence

of the oppressor and the oppressed. Contrapuntal reading analysis is rooted in the notion that people within society, with its social groupings, should transform themselves and their livelihood by living interdependently (Bilgin 2016:134-146), tapping into the knowledge and skills they can collaboratively create. Said (2007) advocated that – as different melodies are played simultaneously in music and deliver harmonious sounds – people with different worldviews, ways of living and experiences should not only coexist but should work in harmony to generate knowledge by learning from each other's realities. 'Connectedness' and intertwined knowledge are important to reflect and learn from experiences.

With regard to the role of teachers and teacher education to develop social justice praxis, the shared experiences of teachers from various backgrounds and different ecologies of knowledge should inform teacher education. By integrating local knowledge with propositional theories pre- and in-service teachers could be more prepared to teach learners whose realities are indifferent from their own (Sayed 2016) and develop social justice praxis for their own teaching practice.

Although the above discussion answers the question of what knowledge should be included in a teacher education programme, the burning question remains the 'how' part. Critical service-learning as theoretical framework will be discussed in an attempt to provide some insight into this question below.

■ What is critical service-learning in the South African teacher education context?

Critical service-learning is a transformative pedagogical strategy (McKay 2010) stemming from Kolb's (1984) experiential learning theory with a focus on experience, reflection and action on reflection (Lund 2018). In this section, I will discuss CSL as a pedagogical tool that can advance a social justice praxis and comment on the current practices of CSL in higher education.

Historical development of service-learning as pedagogical tool

Service-learning as a pedagogical tool for universities originated in the early 1940s to 1960s in America (Kenny 2011). Traditionally, dictatorial (autocratic) decisions were made on the type of service to be rendered without consultation with the party (usually community members in an underserved setting) who was in need of the said service (Butin 2015). Academic courses and service-learning projects were often not related to each other and service-learning was seen as a time-consuming task and an add-on to course outcomes (Petker & Petersen 2014:122-135). Feedback from community partners in service-learning projects also indicated that community members did not see themselves as vulnerable or that in need of the services of universities to sustain their lives (Petri 2015). This type of feedback can be because of universities overstressing service to communities and neglecting to consider the service, in the form of contextualised learning, the communities could render to them.

In more recent developments of service-learning, the focus is placed on the twofold meaning of the word - there is service in learning and learning from service. Typically, the participants of a service-learning project comprise university students and community members who are both receivers and givers of service; simultaneously both are learners and teachers in the project (Mitchell 2015:20-28). Including service-learning as pedagogical tool means learning becomes more collaborative. critical and educational for all parties (Petersen 2018) as participants become engaged in the search for academic depth and relevance (Petker & Petersen 2014:122-135). For many public service disciplines globally, especially health care and education, service-learning has become a requirement of degree programmes as students become influencers of social change by drawing on their 'experiences of service to address and respond to injustice in communities' (Mitchell 2015:21). The following section provides a rationale for service-learning as part of a transformative paradigm, which enables social change as explained above.

Rationalising critical service-learning as part of a transformative theoretical framework

Rooted in the critical pedagogy of Paulo Freire (Freire 1998) who advocates social change through engagement and power sharing (Clark & Nugent 2011) as the 'correct method of approaching reality' (Freire 2005:20), CSL is also very much rooted in the ideology that the community's goals should be accomplished, highlighting reciprocity (Tinkler et al. 2014). In recent times, service-learning encouraged the general academia to adopt it as a pedagogical tool to enable engaged scholarship (Butin 2006; Petersen 2018). Although there are many definitions and applications of CSL (Chong 2014), the four principles of service-learning, namely respect, reciprocity, relevance and reflection, provide guidance for service-learning projects (Butin 2010; Hammersley 2012). Table 8.1 provides an explanation to these principles.

Critical service-learning experiences are based on the principle of co-investigation by participants who subsequently lead to power sharing and equal contributions by all (Butin 2006; Clark & Nugent 2011; Doerr 2011). This echoes the reciprocal principle of service-learning. There is mutual benefit for all stakeholders in participating in the service-learning experience and it prevents the possible 'server' and 'being served' power sharing related to volunteerism (Clark & Nugent 2011:10).

Mitchell (2008) identifies three key elements of CSL as social change orientation, working towards the redistribution of power and the development of authentic relationships. The element of social change orientation refers to reflective learning and individuals challenging their own stereotypes and attaining social change in the communities. This entails that participants must be guided towards understanding the possibilities and consequences of service rather than merely delivering acts of service without conscious reflection thereof (Mitchell 2008).

TABLE 8.1: The four principles of service-learning and implications thereof for teacher education.

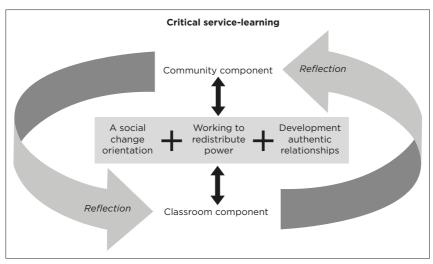
Principle of service-learning and description thereof (Butin 2010)	Implications for teacher education
Respect: Outside participants should remember to respect the communities' way of life, circumstances, abilities, knowledge and skills	Participating pre-service teachers and academics should know that they enter the communities to learn and not to criticise the local knowledge of the participating teachers
Reciprocity: Service-learning components should be mutually beneficial to the involved parties	There is of course a danger of over- exhausting communities, and therefore there should be very careful consideration in planning the service-learning component always to be the benefit of the pre- and in-service teachers
Reflection: Participants reflect on their learning experiences whilst engaging in service-learning activities. Reflections should include reflecting critically on learning and on the service-learning component itself	The participating teachers in community schools, the pre-service teachers and academics reflect on service-learning activities and share their reflections with one another to generate new knowledge based on authentic experiences
Relevance: Service-learning activities should contribute to a deeper understanding, experience and reflection on the academic course that it is planned for. The relevance of the service-learning component to the community is included in this principle (Bowie & Cassim 2016)	This echoes the requirement set out by the Higher Education Quality Committee (HEQC) (2006) that service-learning should be 'relevant in improving the quality of life for the community' whilst achieving the learning outcomes of the course or module

Working to redistribute power entails the disempowered and non-dominant members in the society to regain their voices and be encouraged to share their knowledge and practices (Bruce & Brown 2010; Pompa 2002). This is often one of the biggest critiques to service-learning activities (Bruce 2013:35) and unless effort is made to restore power imbalances where the community is usually portrayed as the minority group; CSL will remain in the ecology of server-served relationships.

The development of authentic relationships refers to the reciprocal principle of service-learning (Butin 2010) where all participants collaborate to identify needs and the structure of

the service-learning activities. The different roles of communities, researchers and students in one project are based on the way the roles connect to each other to form a complete cycle (Mitchell 2008). This forms a sense of interdependence within the group dynamics and each participant is equal in their role and contribution to the group. Collaborative and equal relationships do not mean that the participants need to *place themselves in each other's shoes*; it merely means that there will be a greater understanding of each other and being valued (Bruce 2013; Mitchell 2008).

Mitchell (2008) further identified that each of these abovementioned elements addresses two components of servicelearning: the community component (participant teachers and schools in communities; site where practical experiences take place) and the classroom component (students/pre-service teachers and researcher as participants; reflection and theoretical development of service-learning components). Figure 8.1 shows a visual presentation of Mitchell's (2008) interpretation of CSL.



Source: Adapted from Mitchell (2008).

FIGURE 8.1: Visual representation of CSL.

As Figure 8.1 illustrates, the three elements of CSL are central and inform the community and classroom components of service-learning experiences. Although reflection as principle of service-learning is incorporated into Mitchell's model, the other three elements are still missing. I envision the principles of service-learning (4 Rs), respect, relevance, reflection and reciprocity (Butin 2010), to be incorporated with the model of Mitchell, which will be presented in the section 'The envisioned framework for developing social justice praxis for teacher education through service-learning' of this chapter. I will provide a brief overview of the current practices of service-learning within teacher education below.

Overview of past and current practices with regard to service-learning within education

Internationally, service-learning components form part of academic and credit-bearing coursework for disciplines that serve the public sector, including public education (Petri 2015). Sustainable development, reciprocal relationships between participants and the closing of the gap between theory and practice remain the prominent motivations for the inclusion of service-learning into graduate programmes (Mitchell 2015:20–28). The ethical engagement with communities has become crucial for service-learning projects, as the validity of service-learning in the mid-1900s was questionable because the aim of 'banking' knowledge in communities was of more importance and service-learning soon became charity work rather than academically motivated engagement (Butin 2010).

In South African education, service-learning has taken on many forms since its initial introduction into teacher education in the early 2000s (Mouton & Wildschut 2005), with the pressure on HEIs to deliver more socially engaged programmes (O'Brien 2005). During this time, service-learning programmes were

primarily conceptualised by the academic providers (universities) with little engagement and decision-making on the part of the communities who received services (Mouton & Wildschut 2005). Since the inclusion of service-learning in the MRTEQ policy (DHET 2015) it developed into engaging and collaborative learning experiences for all involved parties (Petersen & Petker 2017:a479) within South African education. The envisioned future for service-learning by academics in South African education (Petersen 2018), especially for teacher education, is for programmes that will enable collaboration academics, community partners, researchers and governmental departments (Petker & Petersen 2014:122-135) enhancing learning in and from practice as stipulated by the DHET (2015). Looking towards this future vision, a critical discussion of the advantages, disadvantages and challenges of implementing service-learning into teacher programmes is included below.

Advantages, disadvantages and challenges of including service-learning components into teacher education

Although the inclusion of service-learning components into teacher education seems advantageous, being aware of and planning for the possible pitfalls and challenges increase the success of the development of such components.

Disadvantages/challenges

One challenge of service-learning engagements, although a possible revelation to some, could be when students realise that they have been oppressive towards other people, or that they have unfairly benefitted from the disadvantaged (Lund 2018), vet. grappling with discomfort is very common in

service-learning. What will distinguish a disastrous reaction from an enabling one is the maintenance of trust and honesty of the relationship between participants (Mitchell 2015). Another great challenge is to motivate academics on programme level to participate in service-learning initiatives and to show continuous enthusiasm for participating (Butin 2015). Some teachers are also hesitant to participate in service-learning components as they require volunteered time that might not deliver immediate results (Petker & Peterson 2014:122-135).

Advantages

Research indicates that the inclusion of service-learning into teacher education enables the development of civic responsibility to 'develop and practice the skills that embody commitments to diversity, solidarity, and justice...' (Mitchell 2015:27). Barnes (2016:238-253) also notes that teachers in the 21st century are diverse and not set in a traditional paradigm of our postmodern society, which enables the generation of knowledge from various experiences and expertise. Other advantages include the positive participants' personal development, collegiality effect of participants, improving of leadership communication skills, and authentic application of knowledge, and it challenges cultural and racial stereotypes (Petker & Petersen 2014:122-135).

By being aware of the challenges in the development of a service-learning component, researchers and community members can negotiate possible solutions for the identified challenges and draw from the advantages for motivation and reaching the purpose of the project. The envisioned framework for the development of social justice praxis for teacher education through service-learning is described below.

■ The envisioned framework for developing social justice praxis for teacher education through servicelearning

Educational practices should be informed by the people it serves (Romm 2018), signifying that members of local communities should have the opportunity to contribute their knowledge and skills to learning programmes offered on basic and higher education levels. Gillis (2018) stresses the urgency for community partnerships in basic and higher education within South Africa as the current system is not preparing learners or students at HEIs to think critically, solve problems or reflect on research to construct their own ideas. The need for collaboration across departments, communities and institutions of both the public and private sector is recognised (The World Bank 2018); however, the way forward in doing so is still unclear.

To address the above-mentioned need for partnerships in educational development, I suggest a framework in which the sharing and generation of local knowledge (Botman 2016:48-67) to develop social justice praxis for education through critical reflection (Mezirow 1990) can be realised by drawing on the mechanisms (Mitchell 2015) and principles of service-learning (Butin 2010). Educational practices and syllabi should transform continuously to enable sustainability for education; therefore, I believe the framework that informs the development of curricula should be flexible, accessible and transparent. The suggested framework will be discussed below in this chapter.

Envisioned emerging framework: Sympatric metamorphosis framework for social justice praxis - A butterfly effect

I will draw from three natural science terms to explain the grounding of my vision for social justice praxis and service-learning: sympatry, metamorphosis and the butterfly effect.

Table 8.2 shows a definition of each term as used in its scientific denotation and the interpretation of the term for education practices in South Africa.

I propose a working theory based on an emerging framework that I call the *Sympatric Metamorphotic Educational Praxis framework* (SMEP). The rationale behind this emerging framework is rooted in my belief that HEIs for teacher education, local communities, in-service and pre-service teachers as well as the national Departments of Education have an equal responsibility for the generation of an education system that is socially relevant,

TABLE 8.2: Explanation of educational relevance of natural science terminology for social justice praxis.

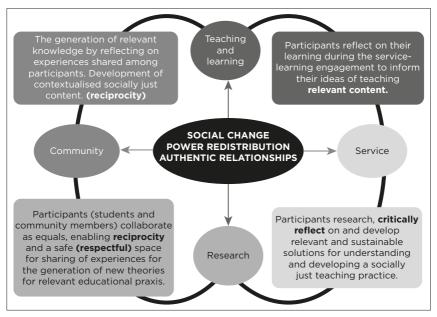
Interpretation for educational practices in

Scientific term and definition	South Africa
Sympatric: The state of related species sharing the same geographical space and frequently encountering each other (Fitzpatrick, Fordyce & Gavrilets 2008)	Diverse local communities that share the same geographical living space (Said 2007), resources and knowledge systems. Within these geographical spaces, there should be no room for 'abyssal thinking' (De Sousa Santos 2014:53), which leads to one community developing feelings of inferiority and learned helplessness (Maier & Seligman 1976:3-46)
Metamorphosis: The transformation process (which is influenced by the environmental factors) of larval insects such as butterflies, moths, beetles, flies and bees, during their life cycle (Hammer, McMillan & Fierer 2014). The dietary choice of butterflies is the environmental factor that causes the most discrepancy in the transitional process of metamorphosis (Hammer et al. 2014)	Pedagogical tools such as CSL (Butin 2015; Mitchell 2015:20–28) should inform the transformation of educational practices and syllabi as critical transformative paradigms advocate for relevant social change (Butin 2010) that is contextualised for a specific environment (Petersen 2018)
Butterfly effect: A term borrowed from chaos theory (Filipe & Ferreira 2013), which depicts that meaningful change results from making many minor changes. The butterfly effect is a metaphor originating from notions that the flap of a butterfly's wings in one geographical area generates the force to cause a tornado in another area (Lorenz 1994; Dooley 2009)	Locally generated knowledge through critical reflection on service-learning activities renders minor changes in the preparatory programmes for teacher education (one space); the later effects (different space) thereof can contribute to societal change as more learners and preservice teachers can engage with content developed for social justice praxis

CSL, critical service-learning.

acknowledges diversity and ultimately prepares citizens for their societal roles. Figure 8.2 shows a visual representation of this framework.

The SMEP framework embodies the outline of a butterfly as metaphor for the interrelatedness of the principles (Butin 2010) and mechanisms (Mitchell 2008) for service-learning: teaching, community, service and research as the informants of socially just educational practices (Austin & Callen 2018; Candua 2016; De Sousa Santos 2014). Each of the four wings of the butterfly framework is symbolic for relevance, reciprocity, critical reflection and respect as guiding principles (Butin 2015) throughout discussion about social (in)justices in education that need to be addressed (Chisholm 2015; The



Source: Adapted from the CSL model of Mitchell (2008) and the 4Rs for service-learning of Butin (2015). **FIGURE 8.2:** Sympatric metamorphotic educational praxis framework.

World Bank 2018). Just as the butterfly cannot fly without all four wings, I envision that the absence of any one of the four principles of service-learning will lead to ineffective servicelearning practices. The four connecting terms (community. research, service and teaching) are those that enable coherence, connectedness (Botman 2016:48-67) and the need for interexistence (Said 2007) amongst people in a society to live in equal, open, peaceable and enabling spaces (De Sousa Santos 2014; Van Deventer et al. 2015:24-35). The three mechanisms for service-learning, social change, power redistribution and the building of authentic relationships (Mitchell 2015:20-28). are central to all the components of the emerging SMEP framework, as in the absence thereof actual learning by all will be hampered (Petker & Petersen 2014:122-135) because the prevalent legacies of inferiority and power relations will consequently regulate participant engagement (Bondy et al. 2017).

Lastly, drawing on the metaphor of the butterfly effect, changes which seem minor, for example inviting students and teachers to participate in critical discourse about diversity and social justice in teacher education, can lead to the development of improved social justice praxis in education. The results of these minor changes will however not be immediate but enable bigger changes in a different space (time) as with the butterfly effect. I suggest the initial step towards social change for the failing education system in South Africa (Gillis 2018: De Lange et al. 2014:748-766; The World Bank 2018) to be that stakeholders in education (refer the section 'Envisioned emerging framework: Sympatric metamorphosis framework for social justice praxis -A butterfly effect') critically reflect (Benade 2015:42-54; Mezirow 1990) on their own bias about diversity, social justice experiences (or lack thereof) and the perceived stereotypes they hold (Jansen 2009; Romm 2018).

Significance and possible contributions of the suggested emerging framework for teacher education in South Africa

South Africa faces challenging demands for the rethinking of current higher education practices as prospective employers identify skills gaps of HEI graduates in the private business and public services (education and health care) sector (DHET 2018) that drastically affects the employability of the prospective workforce (Gillis 2018). The consequences of the absence of social justice praxis in teacher education specifically (Chisholm 2015) calls for the development of programmes that will deliver teachers who are socially aware, acknowledge diversity and adopt teaching approaches that will enable contextualised and relevant learning (Botman 2016:48–67).

Furthermore, graduate programmes are failing to prepare students for the workplace in terms of contextualised problem solving skills, interpersonal communication skills, comprehension skills and reasoning skills (The World Bank 2018). Attitudinal skills and dispositions are also emphasised as areas for development (DHET 2018).

Apart from the skills shortages mentioned above the lack of community partnerships and unresponsive (outdated) curricula form part of the concerns for the future of higher education (DHET 2018). Teacher education in South Africa is one of the domains that does not deliver a workforce that can fulfil the needs of its learners (Smuts 2018), and the quality of education, access thereto and relevance of the syllabi remain a concern (Mashau & Mutshaeni 2015:428–434).

The suggested framework (SMEP) can address the need for the aforementioned transformation of teacher education programmes to enable social justice praxis through critical engagement with all the stakeholders for education (refer the section 'Envisioned

emerging framework: Sympatric metamorphosis framework for social justice praxis - A butterfly effect') in service-learning activities (Botman 2016:48-67; Butin 2015; Peterson 2018). This theory now needs to be implemented into practice to develop a research-based framework for the inclusion of service-learning components on programme level at HEIs. I will embark on an empirical study to validate the framework.

■ Conclusion

South Africa, along with other developing countries, faces major challenges with entrenched inequalities as a result of poverty, social injustice and a clear divide between the advantaged and disadvantaged groups across the country. The unequal delivery of education, lack of diversity education in teacher preparation and systemic epistemicide lead to further divide.

I have argued the need for HEIs to reconsider the current curricula for teacher education as the local knowledge and experiences from communities are still excluded on the basis that its academic relevance is still not recognised. The majority of learners in South African schooling system are taught from a curriculum that has little to no relevance to their immediate realities, mostly by teachers who do not have experience with diversity and coming from backgrounds different from their own.

In this chapter, I advocated for the development of social justice praxis through including a service-learning component into teacher education. By collaborative participation, sharing of knowledge and expertise and critically reflecting on locally generated knowledge, HEIs can be equipped to develop socially relevant teacher education programmes that can continue to transform through the establishment and maintaining of authentic relationships with local teaching communities. South African institutions cannot afford to disregard the local knowledge and skills in a time of global education crises. The onus lies with HEIs to address the basic human right of South African learners to

attain knowledge and skills through schooling to become citizens who can access opportunities to realise their full potential. As a teacher of teachers, my role is to be socially aware, responsive and engaged. I have to continuously reflect on my own assumptions and teaching practices, if my goal is to help teachers to develop a social justice praxis.

I conclude by reiterating the words of Duncan (2009) – if we care about reducing societal inequalities the classroom is the place to start. Teachers instil and help develop so much more than pedagogical content; their approaches should contribute the daily fight for social justice.

To be true to the teaching-research symbiosis as a hallmark feature of a tertiary institution, educational research needs to inform teacher education programmes. Student teachers, who will practise in an increasingly diverse and unjust society, need to be given the opportunity to engage with social justice issues to enable the development of contextually relevant practice. This chapter outlines just how CSL as community-based research can be used to attain this end.

Chapter 9

Relocating social justice in the policy-pedagogy-research nexus: Insights from the Mauritian language-in-education policy

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■ Abstract

In a review of Merten's book *Transformative research and evaluation* (2009), Chouinard (2010:266) claims that 'it is no longer possible to describe the world in simplistic and singularly one-dimensional ways' and that a transformative paradigm 'motivated by a strong social justice and human rights agenda ... provides a much-needed alternative to assist us in addressing the complexity of our world'. This is particularly true in the field of language-in-education. As Bourdieu and Passeron (1990) already indicated almost three decades ago, inefficacious learning arises when the primary habitus of learners developed in the family sphere differs from the secondary habitus upheld by the school as a form of social organisation. Is this any wonder when educational policies tend to amount more to a matter of political – rather than pedagogical – choice (Garcia 2012; Inglis 2008)?

In this chapter, we place under the lens Mauritius, a multilingual postcolonial Small Island Developing State (SIDS), where the nexus between the linguistic ecology and the language-ineducation policy is deemed to be inadequate. Although English - which undeniably bears capital, yet is spoken by less than 1% of the population (Statistics Mauritius 2011) - is prized as a subject and the medium of instruction, the educational system fails to cater to the needs of a majority of learners, who have Mauritian Kreol (MK) as their mother tongue. Paradoxically, a pseudo-form of compliance with conventions to which the country is signatory. such as those governing the rights of children to learn in their first language, may be evidenced. Further, the national curriculum and contemporary pedagogic practices insufficiently factor in social justice, despite assertions of the need to do so in official documents, for example the Truth and Justice Commission report (Teelock 2011).

Drawing from discourse analysis pursuits and empirical data generated from educational practitioners involved in curriculum development, we reflect on the interplay between pedagogy. policy and research paradigms in the attempt to define which element should normally (and ideally) drive the other. This pursuit brings to the fore a pathway to generate a new vocabulary for the construction and legitimation of knowledge for postcolonial SIDS contexts such as Mauritius. This vocabulary will concurrently acknowledge the relevance of the political, pedagogic and scientific loci of power.

This chapter continues the theme of social justice, highlighted in Chapter 8 as a consideration imperative in the construction of a rigorously relevant theoretical framework for education. The issue of language of learning and teaching is a too often overlooked critical factor in education, not only in Africa but in increasingly multilingual societies worldwide. It is also becoming a challenge globally. This chapter rightfully brings this issue to the fore.

Keywords: Learning difficulties; Social justice; Diversity; Language-in-education; SIDS.

■ Introduction

Small Island Developing States: Steering one's way through cross-currents

One of the major challenges faced by small developing countries in the 21st century is the difficulty to keep pace with global economic trends – and thereby ensure the social viability of their policies together with their economic competitiveness – whilst preserving and promoting facets that are endemic to their context. This is particularly apparent in the cultural and educational domains, with languages standing as a prominent example of a contestation terrain between outward-looking aspirations and inward-looking needs (Nadal, Ankiah-Gangadeen & Kee Mew 2017).

Having emerged from the yoke of colonisation, these countries which are at the receiving end of forces often perceive the global

dynamisms that shape the course of their socio-economic orientations as neo-colonial sways, particularly when they run counter to their needs. Commenting on the era that followed the World Conference on Education for All in Jomtien, Thailand, in 1990, Crossley and Sprague (2012) note that:

The politics of international development co-operation [...] continued to impact upon national education policy trajectories in ways that generated tensions between the international agendas that shaped the nature of development assistance, and the local needs that inspired educational priorities within small states. (p. 31)

When it comes to the charting of language-in-education policies as well, the tensions inherent to the linguistic landscape of SIDS become very apparent and, more often than not, the contours of this landscape are delineated by the push towards well-established international languages. Languages boasting relevance mostly in the domestic sphere are deemed unfit within a system geared towards preparing the learner for an increasingly globalised world, even though the percentage of learners who eventually end up leaving the country to study abroad, for example, is utterly insignificant compared with those who stay back to learn and work domestically. In the case of Mauritius, for example, the percentage of students who leave the country to study abroad every year at the end of their secondary schooling cycle amounts to less than 25% of the figure that starts the journey into primary schooling every year (Nadal et al. 2017).

The lack of resources and the almost exclusive reliance on human capital often compel SIDS to opt for a situation of linguistic status quo whereby it appears 'safer' and more consensual for them to make their educational policies rest on the use of languages that command more 'prestige' and credibility internationally. Resorting to the mother tongue and other vernacular languages for educational purposes – be it in the name of social justice or human rights – becomes tantamount to a drastic and major policy overhaul that few policy makers are willing and able to embrace.

Coupled with this absence of commitment, setbacks experienced by countries that are comparable in size or that share the same regional profile contribute in maintaining the present state of affairs. In the Indian Ocean region, for example. Seychelles in the early 1980s opted for Seychellois Creole (known as Seselwa) as medium of instruction for the first four years of primary schooling. This was part of a nationalistic move that had followed the coup d'etat of 1977 and the onset of the one-party socialist regime under president Albert René. However, following the report of the Language Policy Review Committee in 1996, the use of Seselwa was limited to the first two years of primary schooling only (Nadal & Anacoura 2014). One of the ideas behind, as Deutschmann and Zelime (2015) recall, was to provide learners with exposure to English at an earlier stage, as it was felt that the increasing contact with the language afforded through popular media, for example, had prepared them for the shift to a foreign language as medium of instruction.

To the west of Mauritius, the example of Madagascar constitutes another case in point, as there as well, the socialist revolution provided the impetus for the two decades (1972–1991) of 'malgachisation' of education in a move presented as a second enfranchisement from French, following the 1960 independence from France (Randriamarotsimba 2016). However, the policy was marked by a number of hurdles, which necessitated a return to French, followed by the adoption in 2008 of a Malagasy-based system for the primary level and a gradual introduction of French at the secondary level (Dahl 2011; Venart & Reuter 2014).

These different experiences – and especially the Malagasy one – tell a tale of mitigated success insofar as the recourse to the mother tongue as medium of instruction is concerned. More revealingly, they attest to the difficulty of transacting a complete indigenisation of the curriculum and the language-in-education policy despite a strong and unequivocal political will to do so. As an offshoot, some countries – like Mauritius – which are all too well aware of their economic limitations and vulnerability end up

construing of education in the English language as the only viable option to ensure some sort of relevance and validity on the global stage.

■ The Mauritian context: Language, politics and policy

Mauritius, a postcolonial SIDS that gained independence from the British in 1968, has a multilingual and multicultural population because of its settlement history. Having diversified from an economy based on agriculture to one resting on tourism, manufacturing and service sectors, the island now harbours aspirations to be at par with 'big' nations through education, which is deemed to be one of the basic agents of economic growth (MECHR 2008). However, 50 years after independence and despite being a signatory to international conventions governing the use of the mother tongue, the language-ineducation policy of Mauritius is heavily impinged by colonial and neo-colonial forces (Nadal et al. 2017). In the first instance, although MK is one of the home languages for close to 90% of the population (Statistics Mauritius 2017) and students have varying levels of proficiency in English, the medium of instruction is English for all subjects, except Asian languages, Arabic and French. Further, the system is still governed by the Education Ordinance, a document dating 1957 and which makes allowance for the use of any language suitable for the learner (understood to be the L1) during the first three years of primary schooling only. Ironically, however, as the textbooks are in English, the language de facto becomes the medium of instruction (Auleear Owodally 2010). English continues to play a key role at the secondary level of schooling, with students sitting for Ordinary and Advanced level examinations set by the Cambridge Assessment International Education.

What explains the drive for English is undoubtedly its significance for access to the globalised labour market in the current international economic juncture. For Mauritius, which is

only able to bank on its human resources to counter insularity, the preservation of the status of English appears imperative. This features unequivocally in the *Education Act* through a clause stipulating that the Minister of Education must ensure 'the more effective teaching of English and the spread of the English language in Mauritius' (Education Act, RL2/603 1957). Over successive years, official reports (for instance, Ramdoyal 1990), reports of national examinations, and the conclusions of the 'Assises de l'Education' held in 2013 have highlighted that difficulties students encounter in most, if not all, subjects are because of the medium of instruction. As asserted by Tikly (2016), this shows that:

[M]edium of instruction policies often impact negatively on the development of linguistic capabilities for disadvantaged groups and ... this in turn has a negative impact on other learning outcomes including basic literacy and numeracy. (p. 408)

Indeed, the persisting gap between the learners' linguistic capabilities and the linguistic demands of the curriculum and assessment (what Cummins terms the Basic Interpersonal Communication Skills and Cognitive Academic Language Proficiency respectively) proves to be detrimental to most students. Nevertheless, given the incontestable capital English represents, the language-in-education policy has remained unchanged. In addition to the top-down and instrumentalist approach of policy, it must be pointed out that other factors that have contributed to sustaining the status of English in the local multicultural context are its position as a 'neutral' language that carries no ethnic or social label and the negative perceptions of MK - a language that is often associated with the Afro-Mauritian community in particular and is considered as deprived of socioeconomic capital - as opposed to French, the language associated with social prestige and refinement, and English, the language of globalisation and opportunities.

Eight years ago, MK made its way into the curriculum as an ancestral or heritage language in peculiar circumstances, namely

as a result of an unprecedented political pressure the Afro-Mauritian community lay in favour of the recognition of MK as the ancestral language of the local Creole (Afro-Mauritian) ethnic group during the 2010 electoral campaign. This led to the introduction of MK in the primary educational curriculum in 2012. Further, in the Addendum to the National Curriculum Framework (NCF) for primary education, it is mentioned that MK is the heritage language of Afro-Mauritians even though it is acknowledged that the language holds relevance for the population at large as the mother tongue of an overwhelming portion of the Mauritian population (Mauritius Institute of Education [MIE] 2012). However, this decision - which was political rather than based on pedagogical considerations - has had no real impact on the role and significance of English as the medium of instruction. In fact, in 2014, in the course of curriculum review, an attempt had been made to adopt the Foundation Programme. a trilingual approach for the teaching of English and French, thereby giving MK a more prominent function as a medium of instruction. This move - that could be termed as being both daring and drastic given the traditional mores that are deeply entrenched in the Mauritian consciousness regarding the status and functions of different languages - was based on language learning theories, more specifically those related to the use of the child's L1 for the teaching of second languages. The attempt met with vehement resistance from both the educational stakeholders and parents, so much so that the curricular materials had to be withdrawn and replaced by separate textbooks and lessons for the teaching of English and French (Nadal et al. 2017; Peedoly 2017). The fact that, to date, MK is offered as an optional subject at par with other ancestral languages - namely Hindi, Tamil, Telugu, Urdu, Marathi, Modern Chinese - is indeed telling, because these languages are indicative of the country or location from which different segments of the population came during the colonial period and are closely linked to ethnic or religious appurtenance, while MK is spoken by the whole Mauritian population.

Social justice and models of curriculum development

According to Woods et al. (2012:1), social justice is of two types: redistributive and recognitive. The redistributive dimension pertains to the 'more equitable redistribution of resources. knowledge, credentials and access to educational pathways for students', whereas the recognitive axis underscores the need to recognise 'these students and their communities' lifeworlds. values, knowledges and experiences in the curriculum, and in classroom teaching and learning relations'. This recognitive element, which allows 'the interaction between the learner and the educational curriculum' to occur (Meo 2005:22), is in line with Doll's postmodernist theory of curriculum development (1993). It refers to the grounded approach to curriculum development - as opposed to the fixed or rigid or industrialised model of modernist approach to curriculum development developed in mid-20th century and associated with people like Tyler (1949) and Rawls (1999). This postmodernist approach to curriculum development is more dynamic and fluid (Cheng-Man Lau 2001). It is a transformative process aiming at rich interactions. and the curriculum is developed from the learner's practice and experience. As such, interpretation instead of explanation is aimed at. This approach is itself reminiscent of the bottom-up process model of curriculum development, as opposed to the top-down product model.

In practice, it often seems easier and simpler (if not more simplistic) for official policies and state efforts to target the redistributive aspect through accrued subsidies to redress situations of inequality between performing and less performing students. For instance, this has repeatedly been observed in the local Mauritian context, whereby primary schools listed as Zone d'Education Prioritaire (ZEP) – Priority Education Zone – benefit from various forms of material assistance, such as an additional

incentive allowance paid to educators working there and the provision of free meals to pupils.

However, effective school reforms, as Woods et al. (2012) claim, should go beyond redistributive social justice to encompass recognitive social justice. Findings from the 'Assises de l'Education' (Ministry of Education and Human Resources, Tertiary Education and Scientific Research [MEHRTESR] 2013) held by the Mauritian Ministry of Education support this view, as they highlight the limitations of the redistributive dimension of social justice in relation to the ZEP project:

Incentive allowances for staff cannot be correlated with pupils' performance ... There was low positive community involvement in Education ... Head Masters were encountering difficulties to cope with complex situations in the community, social and family problems that spill into schools ... Teachers were often discouraged. (p. 8)

Although the recognitive dimension does not necessarily entail increased spending and depends more on a matter of will, so to say, it surprisingly seems more difficult to embrace by policy makers. This is because the target population that is more likely to benefit from recognitive social justice (minorities, migrants, working classes, historically deprived people, etc.) is often the least influential one in terms of political, cultural and socioeconomic capital. For this reason, its voice is silenced and its needs side-lined to the advantage of more prominent groups. Such a situation was evidenced locally for the Foundation Programme experience mentioned earlier, as parental resistance for instance primarily came from people enjoying socio-economic stability and who viewed the departure from the 'English only' stance as an unnecessary step for 'their' children.

Language-in-education policies constitute one such terrain where recognitive social justice could have been more frontally and more consistently incorporated. Had this been the case, fewer situations of inefficacious learning would have arisen from the mismatch between the primary habitus of learners – developed in the family sphere – and the secondary habitus,

upheld by the school as a form of social organisation (Bourdieu & Passeron 1990). With reference to the local context, the first volume of the Truth and Justice report (Teelock 2011) commissioned by the Government of Mauritius to assess the consequences of slavery and indentured labour on the contemporary Mauritian society and make recommendations in relation therewith pointed in so many words to the need to introduce MK as a full-fledged language at school. The Commission also made unequivocal demands for the use of this language as medium of instruction. Drawing from the experience of prevocational students from Catholic schools who had been partly afforded the opportunity to study in their mother tongue, the report pointed out that the recourse to MK had been beneficial to the learners, as it enabled them to better understand concepts that would have otherwise been difficult or impossible for them to grasp in English or French.

Although it is true that these observations of the Truth and Justice Commission related to a specific category of secondary school learners, it is clear that a language-in-education policy that capitalises on the mother tongue for learning would have been beneficial to a much larger portion of the domestic school population for whom English and French are not already acquired cultural assets. With regard to the reticence from various quarters to attribute a more significant role to MK, it must be brought out, as argued by Tikly (2016), that basic human rights that include education in the mother tongue must not be seen as being contradictory to linguistic rights that include access to an official language. Rather, as he goes on to say, both goals are complementary. The mother tongue thus acts as a bridge to the development of global languages thereby, as professed by Amartya Sen (2005, cited in Tikly 2016), converting rights into capabilities, namely the opportunity to convert that access into 'valued functionings' (Sen 2005, cited in Tikly 2016:414) because legal rights are 'an insufficient condition for realising social justice' (Sen 2005, cited in Tikly 2016:414).

Reducing the schism between policy and reality: The case of the four-year Extended Programme

In this part, we discuss the attempts to breach the divide between language-in-education policy and practice with reference to the Extended Programme (EP). The EP was introduced as a substitute to the Pre-vocational Stream in the course of the Nine-Year Schooling Reform in 2015. The reform is currently underway and the first batch of students, namely those who did not attain National Qualification Framework (NQF) level 1 at the end of their primary schooling, was admitted at secondary level in Grade 7 in January 2018. Apart from poor academic performance, the majority of the EP students hail from deprived socio-economic conditions and many are characterised by emotional disturbance. The vignettes below bear the testimonial of some teachers and provide an insight into the profile of these learners (Figure 9.1).

In line with the notion of redistributive and recognitive social justice, we note that one of the key principles of the educational reform is that 'no child should be left behind' (MEHRTESR 2017:3). As such, the EP aims to prepare students to attain learning outcomes established in the NCF Secondary and prepare them for the National Certificate of Education, pitched at level 2 of the NQF. While the 'mainstream' secondary school students take this exam at the end of three years, the EP students are given an additional year and necessary support to achieve the same outcomes. It is however interesting to note that with the exception of free textbooks, unlike for the pre-vocational sector, no additional educational resources (such as stationery items) are provided to the EP students. Moreover, in a bid to prevent 'tagging' and discrimination, policy now requires that EP classes be taught by mainstream teachers, as opposed to pre-vocational students, who were taught by teachers who had received special training in remedial education. On the other hand, the EP students have an adapted curriculum because of their specific profile as students with learning difficulties, deprived socio-economic

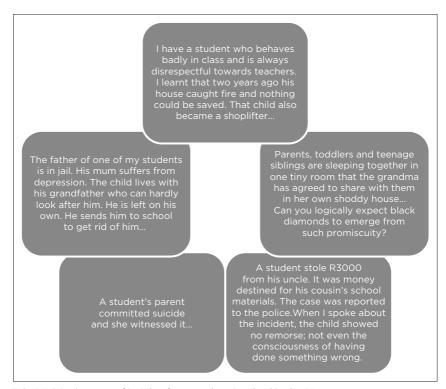


FIGURE 9.1: Vignettes of insights from teachers involved in the EP.

backgrounds and often health problems that impact negatively on their motivation and self-confidence (MEHRTESR 2017). For instance, they study fewer subjects in Grade 7, where the focus is on literacy and numeracy, as well as basic scientific knowledge, in addition to visual arts and technical subjects that are deemed to be within their area of interest and likely to lead them to an appropriate career path in the vocational field. It is only in Grade 8 that they are introduced to the other subjects that their peers in the mainstream study right from Grade 7, for instance business and entrepreneurial studies, social and modern sciences and information and communication technology. In all subjects, however, the learning outcomes are pitched at a lower level

compared with the mainstream curriculum. Although the medium of instruction is English, teachers have the leeway to use the students' L1 as scaffold and to ease learning. Even though, as claimed by Williamson (2017:111), 'the localized practice of enacting a socially just literacy curriculum is complicated' because of tensions between multiple actors and ideologies, it may be argued that recognitive social justice prevails to a great extent with regard to measures that have been taken to accommodate learners in the EP. It is recognised that their socioeconomic background (with all the issues that it engenders) is detrimental to their academic performance and that their learning difficulties hamper their progress. Consequently, in addition to the curriculum and curricular materials being adapted to their personal and academic profile and needs, it is recognised that the emotional and psychological wellbeing of these students must be catered for, namely through 'implementation (that) will holistic taking into consideration the psychological, be sociological and pedagogical dimensions of teaching and learning' (MEHRTESR 2017:7) - even though no concrete action has been taken so far.

As added support to teachers, a Community of Practice (CoP) has been established whereby all secondary schools have been clustered in triads to provide a platform for the sharing of good practices, discussing difficulties and renderina implementation smooth in relation to such aspects as assessment and timetabling. Participants in the CoP include a facilitator from the Mauritius Institute of Education, facilitators from the Quality Assurance Departments of the Ministry of Education and Human Resources. Tertiary Education and Scientific (MEHRTESR) and of the Private Secondary Education Authority, as well as the Deputy Rector and teachers from the respective schools. The establishment of the CoP has brought about a dynamic partnership between the various stakeholders - and to an extent helped to address gaps in the policy-research-(language) pedagogy nexus in EP. On the one hand, this has enabled collaboration (Kirkgöz 2009):

[G]iving teachers a chance to work with and learn from others in similar positions, to co-construct understanding of policy messages and reform proposals and negotiate about technical and practical details of implementation, thereby contributing toward teachers' professional development. (p. 680)

It was seen that, as teachers from different schools came together and shared their experiences, less experienced and, in some instances, reluctant teachers benefitted from the know-how of seasoned peers who had worked with pre-vocational students in the past and had thereby developed expertise in dealing with students from difficult backgrounds. The interaction not only had a therapeutic effect on struggling teachers but also equipped them with tried and tested tools.

Data obtained during CoP also led to a better insight into the profile and needs of the EP students and eventually to the readjustment of the Teaching & Learning Syllabus (TLS) and curriculum materials in a recursive process and through a participatory approach. It became clear during the sessions that the TLS and textbooks, which had been prepared with experienced pre-vocational teachers in the anticipation of the first cohort of the EP students, were not of an appropriate level because the latter had more acute learning difficulties. This, added to classroom observations and additional feedback from teachers in various schools, led to the curriculum developers' realisation that the curriculum materials had to be reviewed and the level readjusted if the students were to benefit from them. The decision was therefore taken to review the Grade 7 textbook with respect to the level and scope and to readjust the TLS for Grades 7-9 of the EP accordingly. This exercise also gave curriculum developers the opportunity to engage with the Grade 8 textbook with more assurance with regard to the level of the content. The adoption of a bottom-up approach to review the TLS and curriculum materials was seen to impact positively on the teachers' pedagogy and motivation. The fact that that their voices had been heard and taken into consideration gave them a sense of ownership - an essential cog in the implementation process. In addition to the positive washback effect in terms of fine-tuning curricular materials to make them more suitable, the CoP also drew the attention of administrators to the plethora of areas where the shoe pinched, which in some instances led to attempts to provide solutions. One example is the changes brought to the Secondary School Readiness, a diagnostic assessment tool that also aimed at student profiling. The bottom-up participatory approach thus allowed adequate consideration to be given to areas that are generally side-lined, namely 'quality instructional resources, interpersonal relationships, and ideologies about curriculum' (Williamson 2017:104).

Nevertheless, despite all these measures, it cannot be said that the policy versus reality schism has been breached. In addition to failing to cater for the precarious emotional condition of the majority of students, the inadequate articulation between policy and practice emerges starkly through the self-defeating attempts to homogenise the approach. The educational reform, in its anxiety to place all students 'at par', has established that the EP students will take the same examinations as mainstream students. In doing so, and in persisting on adopting that route, it turns a blind eye to the wide gap regarding educational attainment between the two categories of students. The schism is so wide that an additional year of preparation is inadequate to prepare the EP students for the National Certificate of Education. As stated by Meo (2005:21), '... categorising students into two groups - regular and special - oversimplifies learners' differences and fails to accurately represent the diversity of today's high school student population'. In fact, the system strongly risks propelling the EP students into repeated experiences of failure. There appears to be little inclination to understand the needs. interests and aptitude of these learners. As brought out by the Truth and Justice Commission Report (Teelock 2011):

If young people are made to internalise their failures and to believe that something is wrong with them, when actually it is the nature of the curriculum content, the pedagogy and the culture of the school – often with all of those forming part of a dominant culture – there is an urgent need to rethink, revisit and repair all the wrong, much of which has been largely informed by the Colonial History of the island. (p. 301)

The repercussions on curriculum development cannot be ignored either. Whilst 'the interaction between the learner and the educational curriculum must be considered' (Meyer & Rose 2005. cited in Meo 2005:22), curriculum developers and the examining body are being compelled to ensure that the mainstream and the EP converge towards the same learning outcomes. This act may turn out to be detrimental to either the EP students or highperforming students, given the difficulty of reconciling learning outcomes that are poles apart in a way that is fair to all. Thus, with regard to the various challenges facing both students and educational stakeholders, we argue that barriers at all levels (pedagogy, home, community and wider educational system) should be removed (Tikly 2016) for the EP students to have the same standing as their mainstream counterparts. There is no injustice that overcoming implies dismantling institutionalised obstacles (Fraser 2013, cited in Tikly 2016) but the materialisation of this objective is highly dependent on political will. To provide a smoother dialogue between research. policy and pedagogy, we propose an inclusive model of policy and curriculum development and implementation that will be discussed in the next section.

As shown in Figure 9.2, research that is context-based and that emanates from policy studies the ecology of the learners, looking into such aspects that impact upon teaching and learning. These are, for instance, the profile of learners as well as teachers, the key agents in classroom transactions; the school culture, which may create an enabling or constraining atmosphere depending on factors such as the management style and the nature of the staff-staff or staff-students relationship; and the curriculum, pedagogy and assessment, which have a significant influence on learning.

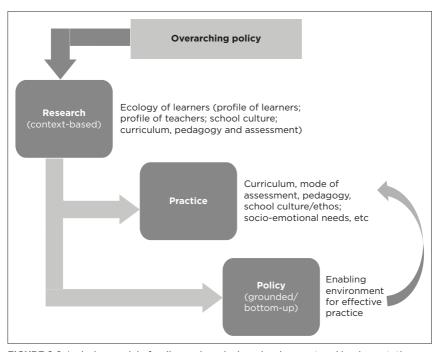


FIGURE 9.2: Inclusive model of policy and curriculum development and implementation.

Research findings are ploughed into practice, which encompasses curriculum, pedagogy and assessment; the school ethos and culture; measures taken to cater for the students' needs resulting from socio-emotional deprivation and any other such elements that can aid learning. In line with recognitive, redistributive and participatory social justice (Fraser 2008), research findings also inform policy in a grounded and bottom-up approach and lead to readjustments that will make decisions more appropriate for learners with a multiplicity of profiles and needs, in a way that is meaningful contextually (Sen 2005, cited in Tikly 2016). Policy thus appears at two levels in this model: on one level, it refers to overarching policy decisions that are taken by the government to chart the future of the country, and, at the other level, it refers to decisions taken at sub-levels (in this

instance, education) that are tempered in the light of insights provided by research so that governmental goals are achieved in a way that is 'just'. Reviewed policy then gears practice as it leads to readjustments in relation to the other strands. The inclusive model allows for less rigidity and more flexibility and fluidity to accommodate requisite changes. This brings about a closer fit between policy and practice, thereby helping to promote social justice.

■ Conclusion

Against a broad national educational context that is often marked by verticalisation and the absence of reciprocity between the base and the top in the formulation of policies, we set out in this chapter to interrogate the place of social justice in the policypedagogy-research nexus by focussing on aspects inherent to the Mauritian language-in-education policy. To this end, we narrowed our lenses on students facing learning difficulties, as we felt that - much more than their counterparts following mainstream learning programmes - these students were in particular need of distributive and (mostly) recognitive social justice to mitigate the potentially alienating feeling associated with the school as an agent of estrangement. As a case in point, we considered secondary school students following the EP and investigated how - through the CoP experience, which involved educational practitioners, school leaders, curriculum developers cum teacher educators, and ministry administrators, amongst others - it became possible to formulate grounded policies. The latter (as opposed to directive overarching policies) were more easily ploughed back into those very same classroom practices that the CoP aimed at investigating and improving.

The inclusive model of policy and curriculum development and implementation proposed in this chapter is based on the premise that the drive for curriculum reform need not necessarily be transacted from the topmost level of the pyramid. This explains why the model developed is not cyclical, as research findings

emanating from the sharing of classroom realities are not used to influence overarching policies insomuch as social justice is concerned. Instead, within the CoP, bona fide insights obtained from key stakeholders are grounded into lived realities, and adjustments for the inclusion of enabling factors that foster social justice are collegially worked out within the existing broad educational policies.

We reckon that these adjustments have – to a great extent – been possible owing to 'size' considerations. Indeed, in a small island developing state like Mauritius where an odd 100 schools or so (Statistics Mauritius 2017) offer courses in the EP for the whole island, it is possible to optimally operationalise the functioning of the CoP by ensuring that all those concerned by the programme – whether closely or remotely – do come together for the generation of fluid responses to challenges faced in educating students with learning difficulties. Therein lies, as Jules and Ressler (2017) argue, the potential to tap on smallness as a source of strength. What however emanates from this study is that contextual factors should not be overlooked in the interplay between pedagogy, research and practice; and SIDS do seem to have interesting arguments to marshal in the quest to factor in social justice in the educational agenda.

Chapter 10

International developments in the structuring of education research

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Abstract

The aim of this chapter is to track the international discourse on the structuring of education knowledge to serve as some guidance for education as a field of scholarship in South Africa. The chapter commences with a description and justification of the research method, followed by an explanation of the need for structure in the fields of education knowledge. The chapter discusses the packaging of education knowledge in (the national scholarly) contexts of each of Germany, the Netherlands, England,

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the United States of America, Australia and China. The packaging of knowledge within each of the sub-disciplines comparative and international education, history of education, educational psychology, philosophy of education and sociology of education is then surveyed. Subsequently, the impact and imperative of teacher education programmes and current societal and scholarly trends on the structuring of education knowledge are explored.

The field of education can, at least as far as its theoretical façade is concerned, be described as a disparate field of scholarship. This is even more accentuated in South Africa. This state of affairs could be ascribed to a number of centrifugal forces. These can be summarised as societal and education system contextual forces at play in each national setting. There is also the factor as the varied shoots of progeny of the field of scholarship. Although contextual forces are imperatives to take into account when building a field of relevant scholarship (to return to the topic of this volume) and whilst the input of fields of progeny can promote *rigour* in the field, there are at the same time imperatives constituting a centripetal imperative that should also be factored in by the scholarly community. This desideratum can be summarised as a coherent, uniform and unified theoretical edifice to place and order all knowledge produced in the field. It seems from the survey of constituent disciplines of education, and the development and current state of the field in various national settings portrayed in this chapter. that scholars have, in this field of tension between centripetal and centrifugal forces, strayed too far in the direction of the latter. and should urgently attend to the integration of the field.

Keywords: Comparative education; Education; Educational psychology; History of education; Research; Theory.

■ Introduction

A central theme of this book is the amorphous nature of knowledge produced by scholars in field(s) of education, the lack of structure. Very lately the structuring or packaging of education has begun to receive attention by theoreticians in such fields. The aim of this chapter is to track the international discourse on the structuring of education knowledge, to serve as some guidance for education as a field of scholarship in South Africa. The chapter commences with a description and justification of the research method, followed by an explanation of the need for structure in the fields of education knowledge. The packaging of education knowledge in (the national scholarly) contexts of each of Germany, the Netherlands, England, the United States of America, Australia and China is then discussed. The packaging of knowledge within each of the sub-disciplines comparative and international education, history of education, educational psychology, philosophy of education and sociology of education is then surveyed. Subsequently, the impact and imperative of teacher education programmes and current societal and scholarly trends on the structuring of education knowledge are explored. In conclusion, a synthesis is drawn from a South African vantage point, and recommendations are made regarding the structuring of education knowledge, in South Africa in particular.

■ Research method

Robson (2011) classifies these research methods into three groups or levels, namely:

- Methods of data collection.
- Methods of data analysis.
- Methods of data interpretation.

Research commences with the collection of data. Once collected, the data mass needs to be analysed to reduce it to sensible proportions, that is to summarise and to order it. Then, having rendered the data mass into a manageable, understandable proportions, the scholar proceeds towards attaching a particular meaning or understanding or explanation to the analysed data. For each of these levels, a number of methods are available.

The method of data collection used in the research reported in this chapter is that of a literature survey. Recently published literature on the organisation of education knowledge in different countries or national context was studied and synthesised. This literature appeared in the form of books and articles in scholarly journals.

For the analysis and synthesis of data, the method of the scholarly field of comparative education was turned to. Although the term comparative education has taken on many meanings as used by different scholars, here it is used as explicated in Chapter 5 of this volume, namely comparing education systems in their interrelationships with the societal contexts in which they are embedded.

In this chapter, the collected information regarding the organising of knowledge produced by scholars will be analysed against the backdrop of the national contexts in which such scholars find themselves. Finally, these will be compared to make recommendations for the structuring of education knowledge, in general (i.e. globally), and once again taking into account the South African context.

Comparing national scholarly projects or endeavour with developments abroad or internationally has, as a method, a proven track record for countering pernicious, even lethal, parochialism in research, and for sharpening the national scholarly project (see Wolhuter 2014).

■ The necessity of structure in any field of research

For the purpose of this chapter, the following working definition or rather description of the term 'structure' (Business Dictionary 2019) is preferred:

Construction or framework of identifiable elements (or components) which gives form and stability, and resists stresses and strains. Structures have defined boundaries within which (1) each element is physically or functionally connected to the other elements, and (2) the

elements themselves and their interrelationships are taken to be either fixed (permanent) or changing only occasionally or slowly. (p. 1)

Stoker (1967:1) defines scientific knowledge as 'methodically acquired, verified, systematised knowledge'. It is especially this last proviso, the 'systematised knowledge', which means that, to qualify as scientific knowledge, knowledge produced by a community of scholars united by a common subject of investigation, should be organised into a common, coherent, united and holistic structure.

It could therefore be supposed that the community of scholars, labouring in the various sub-fields of education, has a common theoretical edifice or structure in which they can build the outcomes of their scientific labour. This edifice should be a model, simulating, reconstructing and illuminating *education* as the object of investigation.

Yet, such a uniform structure, even a widely used structure, does not exist. Terhart (2016:927) typifies education as existing in what Kuhn (1962) in his often used phraseology in the development of science calls a 'preparadigm phase'. Kuhn (1962) distinguishes between two phases in the historical development of any field of science. The first is the preparadigm phase, when there is not (yet) any unanimity amongst scholars as to how to organise or package, even how to explain, observed phenomena. During the second, more mature phase, the paradigm phase, such a unified field theory is clearly visible and operational. As will be reiterated in subsequent sections in this chapter, education (either as a collective, or each of the various sub-fields of education) is clearly in a preparadigm phase. This, however, is not the complete picture. It is not only a matter of scholars clinging onto their own theoretical frameworks of preference (rather than to contribute to building a common theoretical edifice) but the way in which education knowledge gets structured is also shaped by national-cultural contextual factors, as Keiner and Schaufler (2014) explain, and as is evident in the national surveys which will be presented in this chapter.

Reason for the lack of strong structure in the scholarly field(s) of education

The strong force of national-cultural contextual factors is still not the complete picture explaining the absence of a strong, unified, uniform (transcending national-cultural borders) structure in fields of education. The reason cannot (at least only) be looked for in the young age of education as a field or discipline at universities. Chairs and university courses in education appeared for the first time in Germany by the late 18th century (Schriewer, Orivel & Sherman-Swing 2000:8) – University of Halle claiming to have the first chair of education, created in 1779 (Miedema 1997:13). Yet, sociology, which came into being as an identifiable, self-conscious autonomous field of scholarship only well into the 19th century, can boast much stronger epistemic coherence, as is evident in for example the textbook of Popenoe (2000), used in introductory sociology courses at universities all over the world.

The reason for the lack of epistemic coherence in education should firstly also be looked for in the strong vocational education bent in schools or faculties or departments of education at universities. The prime raison d'être of such schools or faculties or departments is to educate teachers, much more so if it is borne in mind that many such schools or even more so pedagogical universities (or universities of education) came into being recently, having been upgraded from teacher training colleges. Teacher training colleges never had a research mission or any culture of research. This situation has been aggravated when, in the time spirit of neo-liberalism, teacher education programmes at universities have changed in recent decades, whereby teacher education programmes are no longer put together from the basic part disciplines or constituent fields of education (philosophy of education, history of education, educational psychology, comparative education and so on) as basic units but are now structured with a set of outcomes, roles and competences teachers were required to have in mind, that is not much different to the training of technicians or tradespeople (Altbach 1991; Wolhuter 2010; Zeichner 2010).

One other reason for the lack of strong epistemic coherence in education is the fact that fields of education can easily tap into the theories, paradigms and theoretical structures of their 'parent' (for the lack of a better word) disciplines. This is the case not only in fields with obvious parent disciplines, such as educational psychology (which has psychology as parent discipline), but also, as will be explained later in this chapter, in the case of fields such as comparative and international education, with no apparent single-parent discipline.

■ Education studies in Germany

As was stated above, education (or pedagogics, *Pädagogik*, as it was originally termed) crystallised out as an independent discipline or a field of scholarship in the German-speaking part of Europe, in Prussia, in the late 18th century, with Johann Friedrich Herbart (1776-1841) as being named the 'Father of Pedagogics', on strength of his book Allgemeine Pädagogik aus dem Zweck der Erziehung abgeleitet (General pedagogics, deduced from the aim of education) (1806), and probably the first one to use the term pedagogics, to denote a field of scholarly studies in education. Ernst Christian Trapp was named the first professor of education, University of Halle, in 1779. This rise of pedagogics in the 17th-century Prussia can no doubt be related to the fact that Prussia was the location of the first national system of public primary schools in modern history, also to the powerful role of Humboldt University, created as part of the shock reaction of Prussia to the Battle of Jena (1806), where it suffered a humiliated defeat against Napoleonic France. The two parental disciplines of pedagogics were philosophy and psychology.

In the case of psychology, the tone-setter, in the 19th-century Germany, was Wilhelm Dilthey (1833-1911) - who practised psychology as one of the humanities, that is conceptually and not empirically or not as a social science – and who helped to give pedagogics its character solidly in the camp of the humanities.

The weakening of pedagogics at university settings at German universities during the decade before the Second World War, more so during the war, and the weaker place of Germany in the international academic world the decades after the Second World War, and the rise of the United States of America (USA) as superpower and the concomitant emergence of English as international common language (in the academic world in particular) opened the door for influence from the Anglophone world, where education was practised as an empirical field of scholarship and as a social science. Moreover, in the time spirit of the 1960s, and the intellectual ring-leadership of Jürgen Habermas, the humanities like pedagogics, with its proestablishment and ivory tower aura, were not only challenged by a rising empirical social science approach to scholarship but also by critical pedagogics, characterised by strong critique of the (societal and educational) status quo. However, after the PISA shock of 2000 (Germany participated in the first round of PISA tests and the results shocked the nation) and the rise international large-scale assessment studies, the social science cum empirical approach has won the day.

■ Education studies in the Netherlands

Education studies in the Netherlands too were strongly shaped by contextual-historical factors. These include the circumstances under which the national education system of the Netherlands came into being, the fact that – despite having a strong and admirable independent intellectual-academic tradition – scholarship in the Netherlands stood in the shadow of their geographical neighbours and linguistic siblings in Germany. And in recent decades, as the uncontested, towering place of Germany in the academic world receded after the Second World War, in a

globalised world, the Anglophone language and scholarly hegemony made its way into the Netherlands as well.

The national education system of the Netherlands came into being during, and actually as part of, the Dutch National War of Liberation against Spain, 1568-1648 (see Venter & Verster 1994). This national liberation war had very strong religious undertones -Dutch Protestantism against Spanish Roman Catholicism. The education system set up during the war carried a strong religious ground motive. Whilst the first Chair of Education in the Netherlands was established only in 1918, at the University of Leiden, Rommert Casimir being the incumbent, this tradition made for education was one of the humanities and had a strong moral, in particular, Christian ground motive - this came perhaps visible in the educational thoughts and publications of Jan Waterink (1890-1966). In the atmosphere of the more secular age by the mid-20th century, and the related rise of philosophical schools such as existentialism, the University of Utrecht's Education Professor Marthinus Jan Langeveld's (1905-1989) epoch-making book Beknopte Theoretische Pedagogiek (1943:1) pleaded for a scholarly field of education built up by using the method of phenomenology and for the goal of education being conceptualised as 'the cultivation of moral independent decisionmaking'. In a society, including its scholarly community, where the cultivation of a Christian value had always been accepted as the prime objective of education, cultural historian De Rooij (2014) writes that this new idea of Langeveld brought about a fundamental turn in the public and scholarly discourse on education.

The second major turn in the scholarly field of education was the change from being one of humanities (practising the scholarly pursuit of education from a philosophical basis) to becoming a social science, following the German development, in an Anglophone-dominated global scholarly community. The force of this turning tide is evident in for example where Bos (2011) in his (admittedly critical, if not scathing) biography of Langeveld

writes how Langeveld, at the end of his life, no longer could find a publication outlet for his research in Dutch scholarly journals, and how he, who once was the central figure in education as scholarly field in the Netherlands, now has become an almost forgotten figure.

■ Education as a field of study in England

The presence of education as a field of study at universities in England dates from 1852, at the University of Manchester. However, it was the enactment of the 1870 Education Act (the Forster Act), which established universal (though not compulsory) public primary education in England, which resulted in education being given a place at many universities. Developments in this field in England influenced global developments in the field of education in two ways. Firstly, drawing from the tradition or philosophy of Francis Bacon (1561–1626), John Locke (1632–1704) (known for his statement 'the child is tabula rasa'), George Berkeley (1685–1753) and David Hume (1711–1776), the field had from early on an empirical base and developed into a social science.

Pioneering theorist on the structure of education scholarship in England, John Furlong, at the outset of his trailblazing publication on this theme (Furlong 2013:3), indicates that the most striking feature of education studies in England is the lack of coherence in the field. Ironically, or paradoxically, this was brought about by two opposite trends during the historical evolution of education at universities in England. The first was that the English universities academically organised into relatively autonomous departments each focussing on a particular discipline saw to it that the field developed as a number of disciplines (such as philosophy of education, sociology of education, history of education, comparative and international education, educational psychology and the like) rather than as one coherent unitary discipline of education. When dealing with these constituent disciplines in later sections of this chapter, it

will be clear how much the scholars in England have contributed to lay the foundations of these disciplines. The lack of coherence in education also meant that these sub-disciplines were strongly shaped by their 'parent' disciplines, for example educational psychology by theoretical frameworks, paradigms and methods in psychology.

The second trend has been that when academe started to be re-shaped by the neo-liberal economic revolution (which made a forceful start in the world in 1979 with the new government of Margaret Thatcher), education turned into an multidisciplinary field (see McCulloch 2017). This fanned the incoherence of education (as research and knowledge packaging now revolved around divergent issues or problems of praxis), now from another corner. In the growing globalised academic world of the 21st century, the role of the English language as international academic lingua franca, together with the leading role of the USA, meant that these forces (the particular features and nature of each constituent discipline, education as social science, education as multidisciplinary applied field and the incoherent nature of the field) exerted a strong influence on the field all over the world, the strong role of national contextual forces (which are highlighted in this chapter) notwithstanding.

■ Education as a field of scholarship in the United States of America

Defining features - all somewhat interrelated - in the development of education as a terrain of scholarship in the USA have been the philosophical outlook of pragmatism which has historically been strong in the USA, developments in teacher education, the neoliberal economic revolution and the place assigned to education in buttressing the place of the USA as superpower.

Pragmatism has been historically strong in the USA, also in shaping academe. In education scholarship this is very salient; some strong research universities determined by the Humboldt ideal of detached (from society) research, such as Yale and Johns

Hopkins, do not have departments or schools or faculties of education.

In such a pragmatic orientation, education research has been strongly influenced by the exigencies of teacher education, which in turn has been structured around pragmatic considerations, more and more so in times of the neo-liberal economic revolution. Paine (2017:170–173) illustrates this graphically in her discussion of the restructuring of teacher education programmes which took place at Arizona State University in 2009 – by no means an isolated case.

Pragmatic considerations were even more accentuated by the neo-liberal economic revolution. What works and what can have immediate demonstrable effect in the culture of performance measurement now dictated the research agenda and principles of organising knowledge. This has been stated in no uncertain terms by the 2002 commissioned report of the National Research Council in the USA (National Research Council 2002), setting the guidelines for funding of education research. This point is also graphically illustrated by the federally funded 'What Works Clearingshouse' (WWC) (WWC 2019).

At least since the Sputnik shock the USA, education scholarship has been forcefully stimulated by the desire to ensure an education system that would play its part in maintaining the place of the country as global superpower (see Noah 1984:550), through the much discussed *A Nation At Risk* report brought out by Ronald Reagan's Commission on Excellence in Education (1983) to publications such as Tucker (2011).

■ Education as a field of scholarship in Australia

Education as a field of scholarship in Australia mirrors the general development of higher education in that country. Even for a colony, higher education in Australia commenced rather late and developed at first slowly. The first university in Australia, the

University of Sydney, opened its doors only in 1850, and thereafter developed slowly. The first doctorate in Australia was awarded only in 1950 (compared to South Africa, where the University of Cape Town awarded the first doctorate in South Africa in 1899) – by a woman researcher who travelled by ocean liner to do a literature study all over the world (in libraries of universities of harbour cities where the liner called). This last bit of information is telling. It graphically illustrates the academic dependence or colonial status of the country, till very recently.

However, in recent decades, Australian universities made a forceful surge to the forefront of the international academic world. Currently, Australia has, after the USA and the United Kingdom, most universities in the top 500 rankings.

The above constitutes a substantial part of the main outlines for comprehending the historical development of education research in Australia. Teacher education programmes (which have always exerted a strong shaping force on education research agendas and the organising of education knowledge) at first were strongly built around the constituent education disciplines.

By the 1990s, Australia embraced both the neo-liberal economic revolution and what Ordorika and Lloyd (2015:385) call the global 'academic arms race'. The second made for pressure to do research, as that is where the largest weight of university rankings lie. This is evident in for example the role and place of the Australian Research Council, Australian Government (2019) which is responsible for administering (including auditing and record keeping, performance management and assessment of) research done at Australian universities. The first trend (the principles of neo-liberal economics being carried into education and into academe) means education research is more and more oriented towards the immediate improvement of practice, also that an increasing part of education research is done by those commissioned to do undertake specific research. In an inclusive analysis of education research in Australia, McWilliam and Lee (2006) caution that research so strongly tied to current government policy concerns leaves very little room for imaginative scholarship directed to what might prove to be future issues. This trend was reinforced by teacher education programme prescriptions. In the 2000s, teacher education programmes were increasingly structured according to specified professional attributes and national standards tied to teacher accreditation (see Groundwater-Smith & Mockler 2017).

■ Education as a field of scholarship in China

Higher education in China suffered an almost total breakdown during Mao Zedong's Cultural Revolution of 1966-1976. The forceful rise of higher education and education research as part of the impressive exercise of re-building higher education since 1978 has taken place in pursuing the broader societal vision of modernising China. In this regard, important developments in the evolution of higher education were the massive investment of resources to develop world-class universities, in terms of Project 211 (1995), Project 985 (1999) and most recently, 2017, the Double-World Class Project, aiming to develop a 100 world-class universities in the early 21st century. The meteoric rise of China in the global higher education landscape is illustrated by the fact that during the 2010-2011 academic year, China has become, in terms of student numbers, the biggest national higher education system on the planet (overtaking the USA); in 2016-2017, it became the world's largest producer of doctorates: 71 000 (versus the USA: 48 000, in the second place).

By 2012, China was in number 10 spot in the rank order of countries of provenance of authors of publications in all Web of Science indexed education journals of that year (Wolhuter 2018a, 2018b). In an extensive survey of scholarly literature published during the 40 years 1979–2019 by Chinese scholars in the field of Education, Hu, Huang and Liu (2020) found that the 20 most salient themes in rank order were (1) educational reform,

(2) higher education, (3) teacher training, (4) basic education school, (5) pedagogy, (6) educational theory, (7) educational development, (8) school education, (9) educational thoughts, (10) educational practice, (12) curriculum reform, (13) student issues, (14) educational objectives, (15) vocational education, (16) teaching processes, (17) quality education, (18) compulsory education, (19) quality of education, and (20) equity in education.

The above research agenda (Hu et al. 2020) explains out of current reforms and developments in education in China, and the place and role of education in the modernisation project in China. In their survey of education research in China, Wen and Weihe (2017:146) typify education research in China as extraordinarily strongly steered by the government, that is a top-down approach. This reflects both the role of research in modern China and the political context.

■ Comparative and international education

Since Marc-Antoinne Julliet coined the term 'comparative education' in 1817 and since John Russell taught the first university course in comparative education at the University of Columbia, USA, in 1900, the presence of the field at universities has disseminated to other institutions of higher education in the USA as well as abroad.

Larsen, Majhanovich and Maseman (2013:171-182), in a reconstruction of the trajectory of comparative education at universities in Canada, delineate three phases: the establishment of comparative education (1950s-1970s), a phase of the fragmentation of comparative education (1980s-1990s) and a phase of the broadening of comparative education (2000s). The first phase saw the establishment of posts for comparativists at schools and faculties of education and the commencement of comparative education courses in undergraduate and post-graduate education courses. The fragmentation of comparative

education phase describes the ensuing dwindling of the number of comparative education chairs at universities and the downscaling and even outright disappearance of comparative education modules in teacher education programmes. In the broadening phase, comparative education was then no longer taught as stand-alone courses under the title of comparative education but was dissolved in courses such as education and development, education and human rights, education and democracy and many others. At the risk of overgeneralisation, this describes the trajectory of comparative education at universities in most parts of the world, although with a time differential: a decade before Canada in the USA, Western Europe the same time as Canada, and the extra-Western world sometime after (Wolhuter 2019:256). This way of manifestation of comparative education in the last phase already suggests a field devoid of a secure and solid infrastructure at universities; moreover, a lack of a coherent and uniform structure subscribed to everywhere in the world. This undesirable situation is aggravated by a number of factors. Since 1990, comparative education is characterised by a proliferation of paradigms, constituting a strong centrifugal force in the field (see Wolhuter 2015). Where comparative education is present at universities all over the world, there appears to be an infinite variety of motivations and purposes for teaching and learning comparative and international education (see Wolhuter 2012).

■ History of education

Teacher education is rather new in world history, and teacher education at universities is of very recent origin. In the first schools, priests also served as teachers. As a stand-alone occupational category teachers appeared for the first time in history in the 17th century in the German-speaking parts of Europe. Teacher education progressed in all parts in the world from Monitorial System (or Bell-Lancaster method), whereby senior pupils taught junior pupils in a large classroom, under the

supervision of an experienced teacher (or monitor); that is similar to an apprenticeship training on the job kind of training of technicians or tradespeople, to a next phase of the normal school, a more organised form of apprenticeship training, to teacher training colleges to universities.

In teacher training colleges, history of education figured strongly in teacher education programmes. This was closely tied to the moral preparation of teachers. Similarly in university teacher education programmes, the teaching of history of education too originally was strong. However, since about the early 1970s, teacher education took more and more the form of an instrumental training, rather than an academic grounding in the constituent disciplines in education. That has had a devastating effect on the place of the field in university infrastructures.

This downward trajectory of history of education, however widespread and lamentable, is not universal, and in many parts of the world, history of education made a spectacular rise recently (especially the continent of Latin America, see Ossenbach 2000:841).

The marginalisation of the field in university teacher education programmes and the disappearance of university infrastructure had an adverse effect on research activity in the field too.

In the history of the field, three broad phases can be distinguished. The first was idea-history, whereby the thoughts of major philosophers about education throughout the centuries were depicted. The ideas were later supplemented by main landmarks in education policy development and education acts in different countries. By the 1960s, a new paradigm became visible, the social paradigm, as the focus moved from ideas shaping education to how education actually manifested itself in societies. Education policies and changes were interpreted against the social and political contexts in which they took place. In contrast to the idea-history phase, this paradigm presented a grassroots perspective on education at various times, that is how students and teachers experienced education.

A 2001 publication by Popkewitz, Franklin and Pereyra (eds. 2001) portrays the history of education as cultural history: that is, as being shaped by regimes of truth, in other words, the knowledge and way of thinking of the dominant social class and ideology of the time and how these have shaped the historical evolution of education. This publication marks the beginning of the third major paradigm in history of education research, namely that of cultural history.

Apart from the fact that history of education has no noticeable infrastructure at universities and shows three major, divergent paradigms, a problem is that ever since the social paradigm phase, scholarship in the field increasingly contends with reconstructing the history of past ages, without ever attempting to use derived or produced knowledge to gain a more complete understanding of education, which is the central subject of study of the fields of education studies.

■ Psychology of education

When the beginnings of education as an autonomous field or discipline at universities in Germany are discussed above, it is mentioned that psychology was one of the progenitors of education. Since then, the interrelationship between psychology and education has been an issue of contention (within the field of education and scholars of education in particular).

On the one hand, there are many overlapping themes of interest to scholars of both fields or disciplines. Examples are numerous and include parent-children relationships, learning theories and ways of learning, cognitive development, peer influences and friendship, attitudes, behaviour, emotions and moral development. As the overlap is so much that the scholars in education (educational psychology specifically) draw strongly on theories from psychology (for example Piaget when studying the cognitive development of children, or Kohlberg when studying the moral development of children) and that it is often difficult to escape the notion that educational psychology is an applied field of psychology.

On the other hand a number of developments in recent decades have resulted in a fading of the presence of educational psychology infrastructure at universities as departments of educational psychology have been abolished, and as educational psychology stand-alone courses or modules have been scrubbed from teacher education programmes. This marginalisation is related to a number of developments delineated earlier in this chapter. These include the worldwide trend in teacher education programmes to shift from an academic grounding in the constituent disciplines in education to an instrumental orientation, an emphasis on the subjects the student intends to teach in schools, and also more emphasis on practical experience in schools.

There have also been attempts to deliberately distance and distinguish educational psychology from psychology. Renowned South African educational psychologist Sonnekus (1973) devoted a substantial part of his introductory text to educational psychology, in an attempt to demarcate educational psychology from psychology.

On the other hand, Crozier (2017:46), after a discussion on the issue of the relationship between educational psychology and psychology, pleads for a closer relationship between the two. Smith (2005) made a typology of proposed or possible relationship between the two. The view of the author, which will be made in the conclusion of this chapter, is for a set of constituent disciplines with the final objective of contributing to a more complete understanding of education.

■ Philosophy of education

The other progeny (besides psychology) of education as distinctive discipline at universities has been philosophy. The philosophical superstructure of education was salient, especially (but by no means limited to) the places and times when education was conceived to be one of the humanities. Mention has been made above of the central place occupied by Marthinus Jan Langeveld during the post-Second World War decades in

education in the Netherlands, and how his scholarship was derived from phenomenology as philosophical superstructure. Also in the first phase of the evolution of history of education, this constituent discipline was conceptualised as presenting the ideas of education found in the philosophies of the great philosophers through the ages.

Already in this philosophical bases outlined in this paragraph, once again the divergence in the field of education becomes visible. A huge variety of philosophies of education can be found in any of the standard texts of history of education, such as Power (1962). In the most often used primer used for philosophy of education courses (Ozmon & Craver 2012), 10 philosophical takes on education are discussed: idealism, realism, eastern philosophy, reconstructionism, behaviourism, existentialism and phenomenology, marxism, analytical philosophy, pragmatism and postmodernism. To complicate matters further, in recent times, at times of globalisation, multicultural education and intercultural education, there have been calls to create a space for extra-Western philosophical orientations (see Merriam 2007).

The social science turn in education has not rid the field of the necessity of a philosophical superstructure in any investigation. Any empirical investigation implies a host of philosophical assumptions or beliefs, such as what is the objective of education? What is the nature of human beings? What regulates or determine human conduct? What is a just society? or What is quality of life?

In view of the historical and unavoidable presence of considerations of philosophical issues in any investigation of education, it is lamentable that in recent decades, philosophy of education suffered the same fate in teacher education programmes as other foundation courses of education, such as history of education, educational psychology or comparative and international education, all discussed above. In their survey of philosophy of education, Oancea and Bridges (2011) contrast this institutional marginalisation of philosophy of education at British universities, with the hive of scholarly activity taking place in the

field. This is evident in for example a number of publications in the field, and the existence of a buoyant Philosophy of Education Society and a journal *Philosophy of Education*. This is a glaring discrepancy. One of the problems is that students of education are not introduced to the promise, scope and methods of scholarly inquiry into education from a philosophy of education perspective.

■ Sociology of education

Sociology of education can loosely be defined as studying the interrelationships between education and society. Typical questions of interest to scholars of sociology of education include the role of education in enhancing the life chances of people, the effect of education in promoting social mobility or the interrelationships between social stratifications on education in a particular society. Sociology of education became very topical as equal education opportunities became the main motive for the expansion and reform of education during the second half of the 20th century (Cooper 1980:1). Virtually all the major reform movements in education in various parts of the world during the second part of the 20th century, such as the comprehensive school movement in Europe, the desegregation of schools in the USA and other countries, or the movement towards multicultural education - all themes of keen interest by sociologists of education - could be related to the ideal of equal educational opportunities.

Leading the development of sociology of education as a distinctly recognisable field of scholarship was David Glass and his group of followers at the London School of Economics in the 1950s, notably A.H. Halsey and Jean Flout. Glass' landmark publication was his edited volume, *Social Mobility in Britain* (ed. Glass 1954). This publication was completed soon after the promulgation of the *1944 Education Act* in England, which raised the age of compulsory schooling to 16 years, and which paved the way for universal (at least lower) secondary school attendance in Britain. Based on a massive empirical survey, the volume pleaded for a system of mass education in Britain to catalyse social mobility.

Originally sociology of education scholarship was strongly based on structural functionalism. However, by the 1970s, power relations began to attract attention, and especially in the camp of scholars, a more pessimistic assessment of the societal ameliorative potential of education was visible. Landmark publications include Michael Young's edited volume: *Knowledge and control: New directions for the sociology of education* (ed. 1971) and outside Britain, Torsten Husén's *The school in question: A comparative study of the school and its future in Western society* (1979) and Sam Bowles and Harry Gintis's: *Schooling in capitalist America* (1976). The rise of these kinds of studies notwithstanding, and whilst there is also a notable rise in identity formation as new research focus, the study of, and belief in education as instrument of, social mobility remains strong, as a recent OECD report testifies (Schleicher 2018).

■ Teacher education

Given the teaching-research symbiosis as an essential feature of the university that education is imparted by scholars involved in teacher education at universities, and that therefore the outcome of their research is supposed to feed into teacher education programmes, the state of and developments in teacher education are topical for the organising of education knowledge.

Arguably the publication that has exerted the strongest force in the scholarly discourse on teacher education is Lee Shulman's 1987 article published in the *Harvard Educational Review* (Shulman 1987) (at the time of writing, January 2020, this article registered 21818 citations on Google Scholar). Shulman distinguishes between seven categories of knowledge that should make up teacher education programmes. These are:

- content knowledge: a teacher should know the content of the subject he or she intends to teach in schools
- general pedagogical content knowledge: this relates to knowledge on classroom management

- curriculum knowledge: knowledge of the curriculum taught in schools
- pedagogical content knowledge: knowledge of how the particular subject offered by the teacher is taught
- knowledge of learners and their characteristics
- knowledge of educational contexts, ranging from the workings of the group or classroom, the governance and financing of school districts, to the character of communities and cultures
- knowledge of educational ends, purposes and values, and their philosophical and historical bases.

Whatever the merits of Shulman's scheme, it hardly appears to provide a coherent scaffold for the construction of an allencompassing theory of education. To take one example: the rubric 'knowledge of educational contexts', at least as specified by Shulman, is rather vague and incomplete and needs to be substantially supplemented and calibrated more finely.

Although having exerted a strong impact on the scholarly discourse on teacher education, it is doubtful if the publication has ever had a strong effect on the structure or reform of teacher education programmes. Even a cursory look at the chapters in the International handbook on teacher education worldwide (eds. K.G. Karras & C.C. Wolhuter 2019) shows that teacher education programmes in existence in the different countries in the world are shaped by contextual and historical factors in operation in each country. This notwithstanding the global trend in teacher education programmes (pointed out in several places above in this chapter) of a downscaling, even an outright scrubbing, of the constituent disciplines of Education, and a discernible trend of teacher education programmes simulating a kind of apprenticeship training in a set of techniques or skills deemed necessary for teaching, and secondly of giving less emphasis on theoretical education and more emphasis on practical experience in schools, in teacher education programmes.

To summarise, neither Shulman's tone-setting article in the scholarly discourse on teacher education nor the current pattern

and trends in teacher education programmes are helpful in showing the way to organise education knowledge.

■ Changes in the societal and scholarly contexts

In the meantime, both society and the broader scholarly world (beyond Education) are the scenes of momentous changes.

The following are an enumeration of some of the most salient developments changing societies worldwide: the ecological crisis, the population explosion in the Global South and the population stabilisation in the Global North, population migration and mobility. technological progress, especially the rise of robots, and the information, communications and transport revolution, growing economic affluence. the neo-liberal economic globalisation (economic and otherwise), the decline of the primary (family) and secondary (workplace) social groupings in the lives of people and the rise in importance of tertiary groupings (functional interest groups), political democratisation, the fading of the once omnipotent nation-state and the rise of importance and strength of international organs (such as the World Bank and International Monetary Fund), democratisation, individualism and the rise of the creed of human rights as new international moral code (see Steyn & Wolhuter 2020).

These trends have radical implications for education and scholarship. For example, the ecological crisis has resulted in the creed for sustainable development, and the Sustainable Development Goals as the global community's vision for the year 2030. One of the 17 Sustainable Development Goals, Goal 4, pertains to education. The goal is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This goal has been further unpacked in the INCHEON Declaration of 2015, which is the global community's vision for education in the world in 2030 (see UNICEF 2015). The information and communications revolution means information and

knowledge are more readily accessible to everyone, and education should no longer be so much aimed at the inculcation of knowledge and aimed at learning how to create and evaluate knowledge. The rise of social media and the spectre of fake news further underscore this need.

Regarding changes in the mode of production and packaging of knowledge, the most salient trend is the shift from Mode 1 to Mode 2 knowledge. Mode 2 knowledge is a term created by Gibbons (2003) for identifying the tendency whereby knowledge is no longer produced, organised, ordered and taught and learned in a discipline-organised format (Mode 1 knowledge), but in a trans- and interdisciplinary open system where knowledge is organised and assessed not so much in terms of scientific yardsticks but in terms of its practical and utilitarian value (Mode 2 knowledge).

In contemplating the organisation of education knowledge, both the nascent societal and scholarly contexts should be borne in mind, if the constructed edifice will speak to society and be weaved into the broader tapestry of scholarly produced knowledge.

■ Education scholarship in South Africa

Besides all the factors which internationally hamper or complicate the construction of a uniform, coherent edifice to place knowledge produced by scholars of education, scholars of education in South Africa are, as explained in Chapter 1 of this volume, in three widely divergent silos. At the risk of overgeneralising, these three categories can be described as follows:

 The Afrikaner scholars who have historically been strongly influenced by the continental (especially the Dutch and German) scholarly community, and who have sentiments not to be found amongst members of the other two categories, for example sentiments around for example the preservation of Afrikaans as language of learning and teaching.

- The white English scholars who have strongly subscribed to the liberal system of values and to academic traditions in the United Kingdom.
- The rising generation of black scholars who have been strongly affected by theoretical orientations such as classical and neo-Marxism, dependency theory, black consciousness, pan-Africanism, postcolonialism and decolonisation theory.

It also explains that at least one of the three groups of scholars themselves embraces an amalgam of theoretical orientations, including the rising generation of black scholars who are strongly affected by theoretical orientations such as classical and neo-Marxism, dependency theory, black consciousness, pan-Africanism, postcolonialism and decolonisation theory; at times, some of these are mutually irreconcilable. On top of it, scholars of education in South Africa do not pay much attention to theory. To find a common theoretical structure which will speak to all three, these constituencies would be very difficult.

■ Conclusion

The field of education can, at least as far as its theoretical façade is concerned, be described as a disparate field of scholarship. This is even more accentuated in South Africa. This state of affairs could be ascribed to a number of centrifugal forces. These can be summarised as societal and education system contextual forces at play in each national setting. There is also the factor as the varied shoots of progeny of the field of scholarship. Although contextual forces are imperatives to take into account when building a field of relevant scholarship (to return to the topic of this volume) and whilst input of fields of progeny can promote rigour in the field, there are at the same time imperatives constituting a centripetal force that should also be factored in by the scholarly community. This desideratum can be summarised

as a coherent, uniform and unified theoretical edifice to place and order all knowledge produced in the field. It seems from the survey of constituent disciplines of education, and the development and current state of the field in various national settings portrayed in this chapter, that scholars have, in this field of tension between centripetal and centrifugal forces, strayed too far in the direction of the latter and should urgently attend to the integration of the field.

Chapter 11

Theory building in education

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Abstract

For education to attain a state of rigour, relevance and especially structure, upon a par with other disciplines and fields of scholarly pursuit, the construction of an autochthonous, coherent theoretical framework is essential. Hitherto scholars in the field have woefully neglected; even abrogated this assignment. Three guidelines for this task are suggested. Firstly, *education* should be made the centre piece or the subject of study, and by means of rigorous scholarship a theory should be constructed as a structure describing, explicating and explaining education, but at the same time also being relevant in guiding practice (such as teachers in class, school principals leading schools, education system planners, or the scholarly or public discourse about

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education policy). Secondly, the threshold concepts of comparative and international education, namely the education system, contextual forces shaping education and comparison, are suggested as conceptual instruments for the construction of such a theory. Thirdly, such a theory should have a normative superstructure too. For this, it is recommended that the creed of human rights and the three global commons, as formulated by Torres, are turned to.

Keywords: Comparative and international education; Education; Education context; Global commons; Societal context.

Introduction

In Chapter 10, the organisation or packaging of knowledge produced by scholars of education is discussed. It is stated that theories are the devices for organising scholarly knowledge into a larger, more meaningful scheme. Yet, in scholarly fields of education, theory has been gravely neglected, resulting in a major deficiency in education as field(s) of scholarship. The aim of this chapter is to table an opening bid to a serious discussion of theory construction in fields of education scholarship. The chapter commences with a conceptual clarification of the term 'theory'. Theory as a pivotal part of any scientific project is then explained. Subsequently, the neglect of theory in education is discussed. Challenges in the way of the construction of a theory in education are then identified and guidelines for the construction of a theory suggested.

■ Theory: Conceptual clarification and challenges in the construction of a theory

The Oxford Dictionary defines a theory as 'a scheme or system of ideas or statements held to explain observed facts' (Ostler 1969:583). The defining features of a *system* are a complex but ordered coherent whole consisting of various components and

interrelationships between these components (cf. Steyn & Wolhuter 2008:2–3).

Two remarks are apt. Firstly, scientific or scholarly endeavour implies no finality. Popper's concept of falsification comes to mind here. And whilst outright falsification or disproving of a theory is relatively rare, refinement in view of new observations or evidence is more common. In view of this feature of theory, Dawkins (2009:9–18) explains that a theory can never be *proved* beyond all doubt, in all finality. In fact, as Dawkins argues, another way or a more modest, but equally valid definition of a theory may be 'a hypothesis proposed as an explanation, hence a mere hypothesis, speculation, conjecture, an idea or set of ideas about something, an individual view or notion' (Dawkins 2009:9).

Secondly, in constructing a theory of whatever, scholars always find themselves in a field of tension created by two diametrally opposing imperatives. On the one hand (as the definition of a theory proffered above), one of the inspirations or ideals of science is to find commonality or unity from a variety of phenomena or observations, that is to move to ever more encompassing statements or universally valid statements on an ever larger number and variety of observations or phenomena. On the other hand, as also alluded above, deeper, more thorough and finer grained analysis and the use of finer calibrated instruments as well as the investigation of different contexts of whatever object of study always reveal the need for differentiation and finer distinctions.

■ Theory as an essential part of the scientific project

In the first chapter of this volume, it is stated that as a working definition of research, the following definition of Stoker (1968) will be used: Research is defined as 'Methodically acquired, verified, systematised knowledge'. The last part of the definition underscored the importance of theory in scholarly endeavour. A research project should use defensible methods to acquire

verified knowledge, and then this new knowledge should be built into the system of existing knowledge. A research project thus culminates in the extension, elaboration, refinement or correction of the existing edifice knowledge; this is the final step in the phases of a research project.

Katherine Heath lists 10 quintessential features of a 'discipline', the first of these she formulates as 'A discipline defines its body of specialized knowledge' (Heath 1958:31). If this description of a 'discipline' can be accepted, then the 'body' element refers to system, to a coherent, ordered, structured whole, that is what a theory is about.

■ The neglect and denigration of theory in education

In contrast to theory being an essential part of any science or discipline, as described above - it can even metaphorically be described as the capstone of a science, theory - the construction of autochthonous theory, critical reflection of the state of theory and instruction in theory construction have been neglected or denigrated or outrightly ignored by the scholarly community in education. In their analysis of reviewers' reports of all 710 manuscripts submitted for consideration to the South African Journal of Education, during the years 2006-2009 (inclusive of both years), Van der Westhuizen, Van der Walt and Wolhuter (2011) found that the second strongest reason for the rejection of manuscripts was that they do not contribute to theory (the strongest reason was that research made no contribution to the improvement of practice - also indirectly an indictment on deficiency in theory construction, a point which will be returned to on two occasions in this chapter).

Strangely, standard textbooks on research methodology in education, that is guiding and training scholars, are silent on the theory construction framework component of research. Examples of such textbooks include Okeke and Van Wyk (eds. 2015), Gall, Gall and Borg (2010) and Henning, Van Rensburg

and Smit (eds. 2004). At best texts include a section on the theoretical framework as providing a framework for research, without touching on the researcher's need to plough back into the framework at the conclusion of his or her research. In all fairness, it should be stated that research methodology textbooks in the social sciences at large are equally silent about theory construction. Also, standard textbooks such as Babbie and Mouton (1998) mirror education research methodology textbooks in including a section on the theoretical framework as supplying a framework for research, without touching on the researcher's enrichment or refinement of that framework at the end of his or her research.

In a recently published article by Van der Walt and Wolhuter (2018), one of the authors, reflecting on his experience over 17 years of facilitating writing retreats for academics and post-graduate students at a faculty of education at a South African university, remarked that he had been struck by the lack of knowledge of, training in and appreciation of the need for theory construction in writing a scholarly treatise.

The last comprehensive survey of the state of scholarship in education in South Africa was that of Deacon, Ostler and Buchler (2009). The authors did an extensive survey of education research conducted in South Africa from 1995 to 2006. Their major criticism was the small-scale nature, and therefore fragmented nature, of a large part of such research, and they recommended (Deacon et al. 2009):

[F] ocused attention of able researchers who, by communicating and collaborating across studies, can build strong bodies of work out of what would otherwise remain incremental and indiscriminate pieces of research. (p. 28)

Hence, the pressing need for a coherent theoretical framework speaks from this survey.

Issues of theory construction do not figure high on the research agenda of many fields of education scholarship. In successive surveys of themes or foci of attention of scholars of history of education, such as Freeman and Kirke (2017), theory or theoretical issues are conspicuous by their absence.

In Chapter 10, on the historical evolution and structuring of education internationally, some features of the identity and the predicament of this field of study were revealed.

One glaring feature of field(s) of education scholarship is that these fields tenaciously stick to the theoretical framework of their parent disciplines. It seems as if education or fields of education have never succeeded in getting to stand on their own feet. In an enumeration and discussion of 10 crises besetting the field of comparative and international education, Wolhuter (2015:30-31) identified the lack of autochthonous theory as one of these crises. The most salient theories evident in comparative and international education literature (see Wolhuter 2006) have all been developed in related or parental disciplines of the field. as scholars saprozoically cling to the theories of the parental shoots of the field: socio-economic reproduction theory (developed by sociologists and economists such as Sam Bowles and Harry Gintis), cultural reproduction theory (developed by sociologists Pierre Bourdieu and J.G. Passeron), human capital theory (developed by economists such as Theodor Schultz and Ken Arrow), structural functionalism (developed by sociologist Talcott Parsons) and dependency theory and world-systems analysis (developed by economists such as Immanuel Wallerstein and André Gunder Frank). The same can be said of other fields of education scholarship too. For example, education psychology is teeming with the ideas of the likes of Jean Piaget, BF Skinner, Erik Erikson and others - all psychologists are not attached to schools or faculties of education - forming the main theoretical pillars of the field. Yet, none of these would have regarded themselves as primarily scholars of education; they were not attached to faculties or schools or departments of education at universities. Turning to philosophy of education as another example, standard textbook of Ozmon and Craver (2008) lists the following philosophies of education constituting the main philosophies in the field, with the single exception of John Dewey, the principal exponents of not one of them is/was originally or primarily a scholar of education: idealism (Plato and Hegel), realism (Aristotle and Locke), eastern philosophy and religion (Buddhism, Hinduism, Zen and Daoism), pragmatism (Dewey and James), reconstructionism, behaviourism (Skinner), phenomenology-existentialism (Brentano, Husserl, Heidegger, Merlau-Ponty and Sartre), analytic school (Wittgenstein) and postmodernism (Lyotard).

To summarise, what is a dire need in the field(s) of education scholarship is what Vos (1987:297-300) identified a generation ago: a need for structural integration, convergence, a structural whole or unity, foundational theory formation to guide further enquiry and investigation as well as to serve as framework from which to guide practice.

For these reasons, the neglect of attention to theory building in standard education research methodology textbooks and integrative theory formation by scholars, as explained above, is lamentable. The same can be stated about scholars who resign themselves to the disparate state of education or its constituent fields, such as Schriewer (2014) who contend that scholars should accept the status quo that the field of comparative education has several identities.

The criteria for and challenges in the way of building up such a theoretical framework, as well as suggestions for the construction of such a framework, will be explored in the following section.

■ Criteria for challenges in the way of and suggestions for the construction of a theoretical framework for education scholarship

This section begins with the delineation of three interrelated criteria for the construction of a theoretical framework in education, and these three criteria at the same time present three challenges, each as a flipside.

The first is the imperative for a unified, coherent, allencompassing theoretical framework. This, what has come to be termed a 'unified field theory' in these types of discussions in many fields of scholarly inquiry, has proved to be a holy grail in many disciplines, perhaps the most salient being in theoretical physics, the guest being for a unified field theory bringing together into one explanatory framework, all four basic forces in nature, namely gravity, electro-magnetic forces and weak and strong nuclear forces (see Hawking 1988). Apart from being proved - at least thus far - elusive in all fields of scholarly enquiry where this ideal has been pursued, the second problem or challenge is that if the point is reached where such a unified theoretical framework becomes visible and widely subscribed to, that it can easily become something stagnant, exclusionary, stifling all innovation, creativity and progress in a field, even thwarting the quest for truth, which is, after all, the final goal in any field of scientific pursuit. A variety of paradigms and theoretical options, to be brutally honest, also have their share of advantages, making for virility, healthy competition and crossfertilisation and enrichment. Rust (1996) describes this feeling very well when commenting about the state of comparative and international education in the beginning of the 1990s when, in the time-spirit of postmodernism, scholars in the field began to show a tolerance and even an appreciation for diversity (of paradigms or theoretical orientations) in the field. Clearly, a balance needs to be found between having space for diversity. creativity and innovation on the one hand, and coherence on the other hand. The author does not pretend to have an answer - this needs to be sought to arrive at by a thorough scholarly discourse by scholars in the field - other than contending that the present, historically evolved state of the field of education can be described as overly, perniciously fragmented, and a stronger centripetal force in the field is sorely needed.

The second challenge is the field of tension between bringing together as much as possible into one explanatory node, and on the other hand, to differentiate to simulate reality perfectly.

To this dilemma of having to meet two diametrically opposing criteria, the author does not have an answer; firstly, this should become the topic of serious interrogation, reflection and deliberation amongst scholars in the field, and, secondly, the balance of evidence and impressions from a survey of the field or fields of education reveals a dire need for stronger integration and bringing together disparate, far flung studies of small scale into broader explanatory frameworks.

The third challenge is the relationship or interrelationship(s) with theoretical frameworks of related fields of scholarly inquiry. such as psychology and the social sciences in general. On the one hand, staking its claim as a full-fledged discipline or even a scholarly field in its own right, surely education needs to boast autochthonous theory. On the other hand, it would be careless to negate the assets in terms of theories from related fields, being at the disposal to scholars of education. The imperative of trying to find unity as wide as possible (the second dilemma discussed above) also means attention should be paid to theories in related fields, and that scholars of education should capitalise from these, rather reinventing the wheel anew. With regard to this challenge of being torn between two equally strong forces, the author has no readymade answer, other than to plead for placing this discussion on the agenda of the scholarly discourse in education, and that secondly, the evidence surveyed in this book and in this chapter, in particular, suggests a leaning too heavily on theories of related fields, and a dearth of autochthonous theory in education.

Three suggestions can be made to guide the construction of a theoretical framework for education. The first relates to the rise of interest in and enthusiasm for Southern Theory in the humanities and social sciences in general. In the fast-changing world of the 21st century, one of the glaring anomalies is the rise of the Global South versus the persistent hegemony of the Global North in the domain of scholarship (see Wolhuter & Chigisheva 2020a). Perhaps the best book outlining the Northern Hemispheric dominance of theory in the entire gamut of social sciences is that of Raewyn Connell (2007).

That the education sciences and its theoretical underpinnings are also sorely in need of being imbued with Southern perspectives, that is reflecting the Southern context in the theoretical edifice has been pointed out by various scholars (i.e. see Takayama, Sriprakash & Connell 2016; Wolhuter & Chigisheva 2020b). Comaroff and Comaroff (2012) present the interesting argument that societally, the rest of the world, North America and Europe in particular, is now moving down a road that has been travelled by Africa - a statement that has also been expressed by political leaders and in the public discourse in South Africa. This thesis links to the thesis of Martin Bernal (set in his three volumes 1987, 1991, 2006) as to the Afro (Egyptian) roots of Western (Greek-Roman) civilisation. In as far as there are merits in these theses, that the societal contexts of the Global North are now approximating that of Africa as the vanguard, and not the other way around (as classical Development Theory has it), it places South African scholars in the social sciences (South Africa then presenting the node of scholarly production in Africa, see Wolhuter 2018) very well to enrich the theoretical edifice of not only education but that of the entire line of social sciences. with a unique Southern perspective.

The second is building on the statement of Heath (1958) quoted earlier in this chapter that any respected discipline has a specialised body of knowledge, that is a unique object of study. The object of study of education is education, and instead of marketing or portraying education as an applied or interdisciplinary field of scholarship (as is often done by scholars in the field, for example, see Ermenc 2013:137), it should be defined as the scientific study of education, and theory constructed by scholars purporting to be scholars of education should be a theory explicating education in its full complexity.

In view of the central role of United Nations Educational, Scientific and Cultural Organization (UNESCO) in the international education project, as a working definition, the following definition of education as formulated by UNESCO (1997) can be taken:

[E]ducation is understood to involve organized and sustained communication designed to bring about learning. (p. 9)

As stated this can be accepted as a working definition. As will be explained, at least this definition is problematic for at least two reasons, namely the absence of a normative moment (which will be returned to in the final chapter on the volume, on the Fourth Industrial Revolution creating a new imperative, context and vistas for education) and the word 'organised'.

Unpacking this concept then, education can exist in at least four modes, as delineated by Wolhuter (2008). The first three modes are formal education, nonformal education and informal education; all three terms are used as defined by Philip Coombs (1985:20–21). Coombs define formal education 'as a highly institutionalized, chronologically graded and hierarchically structured "education system," spanning lower primary school and the upper reaches of the university' (Coombs 1985:20–21). In current times, the 'upper reaches of the university' should be taken further or complemented to eclipse lifelong learning too. Nonformal education and informal education, on the other hand, Coombs (1985) defines:

[A]s any organized, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children, and informal education as the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment – at home, at work, at play; from the example and attitudes of family and friends; from travel, reading newspapers and books; or by listening to the radio or viewing films or television. (pp. 20–21)

Mostly, informal education is unstructured, unintended and unplanned; however, it is the source of a substantial part of the sum total of any person's learning over a lifetime – including that of even a well 'educated' person.

To these Wolhuter (2008) adds a fourth type, entitled preformal education. Pre-formal is the kind of education children obtain from family, mainly parental influences, especially in the phase before the onset of formal schooling. This is to be distinguished from informal education in that parents (mainly, but can also be other older family members and older siblings) deliberately engage with children, with the intention to educate, that is to bring about some kind of learning.

In bringing these diverse range of education modes under the roof of one theory, the third suggestion that can be made is to use the key concepts or threshold concepts of the field of comparative and international education.

The idea of a threshold concept was developed and first published by Meyer and Land (2003). Since then it has been employed and expanded upon in a constant series of publications, the latest major publication being Land, Meyer and Flanagan (eds. 2016). Education Resources Information Center (ERIC) contains 322 publications dealing with the concept (ERIC 2017). Likewise, the concept has taken root in a range of disciplines (cf. Rodger, Turpin & O'Brien 2015:546).

A threshold concept is more than merely a key concept or core concept in a scholarly field. Meyer and Land (2006) explain it as:

[A]kin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress. As a consequence of comprehending a threshold concept there may thus be a transformed internal view of subject matter, subject landscape, or even world view. This transformation may be sudden or it may be protracted over a considerable period of time ... a transformed view or landscape ... (p. 3)

One of the features of threshold concepts is that these threshold concepts are *integrative:* previously separate concepts are brought together into a unified whole, demonstrating the interrelatedness of these concepts (Townsend 2016:24). For lecturers, the idea of threshold concepts holds value and has advantages and use in curriculum development, development of pedagogy and assessment of students' understanding; for students, it enables or at least facilitates learning and securing a

grip on a subject or field, whereas for scholars it can act as a catalyst for research and as a scaffold for theory construction (cf. Lucas & Mladenovic 2007:237, 247; Rodger et al. 2015:547).

The scholarly field of comparative and international education brings together in its periscope three subjects of study: education systems, societal contexts of education systems and a comparison of different education systems (Wolhuter 2020a).

The concept of an education system has been explicated by scholars in the field of comparative and international education (see Steyn, Van der Walt & Wolhuter 2015). The education system is explicated as being a structure consisting of four basic components (Steyn et al. 2015):

- the component education system policy
- the component education system administration
- the component structure of teaching and learning
- the component support services.

Each of these components consists of a number of elements. The elements of the education system policy are the vision of the education system, the mission of the education system, the aims and objectives of the education system and the format of the education system policy (see Steyn et al. 2015). The elements of the component education system administration are the administrative element, the financial element and the element of liaison structures between various elements of the education system (Steyn et al. 2015). The elements of the component structure of teaching and learning are education levels, education programmes, education institutions, teachers, learners, curricula, language of learning and teaching, teaching methods, learning methods and physical facilities (Stevn et al. 2015). The education system support services component consists of the elements support services to learners, support services to teachers and support services to teaching and learning activities (Steyn et al. 2015). Although the education system is most salient in the mode of the formal education, it can also be detected in the mode of nonformal education, and even in the modes of informal and preformal education; it cannot be ruled out as having potential as a heuristic device. Furthermore, although national education systems are the most salient of education systems in the world, education systems exist at different levels, which can perhaps best be depicted as concentric circles, from individual education institutions, to national, to an international or global education project taking shape. This idea has first been elaborately explained by Bray and Thomas (1995), and later further elaborated by other scholars (see Manzon 2014; Standaert 2008; Wolhuter 2008, 2020b).

An education system does not exist in a vacuum and does not have a haphazard, incidental structure. Education systems are created and shaped by the societal context in which they do find themselves, and are the outcome of societal contextual forces. These societal contextual forces have come to be conventionally grouped by scholars of comparative and international education under the following rubrics: geography, demography, level of technological development, social system, economy, political system, religion and life and world philosophical system (Wolhuter, Van Jaarsveld & Challens 2018). Contexts in which education institutions or systems find themselves can also be conceptualised as a sequence of concentric circles from the local, to the national to the international or global level (see Standaerd 2008).

Finally, scholars of comparative and international education do not study education systems in their societal contexts in silos. Various education systems are compared, and from such comparisons, statements can be made regarding regularities regarding the interrelationships between education (systems) and their societal contexts in which they are embedded.

A final note on suggestions or guidelines for the construction of a theory for education concerns the normative nature of education and education system, as the author will argue, by implication also the field of education scholarship. A deficiency in the UNESCO definition of education is that the 'learning' part is not qualified. If that 'learning' can be left open ended to include

any kind of learning, dangerous territory will be stepped into. As eminent scholars of comparative and international education, Epstein and Caroll (2005) put it in another – but not unrelated – context as they caution against the introduction of relativism in any scientific project, 'if all values are relative, then cannibalism is a matter of taste'. To that list can be added for example infanticide, slave trade, torturing or whatever anyone wants. As a leading scholar of philosophy of education, Gerhard Biesta (2013) explains that education is always teaching and learning towards a particular aim, or objective of education. For scholars of education, to refrain from making statements regarding the content of this aim is to open the door for dangerous discontents, as is explained above. In this regard, the author recommends two (supplementary) sources to look at a normative superstructure for education.

The first source is the creed of human rights as the new global moral code (Prozesky 2018). For most of human history, the state, buttressed by the official religion, supplied the moral code of society (see Wolhuter & Van der Walt 2019). In the course of history, this came under increased pressure. As from the 16th century, rationalism and as from the 17th century the scientific revolution and the enlightenment brought about a displacement of vertical causality (explaining phenomena from religious and supernatural forces) to a horizontal causality (reason and empirical epistemology). The fall of absolutism (with the Glorious Revolution of 1689 in England and the French Revolution in 1789, and then the establishment of the United States of America as a Republic in 1776) meant the creed of the divine power of kings (whereby kings received their mandate to rule people from God) became obsolete. Seventeenth-century philosophers such as John Locke began to formulate their creed of human rights. This creed became part of the Constitutions of the United States of America and France. According to this creed, every human being is endowed with and can claim certain basic or fundamental human rights, which are inalienable and which lie beyond the will of any ruler or any democratically elected majority. During the 20th century, this issue of creed of human rights got internationalised inter alia because of the atrocities of the two world wars and became part of the international law, more so when under the forces of globalisation and the information, transport and technological revolution, national borders became porous and the power base of the once omnipotent nation state began to crumble. It also became part of the constitutions of many nations.

What was typically considered human rights was for example the right to life, the right to property and having personal property protected, the right to freedom of expression and the right to due process of law. For much of this history of the creed of human rights time, education did not appear in what was proclaimed to be the set of basic or natural human rights. Neither the Bill of Rights in the Constitution of the United States of America (1791) nor the Declaration of Fundamental Human Rights, which was part of the French Revolution of 1789 – two key documents in the historical evolution of human rights documents – include the right to education as a human right.

It was only from the mid-20th century that education gained began to be visible in human rights manifestos. An important moment certainly was Section 26 of the *Universal Declaration of Human Rights* – a key document in the history of human right statements – accepted in 1948 by the United Nations (2016), and in which the following are proclaimed regarding education:

- Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.
- 2. Education shall be directed to the full development of human development of the human personality.
- 3. Parents have a prior right to choose the kind of education that shall be given to their children.

The interest in human rights education can be associated right up to the United Nations. The United Nations has attached a high premium on human rights education. The United Nations elevated the 10-year period from 1995 to 2004 to the United Nations Decade for Human Rights Education. Furthermore, at the expiry of the 10-year period, in December 2004, the General Assembly of the United Nations launched the World Programme for Human Rights Education to promote the implementation of human rights education all over the world and with this aim in mind has released a *Plan of Action - World Programme for Human Rights Education* in 2006 (UNESCO 2006).

When the creed for human rights is proposed as a source of a normative superstructure for education theory, what is meant is the three facets of human rights education, as explicated by the United Nation's Declaration on Human Rights Education and Training, dated 20 December 2011, namely education *about* human rights, education *for* human rights and education *through* human rights (UN 2011):

- (a) Education about human rights, which includes providing knowledge and understanding of human rights norms and principles, the values that underpin them and the mechanisms for their protection.
- (b) Education through human rights, which includes learning and teaching in a way that respects the rights of both educators and learners.
- (c) Education for human rights, which includes empowering persons to enjoy and exercise their rights and to respect and uphold the rights of others. (n.p.)

In a world where - commendably - diversity is tolerated and valued - Carlos Torres (2015) has listed the three (what he calls) Global Commons as commonalities that keep societies and humanity together and prevent it from disintegrating under the force of unchecked diversity. Carlos Torres (2015) tabled the 'three global commons', yearnings shared by all people on earth, regardless of culture, religion or socio-economic status:

- · we all have only one planet
- we all desire peace
- we all have a right to pursue life, prosperity and happiness. (n.p)

Conclusion

Although the diversity of paradigms and theoretical orientations extant in field(s) of education scholarship are indications of virility, and whilst the drawing of benefit from theories in cognitive fields can be taken as the field plugging into the broader edifice of social science, for education to be a full-fledged discipline or scholarly field, there is a stronger call for a centripetal force to begin operating. For education as a scholarly field(s) to attain a state of rigour, relevance and especially structure - the theme of this book - the construction of an autochthonous, coherent theoretical framework is essential. What can be suggested is that education is made the centre piece or the subject of study by means of rigorous scholarship to construct a theory as a structure describing, explicating and explaining education, being also relevant in guiding practice (such as teachers in class, school principals leading schools, education system planners or the scholarly or public discourse about education policy). The concepts used by the scholarly field of comparative and international education, namely that of the education system, the societal contextual forces shaping education and the method of comparing education systems to arrive at general statements on education (system) - societal context interrelationships - can be suggested as threshold concepts for constructing a theory for education. Finally, a theory for education needs to have a normative dimension. For this, it is recommended that the creed of human rights and the three global commons, as formulated by Torres, are turned to.

Chapter 12

Modes 1, 2 and 3 knowledge production and education: Relevance, rigour and structure

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Abstract

Currently, connected to societal changes, a momentous shift in knowledge production and packaging of knowledge is taking place in the world. Discipline-bounded, generated and organised knowledge (the so-called Mode 1 knowledge), which until a generation ago was the sole and undisputed mode of knowledge production, has come to be challenged by new modes: firstly, by

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knowledge produced and packaged trans-disciplinarily according to the exigencies of practices (Mode 2 knowledge) rather than to the dictates of disciplines, and secondly with the rise of cyber society, also by the possibilities of knowledge production. organising and dissemination made possible by the information and communication technology revolution (Mode 3 knowledge). The aim of this penultimate chapter of this volume is to get into the periscope of the contemplation of the future road for education as a field of scholarship and to gain insight into this momentous shift in knowledge production in the world. It is found that it would be ill-advised to cave in to the pressures to move away from Mode 1 knowledge production, the time-tested way or mode of producing knowledge. However, scholars of education, when building up a theory of education characterised by rigour, relevance and search for structure, can well capitalise on the benefits offered by Modes 2 and 3 rendered knowledge and ways of producing and packaging knowledge. The pre-conditions for benefitting from these new sources of knowledge are that before qualifying as knowledge. such claimed knowledge should first pass through the filters of the scientific method, and secondly these new knowledge should be placed and evaluated within a strong normative framework. In this regard, the imperatives of rigour and relevance and structure as well as of a normative dimension to any theory of education - the central themes of this book and especially the last four chapters are once again highlighted.

Keywords: Education; Mode 1 knowledge; Mode 2 knowledge; Mode 3 knowledge; Relevance; Rigour; Theory.

■ Introduction

The theme of this volume has been the state of education as a scholarly field, in particular the need for rigour, relevance and structure in the field. What has been impacting – and in all likelihood will impact stronger in the foreseeable future – is radical changes in the manner in which knowledge is generated, packaged and assessed in the 21st-century world. This change

can be summarised as the change from Mode 1 knowledge to Mode 2 knowledge and to Mode 3 knowledge. Given the importance, and the added problematic nature of that importance (as outlined in this book, see ch. 11 and ch. 12) of context in shaping knowledge and in shaping education in the world (see Sobe & Kowalzyk 2014), any contemplation of the future road of education scholarship in rigorously building up a theory, both structured and relevant to contemporary society, should take heed to these changes.

The aim of this chapter is to get into the periscope of the contemplation of the future road for education as a field of scholarship, to gain insight into this momentous shift in knowledge production in the world. The chapter will survey each of these modes in turn, and how they have impacted on education. In conclusion, these developments will be assessed against the identified need of education as a field of scholarship to develop more rigour, relevance and structure, and from that assessment, suggestions for the future evolution of the field will be made.

■ Mode 1 knowledge

Various scholars venturing in the field of epistemology have over the course of time distinguished between various kinds or modes of knowledge or knowledge production. One noteworthy instance is that of French sociologist Pierre Bourdieu (1973) who distinguished between three kinds of theoretical knowledge: phenomenological knowledge, objectivist knowledge and praxeological knowledge. However, as used in this chapter, modes of knowledge are used as developed by Gibbons and collaborators (Mode 1 and Mode 2 knowledge) and by Strohmeier (Mode 3 knowledge). Mode 1 knowledge is a term coined by Gibbons et al. (2003) for denoting the way knowledge has been historically generated, ordered and taught (at least in academe and in education settings), namely in a discipline-defined format.

At the risk of being over-simplistic, the history of disciplines is portrayed as philosophy (Greek: the love for knowledge), being the original discipline, and in the course of history various disciplines have broken away from philosophy, to become autonomous disciplines with not only each with its own, distinct, more narrowly defined or specific object of study but also each with its own scholarly community (scholars exclusively devoted to that discipline), its own paradigms and theories and methods, its own disciplinary culture, its own exclusive infrastructure at universities (programmes, courses, departments and faculty) and its own scholarly societies, books and journals.

Surely, much can be said vouching for this state or organisation of scholarly endeavour.

Bantock (1970:11) draws attention to the fact that the present gamut of disciplines earned their status and turf in academe and in curricula simply because they have proved their mettle over a long history as the most economical, most logical and most meaningful way to get an intellectual or cognitive grip on the world. Although it can be stated that such knowledge thus generated and packed does not seem to be streamlined for direct use in solving problems in life and society, there is a huge body of empirical evidence asking for temperance and pointing that such a judgement is extremely superficial and does not stand up to closer scrutiny. In comparative education there is a classical essay by Africa specialist Phillip Foster entitled 'The Vocational School Fallacy in Development Planning' (1965), based on an empirical study in Ghana, making a case that a liberal type of education, which is strongly discipline-bound, is, as far as job and career opportunities and income-generating potential are concerned, much more superior than vocational education. In Chapter 12 and Chapter 13 of this volume, it will be shown how the Fourth Industrial Revolution has given new relevance and value to the humanities and social sciences and to a liberal kind of education, that is the basic or foundation disciplines. The call for vocational education or career education, rather than academic or liberal character-cultivating education, has long been a recurring theme in much of recent history (in the United States of America [USA], for example, a strong and prominent

driver of this kind of education was Secretary of Education in the Nixon administration, Sidney Marland, who gained in America the name of 'the father of vocational education', see Marland 1971, 1972). However, attempts to institute such education have had no unqualified success record, even in terms of income-generating and life chances of graduates of vocational (or career) education compared to alumni of academic (or liberal) education (see Hanuscheck, Woessmann & Zhang 2017; Psacharopoulos 1997).

On the other hand, a theoretical set of disciplines and industry of scholarship taking on a life of its own (the 'ivory tower' metaphor comes here to mind) also have little meaning, as the theme of relevance brought to the fore in this volume indicates. Now it is so that annually some 1.5 million peer-reviewed articles are published worldwide in all scholarly fields (Biswas & Kirchherr 2015). According to Biswas and Kirchherr (2015), on average a journal article is completely read by no more than 10 people. Of the articles published in humanities journals, 82% are not even cited once (Biswas & Kirchherr 2015). This is a serious indictment on the scholarship industry regarding its pursuit of building up an accumulative, coherent body of theory (if it at least shows that education is not the only field of scholarship with these problems, contrary to perceptions or accusations widely thrown around, see ch. 11 and ch. 12), that is its theoretical aims, let alone its practical purposes. The way the South African incentive system being implemented for promoting scholarship or then publication. in particular, has come under severe criticism for its failure to ensure and to promote scholarship and the production of practice-improving research (see Helata 2020:27; McCleod 2010). It is in this regard that the merits of Mode 2 knowledge come in, which will be addressed below.

In Chapter 11, it has been described how the scholarly field of education at universities commenced as an offshoot of the disciplines of psychology and philosophy roughly at the end of the 18th century and the beginning of the 19th century. In the 20th century, various (sub)-disciplines of education came into being, such as philosophy of education, educational psychology,

history of education, sociology of education and comparative and international education, each with an infrastructure at universities, for example, academics exclusively devoted to a discipline and a place in teacher education and post-graduate programmes as stand-alone courses and modules. In the case of comparative education, for example, the first comparative education course taught at a university was by James Russell at Columbia University in the USA in 1900. Following the pacesetting course of Isaac L. Kandel at Columbia University, courses in comparative education proliferated greatly in the USA after 1920 (Wolhuter 2010:73), followed hot on its heels are universities in Canada (see Larsen, Mahjanovich & Masemann 2013:172). The disciplines of education showed a promising and sustained growth and entrenchment at universities worldwide well into the 20th century. For example, at one stage in the 1970s and 1980s, the University of South Africa had a Department of History of Education with 29 academics, reputedly (until today) an all-time record for history of education. Unfortunately, as was cursorily touched upon in Chapter 11 and will be explained in the 'Mode 2 knowledge' section, comparative education and the other disciplines of education fell on hard ground at universities in South Africa and abroad towards the end of the 20th century as this Mode 1 of knowledge production was challenged by two other modes.

■ Mode 2 knowledge

Gibbons et al. (2003) coined the term Mode 2 knowledge to refer to the phenomenon whereby knowledge is no longer established, organised and transmitted in a discipline-tied package (Mode 1 knowledge), but in a trans- and interdisciplinary open system where knowledge is organised and assessed not so much in terms of scientific criteria but rather out of practical and utilitarian considerations.

This trend finds its antecedents in a number of contemporary societal trends. The first and probably the most salient feature of

these trends is the neo-liberal economic revolution. The neo-liberal economic revolution and its ramifications in social policy at large have become hegemonic in the world today (Au & Lubienski 2016:28). This trend may be summarised as the triumph (even overstretching) of the principles of the free-market economy, a contraction of the state and the range of its activities and giving the forces of the free-market free reigns. Harvey (2007) describes the neo-liberal economic revolution as follows:

[A] theory of political economic practices proposing that human wellbeing can be best advanced by the maximization of entrepreneurial freedoms within an institutional framework characterized by private property rights, individual liberty, unencumbered markets and free trade. (p. 22)

It is not only first and foremost that the state withdraws its involvement and regulatory role in the economy of a country but it also subsequently carries over the principles of a free-market economy, such as efficiency, the profit motive and performativity, to societal domains outside the economic sector, such as health services, public transportation or education (see Wolhuter & Van der Walt 2019).

The neo-liberal economic revolution is conducive to a hierarchy of values where the relevance or practical, immediate, concrete utility of everything is asked for and is accorded much value. This question is also directed at the way knowledge is produced and packaged. One of the signature features of the higher education revolution currently sweeping throughout the world (see Wolhuter 2011) is a call for relevance, resulting in a fundamental restructuring of the university. Traditionally higher education, and universities in particular, could commit themselves relatively secluded from the pressures and vicissitudes of society to the pursuit of truth as the highest value (the 'ivory tower' model of the university). With the emergence of the knowledge society (to be discussed shortly), the commodification of knowledge, the downscaling of the state of its activities, which means universities are more and more reliant upon private rather than public funding, and the neo-liberal economic revolution with its principle of cost-benefit assessment, universities are increasingly under pressure to deliver relevant produces and knowledge. Friedman (2006) refers in this regard to the following mission statement of the Oklahoma Center for the Advancement of Science and Technology (OCAST), a HEI and university in the USA:

In order to compete effectively in the new economy, Oklahoma must develop a well educated population; a collaborative, focused university research and technology base; and a nurturing environment for cutting-edge business, from the smallest startup to the largest international headquarters [...] OCAST promotes University-Business technology centers, which may pan several schools and businesses, resulting in new businesses being spawned, new products being manufactured, and new manufacturing technologies employed. (p. 317)

The idea that (basic) science has reached the end of its life is often encountered. John Horgan, in his much-read The end of science: Facing the limits of knowledge in the twilight of the scientific age (1996), argues that basic science has now revealed and explicated all knowledge humanly possible, and all that remains for scholars is to turn to applied science: the practical application of this knowledge. On the other hand, respected scientist and futurologist Buckminster Fuller argues in his book Critical path (1982) that up until 1900 human knowledge doubled approximately every century, but by 1945 it was doubling every 25 years and by 1982 it was doubling every 12-13 months (see André Borschberg 2017, 'Innovation toward a better quality life'). The imperative for relevance, one of the themes of this book, certainly means that a lot can be said in favour of packaging knowledge as per guidelines of Mode 2 knowledge. However, as was stated when discussing Mode 1 knowledge above, the current set of disciplines has gained their place over a long history, during which they have proved themselves to be the most efficient, meaningful and successful way to gain an intellectual grip on the world. Progress and science can flourish only in an atmosphere of

freedom of inquiry, where curiosity takes the scholar or scientist as his or her professional judgement guides himself or herself, rather than being steered by utilitarian goals. For example, when James Dalton, Cavendish, James Maxwell Clark, Rutherford, Niels Bohr, JJ Thompson and others developed nuclear physics, they had not in mind nuclear health treatment or nuclear power stations and its uses. In view of the effect of the neo-liberal economic revolution on universities and the call for relevant (that is immediately and concretely relevant to industry and business) research, Nobel Economics Laureate Joseph Stiglitz (2018) strongly cautions against the negation of basic research; in fact, he lists this neglect as one of the discontents of the neo-liberal economic revolution.

Turning to the education science(s), here the rise of Mode 2 knowledge production and packaging (and even transmittance, in teacher education and in post-graduate programmes of education), was even on a steeper rise than in academe in general. During the last decades of the 20th century, there was a strong worldwide change in the nature of teacher education programmes. Teacher education was no longer an academic grounding, built on the (part-) disciplines of education as building blocks, but in a drive towards instrumentalism or utilitarianism, and more and more began to resemble the training of technicians or tradespeople, that is training in a basic set of skills deemed to be readily useable in the classroom situation (Altbach 1991:492: Schweisfurth 1999:94). Such new arrangements spelled doom for the disciplines of education but were conducive to teacher education programmes and even organisational structures at universities' faculties of education and research programmes being made on the Mode 2 template. A very striking illustration of this trend is South Africa, in the change brought about by the Norms and Standards for Teacher Training, determined by the Minister of Education as teacher education policy, in 1998 (revised in 2000). This policy directive

stated that teachers should be trained for the following seven roles (Brunton & Associates 2003):

- Learning facilitator: The teacher has the assignment to facilitate learning in an inspiring way, and in a way taking heed of the needs of learners.
- Interpreter and designer of learning programmes and material:
 The teacher should understand and has the task to interpret learning programmes, and also to select the textual and visual teaching aids most appropriate to the particular context.
- Leader administrator and manager: The teacher has the role to make decisions at the classroom level, has a role with regard to the administration duties at classroom level and should play an active role decision-making organs at school.
- Learner and lifelong researcher: The teacher himself or herself has the obligation to remain a lifelong learner and researcher, improving himself or herself all the time.
- Community, civil and pastoral role: In line with the letter and spirit of the Constitution, the teacher should take part in community, civil and pastoral matters with parents and community members in general in an ethical, democratic way, and should be prepared to assume leadership.
- Assessor: The teacher has a role to assess learners.
- Learning area/-subject/-phase specialist: The teacher is expected to be well versed with respect to the knowledge, skills, values, principles and procedures of his or her area or phase or subject of specialisation. (pp. A44-A59)

Soon teacher education programmes at South African universities were restructured, now consisting of module names and content resembling these roles, and hot on the heels of teacher education programmes, faculties or schools of education suffered the same fate as they were structurally reorganised accordingly. The oncestrong History of Education Department at the University of South Africa, mentioned above under Mode 1 knowledge, was totally decimated; in fact, at no South African university a department of history of education can be found today, whereas

a generation ago such departments were common at the historically Afrikaans and the historically black universities.

What happened to a discipline such as comparative and international education in teacher education programmes, regarding its infrastructural base at universities, is illustrative of the fate of the entire line of education (sub)disciplines at universities. Larsen et al. (2013) distinguished between three phases in the history of comparative and international education at universities in Canada. The first phase was an establishment phase, roughly in the 1960s and 1970s. During this phase, chairs of comparative education were instituted at universities, postgraduate courses of comparative education commenced and comparative education became visible in initial teacher education programmes. This phase corresponded with the time when disciplines of education were at least measured by their presence at universities (as stand-alone courses and number of chairs), still on an upward trajectory. A second phase, Larsen et al. (2013:172) call the 'fragmentation of Comparative Education at Canadian universities'. During this phase, comparative and international education disappeared as stand-alone courses at universities. Chairs were abolished as the faculty retired and moved on, or even as part of radical restructuring of organigrams. This shift ties in, and in fact can be considered as part of, the rise of Mode 2 knowledge. This phase occurred in the 1980s and 1990s in Canadian universities. Then by the 2000, a third phase in the history of comparative and international education at Canadian universities commenced (no doubt driven by the contextual imperatives of the time), as comparative and international education returned, this time not in the form of stand-alone courses but comparative and international education was subsumed in courses or modules such as education and development, globalisation and education, postcolonialism and education, education and democracy, education and economics, education and social justice, education and human rights and many others. This historical trajectory of comparative and international education at Canadian universities has its parallel in

many other parts of the world, although with some time difference (i.e. not at the same time as when each phase occurred at universities in Canada, see Wolhuter 2009). The problem under this dispensation is that now, as Maseman (2008, oral remark, unpublished) puts it, 'Comparative Education runs a mile wide, but an inch deep', that is students do not get acquainted with the theoretical bases, scope, method(s) and potential of comparative and international education. This is detrimental to the development of theory (and of rigour and structure) in education. It should also be borne in mind that disciplines such as comparative education and history of education have, by the very nature of their particular perspective from which they study education, a very particular method and in that way too have a unique, indeed indispensable contribution to make to the construction of theory in education (see Wolhuter & Seroto 2020).

■ Mode 3 knowledge

One of the themes evident from the chapters of this book, especially as from Chapter 11, when the focus was placed more narrowly on theory construction in education, is that theory construction in any discipline or scholarly field, more so in the social sciences, is being shaped by societal contextual forces. A number of forceful trends are taking shape in 21st-century society. These trends include the rise of cyber society or the information and communications technology (ICT) revolution.

Currently, an instant 24-h planetary information network is rapidly taking shape because of free access to and widespread use of the personal computer, the Internet, the fax machine and the mobile telephone. Even in 2013, there were already more mobile phones than people in the world; the global population stood at 7.2 billion, whereas there were at that stage already 7.3 billion mobile phones in the world (Pelser 2013:2). In 2012, with just short of 900 million Facebookers, more than 500 million Twitterati and 2.3 billion Internet users, a forceful global digital culture has become a reality (Joubert 2012:3). It took Twitter a

mere 5 months to go from 10 billion to 20 billion tweets, after it took 4 years to reach the first 10 billion (Anonyms 2010:4).

It is against the backdrop of the rice of cyber society and the information and the ICT revolution that the symmetrical rise of Mode 3 knowledge comes into play.

Although different authors have written on Mode 3 or three modes of knowledge, with various meanings, the term is used in this chapter as described by Strohmaier (2014), who introduced the term to distinguish it from Gibbons et al.'s Mode 1 and Mode 2 knowledge, and to refer to a new mode of knowledge of knowledge production and packaging which has emerged in the contemporary world, besides Mode 1 and Mode 2 knowledge:

With the proliferation of data, the increasing availability of rather simple tools to analyze data and an increasing number of people who can use these tools in combination with the availability of low cost publication platforms (e.g. blogs), the potential to democratize certain aspects of scientific processes – such as empirical data analysis – seems tremendeous. This might give rise to the idea that everyone who can use these tools (such as Python), and publish the results from their analysis (e.g. via blog posts) can now participate in knowledge production. (n.p.)

Although democracy (and the democratisation of access to knowledge) is a commendable trend of current times, the democratisation of access to knowledge, much more to the production of knowledge, has its caveats too. The spectre of post-truth and fake news and its very dangerous results come to mind (see Sismondo 2017). In this regard, Strohmaier suggests that when evaluating knowledge, the rigours of the scientific method should be taken as yardstick.

The rise of Mode 3 knowledge has implications for the scholarly field of education not only directly but also indirectly by the strength of its impact or then potential impact of students and on society. The social media can also be used to construct and to distribute what is sold as scientific, sound, validated knowledge about education and educational affairs. The democratisation of information and the rise of Mode 3 knowledge in the scheme of

Bloom's taxonomy of educational objectives (in education the classic theory of education objectives, that is learning objectives, is that of Benjamin Bloom, originally spelled out in the publication of Bloom et al. 1956, but modified during the course of time, the last much cited modification being that of Anderson et al. 2001 the objectives found in this taxonomy include knowledge, understanding, application, analysis, synthesis, creativity and evaluation), the emphasis on education at all levels should shift from knowledge (i.e. the transmission, memorisation and reproduction of factual knowledge) to the self-acquisition. synthesis and evaluation of knowledge. This brings to the fore to link to the theme of rigour in this book - the importance of the rigour of the scientific method of evaluating what is offered on sale as knowledge is not limited to post-graduate courses of research training and scholarly activities in education but acquaintance with the scientific method becomes now more essential and more relevant (to tie to the theme of this book) in far lower echelons of the education ladder. Secondly, this issue of Mode 3 knowledge underscores again the importance of education as a normative discipline, the need for a normative dimension in education scholarship highlighted in Chapter 12, and the value or then relevance (to return to the theme of this book) of the creed of human rights in this regard.

The rise of Mode 3 knowledge also has implications for methods of teaching and learning practice and theory. Regarding the methods of teaching, the 2006 Second Information Technology in Education Study (SITES) study built, on the basis of factor analysis and the Cronbach α test, a threefold classification of teaching method orientations: the traditional (teacher centred), the lifelong learning orientation and the connectedness orientation (Law & Chow 2008). The lifelong learning orientation is a teaching method where learners are guided to learn from real-life examples or situations; the emphasis is placed on the individual learning needs of students, and to students who are similarly guided towards identifying and deciding on their own learning objectives – to plan, to learn and to monitor themselves

accordingly. Connectedness orientation is a teaching where learners are given ample scope to learn from each other, and where they learn to avail themselves of the web in a responsible way, in order to learn from the web. Of the three orientations, the last two are most recommendable and are becoming more and more essential in view of the rise of cyber society and of Mode 3 knowledge.

It is not only teaching that has been affected by cyber society. The flipside of teaching in an education situation, learning, has been as radically affected; not only learning as praxis but even in the evolution of learning theory the trace of cyber society is evident. The historical trajectory of learning theories developed from John Locke's simplistic tabula rasa theories in the 17th century and slightly less simplistic, behaviouristic theories of early 20th century (Thorndike & Skinner). Next to come were more nuanced cognitive theories (such as Piaget, where the role of biological maturation and the development of different levels of cognitive abilities were recognised) later in the 20th century. Then constructivist and social constructivist theories (giving more recognition to the role of the student in creating knowledge) appeared at the turn of the century (cf. Havukainen et al. 2016). present-day George Siemens' learning theory connectivism (Siemens 2004) is more aligned to the present world. and which make education institutions - at least in their traditional mode of serving primarily as centres for the transmittance of knowledge, which learners unquestionably and passively absorb seemed to be outmoded. Subsequently on one aspect of society. cyber technology and its role in social empowerment, and how these have played into the development of learning theories, will be zoomed into.

Social empowerment can be defined as a 'process through which individuals or organised groups increase their power and autonomy to achieve certain outcomes they need and desire' (Eyben 2011:n.p.). Although such processes are of value in a world where inequality is rife and substantial numbers of people are disadvantaged along the lines of for example gender, socio-economic

status or ethnic status (to name but three of the most salient dimensions of inequality), viewing social empowerment as a simple unequal distribution of power in society between various categories of people would amount to a much reductionistic conceptualisation of empowerment. Freire (1993) argues that power is not a quality that can be dispensed in this way but rather is both a process and an outcome. As a process of empowerment, it is something that happens to the individual alone; it is a complex phenomenon involving shared experience and interrelationships with others (Kapitan 2014:2). The outcomes of this process are selfdetermination and increased efficacy (Freire 1993). On the other hand, in any theory of empowerment, the individual should not be dissolved in the social group or category. Boehm and Staples' (2004) study of empowerment as conceived by social work practitioners and clients came to the conclusion that social empowerment is as much a personal process, the clients viewed social empowerment as a means to mastering their own personal challenges in their lives. That technology has potential as an instrument of empowerment, for example by providing access to knowledge and information, is obvious and has also been demonstrated by research (such as Adams, Blandford & Lund 2005).

In Chapter 11, the problem of the Northern Hemispheric hegemony in knowledge construction and theory building has been highlighted. The democratic Mode 3 knowledge construction indeed opens new vistas for bringing into the theoretical edifice of science new perspectives not only from the Global South but also from grassroots level from the many vulnerable categories of people thus far marginalised and finding themselves on the fringes of society (see Wolhuter 2019). But anything that is being sold as knowledge does not fit the requirements of knowledge, and indeed can incur much damage, even lethal. The produced knowledge should first go through the filters of the rigour of the scientific method for verification and that of a normative framework. This brings back the imperatives of rigour of scientific knowledge as verified knowledge and of the need for a normative

framework, and what the creed of human rights and/or the global commons can supply - all themes encountered in the preceding chapters of this volume.

■ Conclusion

Education and scholars of education, in their need to construct a rigorous, relevant and structured theory of education, find themselves in a world of three kinds of knowledge production and packaging. It would be ill-advised to cave in to the pressures to move away from Mode 1 knowledge production, the timetested way or mode of producing knowledge. However, scholars of education, when building up a theory of education characterised by rigour, relevance and search for structure, can well capitalise on the benefits offered by Modes 2 and 3 rendered knowledge and ways of producing and packaging knowledge. The preconditions for benefitting from these new sources of knowledge are that, before qualifying as knowledge, such claimed knowledge should first pass through the filters of the scientific method, and secondly these new knowledge should be placed and evaluated within a strong normative framework. In this regard, the imperatives of rigour and relevance and structure as well as of a normative dimension to any theory of education - the central themes of this book and especially the last four chapters - are once again highlighted.

Chapter 13

The Fourth Industrial Revolution: Implications and opportunities presented by a new economic order for education to be a rigorous, relevant and structured field of scholarship

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■ Abstract

In this final chapter, the aim is to bring the implications of the one striking new player in the contextual field, namely the Fourth Industrial Revolution, into the map of the outlines of a required theory of education. The features of this revolution are sketched. and this revolution is compared with the First, Second and ThirdIndustrial Revolutions. The Fourth Industrial Revolution is found to differ from the preceding three industrial revolutions not only in degree (level of technological development underlying the revolutions) but also in kind, as it opens up unprecedented future vistas, in equal measure frightening and exciting (positive). This challenge of the nascent Fourth Industrial Revolution more than ever underscores the importance of education (as praxis) and for a normative dimension framed in the creed of human rights for both education praxis and education theory. Moreover, after an analysis of this revolution, it is also suggested that the creed of human rights be supplemented by capabilities theory in providing a philosophical superstructure or normative framework for education theory. The chapter and book concludes that such a theory of education can articulate in guidance for education in the 21st century.

Keywords: Artificial intelligence; Capabilities theory; Education; Education theory; Fourth Industrial Revolution.

■ Introduction

One fact, or dilemma, pertaining to the theme of this book, which stands out clearly in the chapters, especially the preceding three chapters, is the tension between the universal or the intransient of what is portrayed in a theory and the need or feature of theory on the one hand, and the production and packaging of knowledge, being context-contingent, on the other hand. One feature surfacing in the global societal context is that of the nascent Fourth Industrial Revolution. This revolution opens at the same time exciting, unprecedented vistas for education as a field of

scholarship and poses a threat to the field of education. The objective of this final chapter is to bring this towering, growing feature of contemporary society into the map of considerations with respect to theory construction in education. To commence with, the term 'Fourth Industrial Revolution' will be clarified, after which its implications for education will be explored.

■ The Fourth Industrial Revolution

The term 'the Fourth Industrial Revolution' was coined by Klaus Schwab to identify the industrial revolution currently taking place. The key feature of this new world is the blurring of the boundaries of the physical, the biological and the digital worlds (Schwab 2016:1). This confluence of the physical, the biological and the digital are bringing about a wide range of technological innovations, of which artificial intelligence is arguably the most staggering one and calls for an urgent and thorough attention from the point of view of the theme of this book. But there are also other innovations that include self-driving vehicles, drones, robotics, three-dimensional printing, energy storage, quantum computing, the Internet of things and nanotechnology, although the list is far from exhaustive. Other evidences of this Fourth Industrial Revolution include the Human Genome Project, synthetic biology (the ability to write DNA), genetic engineering and genetic modification. Schwab argues that this Fourth Industrial Revolution will have a profound effect on the economy and on society, which is unclear at this stage. This Fourth Industrial Revolution has implications for economic growth, ageing, productivity, employment and labour substitution, skills needed, the nature of work, governance and international warfare and security (Schwab 2016:28-180).

Schwab has decided on the term the Fourth Industrial Revolution to distinguish it between the preceding three industrial revolutions in history. The First Industrial Revolution was based on steam power and followed on James Watt's invention of the steam engine in 1765 and lasted until 1840. This revolution saw

the emergence of railways, mechanical production, factories of the Victorian age, the steam boat, Taylorism and Fordism (although the latter commenced well after 1840).

The Second Industrial Revolution, which lasted from the late 19th century to the early 20th century, was based on electricity. This period saw the appearance of the electric light, the dynamo, the battery and the radio.

The Third Industrial Revolution began during the 1960s. It was based on new technology, such as semi-conductors, the transistor, mainframe computing (which took off in the 1960s), personal computing (which took off in the 1980s) and finally the Internet (which emerged in the 1990s).

The Fourth Industrial Revolution is not only larger than the previous three in standing on their shoulders, that is building forth and taking further technology-supported industrial manufacturing, but things such as artificial intelligence presents a qualitative leap into a new territory.

■ Implications for education

The interrelation between economy and education: A historical and comparative international survey

The relationship between education (praxis) and economy runs throughout history. Scholars trace back this relationship right to the very beginning of schools. According to the best of evidence, schools originated for the first time in history about 3000 BC (Bowen 1982:8). Few researchers have studied the origin of schools, much less tried to explain the origin of schools. But one theory as to why schools came into being in society is that of Peter Gray (2013), who postulates that schools were created soon after the agricultural revolution because of the new kind of person required by an agricultural economy. Although in a hunter and gatherer economy, people could roam around independently,

freely, following their own judgement, an agricultural economy asks for a more disciplined, submissive kind of person, and therefore schools were created to cultivate such kind of persons.

The relationship between the economic advances known as the succession of industrial revolutions and education is complex, not linear, but is nevertheless undisputedly there. At least two divergent, actually opposite, effects of the First Industrial Revolution and education are commonly found in the literature. On the one hand, it is said that an unschooled industrial labour asks even less in terms of education than working on a farm (Ashton & Green 1996:119, 129). The statistic often cited is that during the first 100 years of the industrial revolution in England, the adult literacy rate in England dropped from one-third to one-guarter (Cipolla 1969:1). On the other hand, as frequently encountered in the literature, is the argument that the beginning of government finance to schooling in England (instituted in 1833) was a direct result of the industrial revolution, even a reaction against the discontents of the industrial revolution schooling was promoted to curb the abuse and inhuman child labour in factories, and also to keep children off the streets of the industrial cities (e.g. see Cruickshank 1978). If a comprehensive view of global history of the past few centuries is taken and analysed, what cannot be denied is that industrialisation and the expansion of schooling went hand in hand (see Carl 2009). It can also surely be stated that the levels of education associated with the successive industrial revolutions hitherto, that is the First. Second to Third Industrial Revolution, were on a upward trajectory. However, as was cautioned this is no simple linear $(x \rightarrow y)$ relation. For example, in this regard, Paci (1977) draws attention to the fact that during the 1960s and 1970s, that is well into the Second, or electricity-driven, Industrial Revolution, oil companies could successfully train an illiterate person within a year to become a welder for the oil rigs in Libya. But the later industrial revolutions much more urgently called for an educated citizenry than did the first or more rudimentary industrial revolutions. What is an illustrative heuristic in this regard is Porter's (1990) model of four phases of industrialisation, which makes the relationship between education and industrialisation more clear, other than the First, Second, Third and Fourth Industrial Revolution model, based on the technological substratum of industrialisation. Porter (1990:546) distinguishes between the following four phases in the development of an industrialised economy: factor-driven, investment-driven, innovation-based and wealth-driven industrialisation.

In a factor-driven industrialised economy, factories are dependent on products of the primary economic sector (minerals, agricultural products, etc.) as well as a pool of abundantly available unschooled or semi-schooled labour (Porter 1990:547). Most workers in a factor-driven industrial economy are doing menial jobs in the production, whereas very few do create new products (Neef 1999:548; Porter 1990:548). Workers with no or very little formal education can enter the system, learn on the job and be productive, and can even proceed to supervisory or management posts (Cappelli et al. 1997:19). A second phase in the development of an industrial economy is an investmentdriven economy. In this phase, investment money (capital) is required to build modern, often large factories or facilities, which are equipped with the best-available technology (Porter 1990:548). Competitive advantages of a country or companies are based on willingness to invest in the economy. These economies are characterised by the utilisation of electricity, gas and water supply, and by mechanisation. Mechanisation has an effect on demand in the labour market, because even many schooled labourers are replaced by machines. For example, where labourers used tools to file, saw and plane pieces of a material to their required size, machines operated by the press of a food pedal now take over this work (Prais 1995:3-4). Labour needs a shift in the direction of machine makers and supervisors. who require more education and training than the typical labourer of the factor-driven industrial economy.

In the third phase, the innovation-driven phase, companies and their factories do not only take over and improve technological

methods from other countries but often they also create their own technology and methods (Porter 1990:554). Because of improved technology automatisation takes place and even machine operators are increasingly replaced by automatic devices (Prais 1995:4; cf. Kennedy 1993:88). Therefore, the demand for unschooled and lowly schooled labour diminishes, and the demand for highly schooled labour (technicians, maintenance engineers and their supervisors), to supply and to service and keep the new equipment operational, rises (Bhorat & Hodge 1999:349; Neef 1999:34; Prais 1995:4).

Two salient features of a wealth-driven industrial economy are that, firstly, enterprises continuously attempt to cut down on personnel costs, and secondly that enterprises amalgamate so as to benefit from economies of scale. This means that workers find themselves in an even more competitive environment, and personal skills and ingenuity – and by implication education too – are getting even more importance.

Future perspective: what can be learned from past Industrial Revolutions regarding the role of education in and the required Education Theory during the Fourth Industrial Revolution

Before extracting what could be learned, in the face of the nascent Fourth Industrial Revolution, from this history of progressive industrialisation regarding education, it should once again be stated that the interrelationship between economy and education is complex. Although, as the classic publication in this regard, F. Harbison and C.A. Myers' *Education, manpower and economic growth: Strategies for human resource development* (1964) could show on aggregate a strong positive correlation between economic strength and education effort of nations, as have any study calculating rates of returns on education in aggregate national level record strong positive rates of return

(2011), when going to individual level a much more varied pattern and less deterministic relation emerge. The spectre of schooled unemployment or efforts all over the Global South to use education expansion to effect economic modernisation, including industrialisation, is a testimony of this. The exact interrelation between education and economy depends much on the total societal ecology of that location and time, and how the various societal sectors (geography, politics, social structures and dynamics, demography, religion and life and world view) are interlocked; these are extremely complicated. How difficult it is to track down, for example, the factors involved in the success of a business venture, and to pin down the exact role of education in that equation, is clear in for example how research at present still claims that business success is largely based on the 'luck' factor (see Liu 2020).

Having explained the complex nature of the interrelationship between economy and education, it is stated that the historical development of the sequence of industrial revolutions thus far revealed that the rising technological bases and the rising levels of organisational sophistication as well as the increasing scope of operations mean that education or training of human resources assumes increasing importance along the spectrum-sequence of industrial revolutions. In an industrial economy where menial labour is more and more replaced with machines, where efficiency in organisational arrangements is the order of the day and where economies of scale grew right to its logical end of culminating in industries embracing global markets at a time of globalisation (i.e. when the technology underlying globalisation made possible staking a claim on markets on a worldwide scale), levels and quality of education became increasingly important. The logical extrapolation from this is that the Fourth Industrial Revolution will only increase the price tag attached to education and training. However, in addition to this straight-line extrapolation, two further predictions can be ventured. Firstly, the technology underlying the Fourth Industrial Revolution is not only

quantitatively more than that of the previous Industrial Revolutions, but, secondly, there is also a qualitative difference, that it is not only a matter of difference of *degree* but also a difference in *kind*. The possibilities opened by new and approaching technology underscore the need for a normative dimension in education praxis (and by implication in education theory too) anew. This will be elaborated upon below. Secondly, it is evident from the progression of Industrial Revolutions that with each successive economic transformation, more and more individual ingenuity and creativity are needed. This is even more so in a globalised context, where there is a global flow of talent. The implications of this for education praxis and education theory will be unpacked in a subsequent section of the chapter.

A more compelling need for a normative superstructure and for the creed of human rights

It has been explained in Chapter 12 that one of the Global Commons, that is something all people regardless of belief and creed of socio-economic status desire, is that of peace, However, human history hitherto is one littered with violent conflicts. From 3600 BC to 2006, there were only 292 years of peace, but there were 14351 wars waged, in which 3.5 billion people were killed. It is in the 20th century that this violence reached its zenith. According to Ray Rummell (1994), 20th century was a democide century: democide (that is state- or government-directed violence) caused 168 198 000 deaths. Racism took its toll too. In 1994, in Ruanda within a span of a few days, Hutus killed over a million Tutsi (see Meredith 2011). It would be difficult to deny that violence of this scale and intensity has nothing to do with the technology made available by especially the Second Industrial Revolution (electricity, rail road and power ships and boats and aeroplanes, enabling the rapid movement and deployment of troops, to name but one instance). This inhuman escalation of violence reached a high watermark with the two World Wars with the two Nuclear Bombs in 1945. Here the close connection between this state-induced violence and second industrial revolution technology (such as electricity) and its application should be noted. In the United States of America, the term "military-industrial complex" gained currency in the political discourse, a term graphically depicting this relationship.

Towards the end of the 20th century and beginning of the 21st century, a subsidence of violence seems to have occurred. At this stage, the author wishes to bring into the narrative two much-read books by social and political commentator Yuval Noah Harari. Harari wrote a sequence of three books, Sapiens: A brief history of humankind (Harari 2014), Homo Deus: A brief history of tomorrow (Harari 2015) and 21 Lessons for the 21st century (Harari 2018). In these three books, he offers a panoramic exploration of respectively the past, the present and the future. Homo Deus portrays an overly optimistic and bright present state of humanity, beginning with the observation that the human propensity for violence appears to have been conquered. Although in ancient agricultural societies, human violences were responsible for approximately 15% percent of all deaths, in the early 21st century, this has dropped to about 1% percent (Harari 2015:14). Harari (2015:15) calls this shift 'breaking the law of jungle'. From the vantage point of the field of scholarship which this chapter has been written (education, and at that comparative and international education), it is tempting to ascribe this momentous shift (at least partly) to the extension of education to all during the second half of the century. the emphasis on peace education and the whole idea of education on human rights. Certainly, it can be stated that it played its part, although the interrelationship between education and peaceful co-existence as an outcome of education is very complex and depends on the total contextual ecology in which education is embedded. But Harari has an interesting extended argument, touching on aspects of technological innovations. Harari (2015:14-15) writes that not only is violence on the decrease, and

wars seem to becoming something of the past, but even more importantly, a growing segment of humankind has come to see war as inconceivable, that is beyond contemplation. Whereas a century ago, Harari (2015:14) argues, whenever politicians, generals, business people and ordinary citizens met and made plans for the future, they always left room for war. This is no longer the case. Whilst there are a multitude of factors explaining this about-turn, such as the fact that the present stage of nuclear weapons has turned any possible war between superpowers into a mad act of mutual suicide, and thus wars no longer continue to be a rational way to resolve conflict, the rise of a globalised economy (where harm on one outside is no longer a harm of the outside but also the own) and the rise of a knowledge economy (as is explained above, in a 'flat world', what is coveted is no longer so much the mineral resources of neighbours, but knowledge), there is one factor which should also be brought into the equation, namely the technological bases of successive Industrial Revolutions.

It has been explained above that the rise of the nation-state (and its use of power, also for aggressive purposes) was based on the Second Industrial Revolution and its technology (especially making possible the state's monopoly on information and knowledge and the distribution thereof: national radio, national television and the like). The Third Industrial Revolution decimated the state's monopoly on knowledge and democratised access to information and knowledge and the distribution thereof (the Internet, mobile phones, emails and the products of the Third Industrial Revolution). This democratisation of access to information and knowledge has had far-reaching consequences. The most graphic illustration of this is the 2011 Arab Spring in Tunisia, which was started by a single photograph, distributed on Facebook.

The Fourth Industrial Revolution, at last, brings with it a new twist in this saga on power of information and knowledge control. After the optimistic picture Harari paints of today, as explained above, regarding the twilight of violence, in his follow-up book dealing with the future, in 21 Lessons for the 21st century,

Harari (2018) sounds an alarming tone. The technology of the Fourth Industrial Revolution puts within the reach of anyone's access the forces of terror, violence and destruction on a scale unknown in history hitherto. Combined with the access to the production and distribution of information, including false news or fake truths, and the rise of populism, this makes for a potentially explosive cocktail. This underscores the need for education praxis and for education theory to have a strong normative dimension, and in this regard, the creed of human rights, suggested and motivated in the preceding two chapters, once again comes to the fore as the appropriate normative framework.

■ The lure of human capabilities approach

It has been explained above that, if the trajectory of the first three industrial revolutions is anything to go by, the Fourth Industrial Revolution will attach a high premium on individual talent, creativity, ingenuity and innovation. These are trends already visible, as Van der Bunt-Kokhuis and Van der Sluis (2009) and in the case of the higher education sector - Wildayksy (2010) explain. Friedman (2005) argues that the world has become 'flat'. By this he meant that the mobility or ease of movement of people and capital in globalised society and the role of technology and technological prowess as factor of national power have obliterated any advantage which geography (location, size, climate and mineral resources) has bestowed upon a country. Such a premium which the Fourth Industrial Revolution has attached to education. not only level of education, but also education for the cultivation of individual talent, and education for creativity, independent thinking, ingenuity and innovation (see Coberly-Holt & Elufiede 2019), makes the vocational and technical education of a few generations ago (clearly tailored for an economy in the stage of the Second Industrial Revolution) to appear as obsolete or anachronistic (if ever there was much to say for such education, in the preceding chapter it has been shown that even at times of the high tide of the Second Industrial Revolution, such vocational-technical education could not succeed to muster much of a successful track record).

It is in this regard that capability theory is suggested as a creed of philosophy to guide the development of education praxis which provides for maximum individual differentiation and for education the cultivation of individual talent, and education for creativity, independent thinking, ingenuity and innovation. The capabilities approach is a philosophy of which the major advocates are Amartya Sen (1999, 2010) and Martha Nussbaum (2000). It is an approach emphasising individual emancipation.

The notion of capability within this approach is not the narrow idea of skills such as to be able to read to write or to do simple arithmetical operations. Capabilities are conceptualised as the range or scope of opportunities and freedoms people have, to follow the goals they have set for themselves and to effect the kind about change which they regard as valuable. Whilst some scholars of education (e.g. Phillips & Schweisfurth 2014:90-91; Rizvi & Lingard 2010:149) have advocated the capabilities approach - especially as an antidote to neo-liberal economics dictating education - the education-wise operationalisation thereof, that is how it can find its full place in teaching-learning strategies in classrooms, lecture theatres and tutorial classes, not been constructed (Wolhuter 2020). More than this, if it can be accepted, this capabilities theory should also be incorporated in the theoretical edifice of education guiding praxis. Therefore, in this final chapter, in the face of the Fourth Industrial Revolution, it is suggested that this capabilities theory also be incorporated as a guiding philosophical or normative superstructure of education, alongside the creed of human rights (explained and motivated in Chapter 12).

A new appreciation for the humanities and social sciences

The advance of a Fourth Industrial Revolution has also brought with it a new appreciation of the value and role of the humanities and social sciences, even art subjects (see Avis 2018). The management of the new science and innovation is a major assignment for democracies in the world of today (Stilgoe, Owen & MacNaughten 2013). Public discourse and decision-making require a theoretical framework for understanding and supporting efforts aimed at responsible innovation. Such a theoretical framework, in turn, can only be developed by an informed citizenry and at their vanguard a scholarly community, well versed in the issues unpacked as subjected to robust and rigorous analysis by the gamut of humanities and social sciences. At the World Economic Forum of 2018, it was explained as follows (Vestberg 2018):

[/]mportantly, to instil the civic and ethical understanding that will allow human beings to wield these powerful technologies with wisdom, perspective and due regard for the wellbeing of others. (n.p.)

From the vantage point of education as scholarly field, this new appreciation and new role for the humanities and the social sciences have a number of implications. It means that the humanities and social sciences, from primary and secondary levels of education to tertiary education, are to be viewed with new eyes and accorded more status than it had during the years of the Second and Third Industrial Revolutions, when technical-vocational education, which was much in the vogue in some quarters and during some times, especially towards the end of the Second Industrial Revolutions. Ditto for the much hype about science, technology, engineering and mathematics (STEM) education which, in the context of the Third Industrial Revolution, in the recent past was sold as the 'be all and end of all' education needed. Already there are calls, motivated by the exigencies of a Fourth Industrial Revolution context, for STEM education to be

superseded by STEAM education (where A stands for arts) (see Gunn 2017).

■ Conclusion

In the final chapters in this book, the need to construct a general theory of education became clear. This need, as well as the requirements which such a theory will have to meet, has been made explicit in the last chapters. It appeared that one dilemma or challenge or criterion of a theory is that it should at the same time embody the eternal, unchanged, intransient essential features of education, as well as be sensitive to societal context. In this last chapter, it has been explained that one salient feature of the societal context of the early 21st century is that of the nascent Fourth Industrial Revolution. This Fourth Industrial Revolution differs from the First, Second and Third Industrial Revolutions in degree as well as in kind. It differs in degree in that it adds a new development of technology upon which the previous three Industrial Revolutions had been built. This technology. which can be summed up as the fusion of the physical, biological and digital worlds (and of which artificial intelligence and genetical design and manipulation are but two examples), calls up an imagination ambivalent future scenarios: at the same time at the same measure, exciting and frightening future scenarios. To meet this education assumes more importance in society than ever before, implying equally the need for a theory guiding education praxis. The nature of the Fourth Industrial Revolution underscores the need for an education theory with a normative superstructure, and in this regard, the creed for human rights comes to the fore as an appropriate normative framework. Finally, the Fourth Industrial Revolution suggests that this creed be supplemented with capabilities theory, to clearly and confidently articulate into a guiding theory for education praxis. It is that recommendation, that for rigorous, relevant and structured education worthy of taking its place in the line of disciplines. scholars of education commit themselves to such an assignment.

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Chapter 1

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Chapter 2

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This book focuses on the quest for relevance, authenticity and responsiveness. It has a powerful message that should appeal to scholars in the South African education sector. The topics are interesting and the range of topics showcase the issues that are of major importance not just in South Africa, but in other emerging economy countries as well. The book will appeal to all those who desire change, improvements and a move towards excellence in the field of education.

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The search for knowledge about what works in teacher education and in teachers' practice is a daunting knowledge quest that needs consistent inquiry and re-inquiry. This scholarly book connects social justice praxis with service learning, considering that it is to be published in COVID-19 times when service and care will be at the forefront of life in communities and in society as a whole. The book includes family life and teacher mentoring into the authors' search for understanding and knowledge-making. When researchers locate their studies in the harsh reality of school health, learner support and family participation – in the world of everyday life – one has to salute their projects and the institutions where they conduct research for getting to the centre of education of the young, their wellbeing, care and familial support. This book represents responsive research. More of this will be needed when the impact of the COVID-19 pandemic on children's lives at home and in schools, surfaces and when researchers will have to penetrate the reality that goes on behind the masks that children will have to wear.

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