<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Shortcomings in case study research design in master’s dissertations at South African universities</td>
<td>MANDUTH RAMCHANDER</td>
</tr>
<tr>
<td>17</td>
<td>To use electronic assessment or paper-based assessment? That is the question (apologies to Shakespeare)</td>
<td>REHANA MINTY</td>
</tr>
<tr>
<td>28</td>
<td>Inquiry-based approach: Reconstructing the undergraduate teaching and learning space</td>
<td>MAITUMELENG ALBERTINA NTHONTHO</td>
</tr>
<tr>
<td>41</td>
<td>To see someone else’s perspective: A case for digital stories in schools</td>
<td>GAYE PIETERSE AND ROSEMARY QUILLING</td>
</tr>
<tr>
<td>57</td>
<td>Promoting quality learning experiences in teacher education: What mentor teachers expect from pre-service teachers during teaching practice</td>
<td>MOENIERA MOOSA</td>
</tr>
<tr>
<td>69</td>
<td>Exploring and understanding rural teachers’ conceptions of learning and teaching in schools of Acornhoek district, Mpumalanga Province</td>
<td>ANNIE MAFUNGANYIKA AND THABISILE NKAMBULE</td>
</tr>
<tr>
<td>86</td>
<td>Preparing student teachers for teaching in rural schools using work integrated learning</td>
<td>MOEKETSII ELIAS DLMINI</td>
</tr>
<tr>
<td>97</td>
<td>Practitioners’ Corner Perceptions regarding the role of social support in academic achievement of adolescents exposed to violence</td>
<td>LELANIE JUDEEL AND CINDY RAMHURRY</td>
</tr>
<tr>
<td>115</td>
<td>Doctoral Corner</td>
<td></td>
</tr>
</tbody>
</table>
The Independent Journal of Teaching and Learning (IJTL) is an education-focused journal, published twice a year, online and open access [ISSN 2519-5670 (Online)] by The Independent Institute of Education. The aim of the journal is to make a difference to educators at the primary, secondary and tertiary levels. Providing a scholarly forum for academics and education practitioners to share research on teaching and learning. The journal as well as all submission and publication information can be found at https://ijtl.iie.ac.za/

The IJTL is intended to be a resource for education practitioners and researchers as it aims to provide useful, research-based resources and provide a scholarly forum for academics and education practitioners to share in research on educational practices and teaching and learning at various levels.

The following contributions are considered for publication:
- Research-based empirical, reflective or synoptic articles that would be of interest to education practitioners;
- Review articles that critically examine research carried out in a specific field;
- Discussion or advocacy papers suitable for publication, articles for publication in a section entitled practitioners corner;
- Book reviews that comprise a clear and concise evaluation of recently published books.
- The journal accepts Doctoral Abstracts, which include the link to the full text thesis from researchers that have graduated with a PhD/Doctorate in Education in the last two years. These are not peer reviewed and are published in a separate section of the journal.

**Editor-in-Chief**
Professor Dolina Dowling BA; Dip Ed; Dip Sp Ed; APhS; MA; PhD.

**Managing Editor**
Marla Koonin BA Comm; BA Hons Journ (cum laude); MA Journ (cum laude); CPRP.

**Editorial Advisory Board**
Professor Carmel McNaught BSc (Hons); Dip Ed; MEd; PhD.
Professor Andile Mji BSc; HDE; BEd; MEd; DEd.
Professor Michael Glencross BSc; PGCE; BEd; BSc(Hons); MPhil; DPhil.
Dr Felicity Coughlan B SocSc Hons (SW); B SocSc Hons (Psych); MSc; DPhil.

**Publisher**
The Independent Journal of Teaching and Learning is published by The Independent Institute of Education (Pty) Ltd.
ADvTech House
Inanda Greens Business Park
54 Wierda Road West
Wierda Valley, Sandton
South Africa
www.iie.ac.za

**Disclaimer**
The publisher and the editor cannot be held responsible for any consequences arising from the use of information contained in this journal. The views and opinions expressed do not necessarily reflect those of the publisher or the editor.

**Address for correspondence**
Professor Dolina Dowling
Editor-in-Chief
The Independent Journal of Teaching and Learning
PO Box 2369
Randburg 2125
South Africa
E-mail: editor@iie.ac.za
# Contents

**Volume 13 (1) 2018**

1. Notes on contributors

3. Editorial  
*Professor Dolina Dowling*

5. Shortcomings in case study research design in master’s dissertations at South African universities  
*Dr Manduth Ramchander, Durban University of Technology, South Africa*

17. To use electronic assessment or paper-based assessment? That is the question (apologies to Shakespeare)  
*Rehana Minty, University of Johannesburg, South Africa*

28. Inquiry-based approach: Reconstructing the undergraduate teaching and learning space  
*Dr Maitumeleng Albertina Nthontho, University of Pretoria, South Africa*

41. To see someone else’s perspective: A case for digital stories in schools  
*Gaye Pieterse, University of KwaZulu-Natal, South Africa*  
*Rosemary Quilling, University of KwaZulu-Natal, South Africa*

57. Promoting quality learning experiences in teacher education: What mentor teachers expect from pre-service teachers during teaching practice  
*Dr Moeniera Moosa, University of the Witwatersrand, South Africa*

69. Exploring and understanding rural teachers’ conceptions of learning and teaching in schools of Acornhoek district, Mpumalanga Province  
*Annie Mafunganyika, University of the Witwatersrand, South Africa*  
*Dr Thabisile Nkambule, University of the Witwatersrand, South Africa*

86. Preparing student teachers for teaching in rural schools using work integrated learning  
*Moeketsi Elias Dlamini, University of the Free State, South Africa*

97. Practitioners’ Corner  
Perceptions regarding the role of social support in academic achievement of adolescents exposed to violence  
*Lelanie Judeel, BlueRooster, South Africa*  
*Dr Cindy Ramhurry, University of Johannesburg, South Africa*

115. Doctoral Corner

125. List of reviewers
Notes on contributors

Moeketsi Elias Dlamini is a lecturer and coordinator for Initial Teacher Education at the University of the Free State, Qwaqwa Campus since January 2018. Moeketsi graduated his Secondary Teachers Diploma (STD) from Tshiya College of Education in 1995. He furthered his studies and completed the Further Diploma in Education (FDE) with the University of the North in 2001 and studied with the University of the Free State and was awarded a Bachelor of Education (Honours) degree in 2004. He completed his Master’s degree in Higher Education Studies from the University of the Free State in 2017. Moeketsi started his career as a teacher in 1996, at Vierhoek Intermediate School, Welkom, Free State and was appointed a principal in the same school in 2001. He was a deputy principal at Bluegumbosch Secondary School from 2006 to 2012. He began working at the University of the Free State as an officer for Professional Services from 2012 until 2015 before being appointed to his current position.

Lelanie Judeel holds a Master’s degree in Psychology as well as a Higher Education Diploma. She taught in a special needs school in the UK for 10 years and during this time became qualified to teach in the UK. Lelanie is a qualified Research Psychologist, Psychometrist and Counsellor with 16 years of national and international work experience in various roles as a Psychologist, Play Therapist, Career Counsellor, Educational Specialist and Researcher. Her areas of interest are student support, lecturer development, digital pedagogies, instructional design and the use of digital tools in online education. Lelanie is enrolled for her PhD in Educational Psychology focusing on the validation of a digital instructional design model in the education context. Lelanie is currently the COO for BlueRooster, guiding the team to create digital content that is relevant, interactive, flexible and fun. She is a seasoned speaker both nationally and internationally.

Annie Mafunganyika is currently enrolled for a Doctor of Philosophy in Education at the Wits School of Education in the fields of Rural Education and Pedagogical Issues in rural schools. She has in-service work experience as a teacher from 2009-2013. Her research interests are in the Development of Rural Education in South Africa. Furthermore, her research interests extend to researching Curriculum Planning, Policy and Curriculum Reforms; Teacher Development; Knowledge and Curriculum Issues and Pedagogical Issues.

Dr Maitumeleng Albertina Nthontho is a lecturer in the Department of Education Management and Policy Studies, Faculty of Education, University of Pretoria. She serves as a programme coordinator for the BEd Honours in Distance Education. She recently completed a two-year Post-Doctoral Fellowship Programme on ‘Exploring the life world orientation of adolescents in South African schools’ in the
University of Pretoria. Her research interests include Human Rights in Education, School Management and Governance, Democratic Participation in Schools, and Religious Diversity in schools. Her fields of expertise are Education Management and Leadership, Educational Policy, Education Law and School Governance.

Rehana Minty is currently a lecturer in the Department of Applied Information Systems at the University of Johannesburg. She has over 23 years of lecturing and teaching experience. She received her Master’s in Education, cum laude from the University of Johannesburg in 2012. She is currently registered for her PhD in Education at the University of the Witwatersrand that focuses on the teaching and learning of Mathematics in a paperless environment. Her research interests are on the use of ICTs in Education, which includes electronic assessment. In 2015, she registered a community project on the East Rand, which focuses on equipping teachers with computer literacy skills. This community project was born as a result of her findings from her Master’s study that was conducted at selected schools in Ekurhuleni.

Dr Moeniera Moosa has taught for 15 years in Primary Education and was a school principal in Johannesburg. Currently she is a lecturer at the Wits School of Education as well as the B. Ed. Coordinator. She has been the Head of Teaching Experience from 2013 – 2015 at the Wits School of Education. She lectures in Psychology of Education at undergraduate and postgraduate levels. Her research interests are in initial teacher education as well as aggression and bullying. She is a member of the UNESCO chair in Teacher Education for Diversity and Development.

Dr Thabisile Nkambule is head of the Curriculum Department at Wits School of Education. Her research interest includes Teaching and Learning; Rural Education; Pedagogical issues; Literacy and Academic Literacy in Higher Education Institutions; Curriculum Issues; Gender and Women Issues; Sport and Education.

Gaye Pieterse completed her MCom in Information Systems & Technology (IS&T) http://hdl.handle.net/10413/15173 at the University of KwaZulu-Natal in 2012 and was working towards a PhD in Mathematics Education at Rhodes University at the time of her death in 2017. Gaye was first and foremost an educator, with over 30 years teaching experience at primary and secondary school levels. She had a keen interest in exploring a wide range of pedagogic techniques and methods in order to reach all young learners, including exploring the role of digital technology in education. She brought a multidisciplinary approach to all her work.

Rosemary D. Quilling is a Senior Lecturer in Information Systems & Technology (IS&T) at the University of KwaZulu-Natal (School of Management, IT and Governance), South Africa, Durban. She has a keen interest in social computing and emerging technologies; specifically, their use in higher education teaching and learning. Rose enjoys working in the ‘in-between spaces’; enjoying interdisciplinary and collaborative projects. She has 20 years’ experience in higher education and is a recipient of the UKZN Distinguished Teacher award (2015) and the CHE/HELTASA National Excellence in Teaching & Learning award (2016).

Dr Manduth Ramchander is a senior lecturer in the Department of Operations and Quality at the Durban University of Technology. He teaches Operations Management and Project Management.

Dr Cindy Ramhurry holds a PhD in Education, with the issue of power in teaching and learning, being at the core. She currently lectures at the University of Johannesburg, in the Department of Languages, Cultural Studies and Applied Linguistics (LanCSAL). While her main role is that of lecturer, much of this work overlaps with research and curriculum development. Cindy is a scholar who is fuelled by a passion for the empowerment of young people.
The Independent Journal of Teaching and Learning (IJTL) was established as a result of identifying a gap in scholarly publications at all levels of education for researchers, academics, practitioners, and policymakers in South Africa. The aim then, as now, is to provide a forum for reflective education practices and innovation. The incorporation of research articles at the different levels of education in one publication is important. It allows for the system to be viewed holistically. Any education system has to be flexible and dynamic in order to adapt to the ever-evolving needs of society, which are typically driven by new knowledge and innovative technology.

The World Economic Forum Report of 2016 suggests that 65% of children entering primary school now will be employed in jobs that do not yet exist. This has major implications for all levels of education. Exponential technological advances, especially those in the field of artificial intelligence, mean that attributes and skills such as creativity, critical thinking, and complex problem solving are needed in order to flourish. Students also need to learn skills of self-reliance, flexibility, and embrace the joys and rigours of lifelong learning in order to have fulfilled lives, be able to participate successfully in the global economy, and be critically engaged active citizens. These skills and attitudes cannot only be inculcated during higher education study. It is a way of ‘being and doing’ that needs to start at the earliest stages of non-formal, informal and formal learning. This is yet another reason for the journal to continue embracing its bold philosophy of non-segmentation of the education system.

In this first edition of 2018 - 13(1) - the journal boasts an eclectic mix of articles yet all are united in their commitment to enhancing education and the student experience whether it be at the higher education or school level. This can be seen in, for instance, the examining of the robustness of the use of a particular research methodology in master dissertations; the unspoken yet real expectations that teachers have of students in teaching practice; and pedagogical approaches in teaching and learning in both schools and higher education institutions. Of particular importance is the learner in the rural school. If our education system fails at this point, the rural child is severely limited in his or her life choices. This edition underlines the connections between the different layers of education.

The use of appropriate methodology is the cornerstone of rigorous research hence the methodology has to be clearly stated and its use justified. If it is not suitable for the project in hand then the reliability and validity of the results are in doubt. In the first paper, the author is concerned about the rising use of case study methodology in master dissertations and the criticisms surrounding its use. He investigates the robustness of this method using content quantitative analysis with respect to 86 successfully completed
master’s dissertations at three South African universities during the period 2013-2015. He finds that a number of methodological issues need to be addressed if the results of such studies are to be trustworthy. He makes recommendations that include the development and implementation of specific guidelines for case study research to ensure it is fit for purpose.

The next three articles deal with teaching and learning. The use of electronic assessment rather than paper-based assessment in the module End User Computing is the focus of the first. The author concludes there are benefits and disbenefits to both practices and so suggests that a blended method of assessment could be optimal. The need for further studies is acknowledged. In the second of these three articles, the author is concerned about the high number of students who do not complete their higher education studies. She reports on her use of an inquiry-based approach to teaching and learning to address this. The research shows the potential of this method in creating critical thinkers and guidelines for implementation are provided. While the next article explores digital story telling in schools, it could also be of interest to higher education practitioners. The findings show that this approach can foster student reflexivity and critical thinking. Although there are challenges with this pedagogical approach, it is worthy of further investigation.

The following three articles all have implications for teacher education. In the first, a case study is used to determine the expectations that teachers have of students during teaching practice. The findings show that there is a gap between the students’ craft knowledge and teacher expectations. This requires the review of the teacher education programme; its aims and intended learning outcomes as well as providing awareness sessions to schools to ensure alignment of understanding. In the following article the authors conduct much needed research into conceptions of teaching and learning in rural schools. A strong correlation is found to exist between teachers’ conceptions of learning and their conceptions of teaching. This is an area that needs attention. The third article in this cluster deals with teacher education and the underpreparedness of graduating teachers to teach in rural schools. A work integrated learning approach is investigated which results in a number of recommendations being made including those for the teaching education institutions and the Department of Basic Education and education districts.

In South Africa as elsewhere in much of the world, adolescent exposure to violence is a too frequent phenomenon. In their article in Practitioner’s Corner, the authors through a qualitative study explore the role of care and support for such young people so that they achieve academically. Whilst they find positive correlations between good support and achievement, the authors conclude that although support can foster academic achievement there is no generic formula; support needs to be carefully tailored to each individual circumstance for success.

The Doctoral Corner comprises five abstracts of recently awarded doctoral degrees in areas such as: archiving and curation of knowledge, teaching and learning, management models in teacher training colleges, leadership in working class schools, and women leadership in disadvantaged schools. The publication of these alert researchers and practitioners to new research in their areas of interest.
Shortcomings in case study research design in master’s dissertations at South African universities

**Manduth Ramchander, Durban University of Technology, South Africa**

**ABSTRACT**

Case study research entails an in-depth study of contemporary phenomena that is bounded within real life contexts. While it has become popular, particularly in the Social Sciences, it has been plagued by criticisms with regards to rigour. Rigour relates to the trustworthiness of findings, which can be enhanced by, firstly, providing evidence of the rationale used for selecting a case study research design and, secondly, by providing a convincing argument for case selection. Master’s degree dissertations should be no exception and should entail the same degree of rigour as other scholarly outputs. In this article, quantitative content analysis was used to analyse 86 master’s degree dissertations completed by a case study research design at South African universities during the period 2013-2015. It was found that the majority of the dissertations lacked the following: definitions of case study research design; reference to key authors; rationale for selecting a case study research design; and reference to topologies employed for case selection. This study highlights the methodological issues that arise, the need for more rigour to be demonstrated by master’s students and a greater degree of guidance to be provided by supervisors about case study research design. It is recommended that faculties develop specific guidelines to address the gaps regarding case study research design.

**Keywords:** case study, case selection, rigour, research design, topologies

**INTRODUCTION**

‘Using case studies for research purposes remains one of the most challenging of all social science endeavours’ (Yin, 2009: 3). Case study research has become popular amongst qualitative researchers, in particular in the Social Sciences (Starman, 2013). However, it is important that such research is undertaken with rigour which should be evidenced in the research report (Casey, Shaw & Murphy, 2013). To the contrary, Tight (2010) posits that many studies featuring the phrase ‘a case study of’ in their titles may have been completed with minimal reference to literature on case study research. In this regard, Yin (2009, 2014) postulates that the lack of rigour evidenced in case study research is possibly the result of the scarcity of methodological texts to guide the researcher, when compared to those available for other research strategies.
Research practice regarding the methodology used in master’s degree dissertations, at South African universities, employing a case study research design, has not been previously evaluated. The aim of this study is to explore the rigour of case study research design in master’s degree dissertations within the Social Sciences at South African universities. The objectives of the study were to establish the extent to which: in-text reference was made to case study authors; rationale was used for selecting a case study research design; and, criteria were used in case selection. These objectives were developed after taking into consideration the critical elements of case study research, which was informed largely by the contributions of the two foremost writers on case study research design: Yin (2009, 2012, 2014) and Stake (2005). The objectives were also shaped by a previous study (Hyett, Kenny & Dickson-Swift, 2014) with the difference in this study being that master’s degree dissertations instead of journal articles were analysed.

This article begins with a literature review of the definitions of case study research design, which is followed by the contextualisation of case study research design as part of the qualitative research approach. The elements of rigour and topologies used for case selection are then discussed. The literature review concludes with a discussion on the teaching of case study research design. This is then followed by a discussion of methodology and an analysis of the data set. Finally, conclusions are reached and recommendations are made.

**LITERATURE REVIEW**

Two authors, Yin and Stake, have been frequently identified as the principal writers on case study research (Brown, 2008; Baxter & Jack, 2008; Tight, 2010). Yin (2009, 2014) defines case study research design as the in-depth investigation of contemporary phenomena, within a real-life context, by making use of multiple evidentiary sources that converge on the same series of issues. The various other definitions which are similar, include the in-depth study of: contextually bounded phenomena (Knobel & Lankshear, 1999); phenomena, within their real-life context (Gomm, Hammersley & Foster, 2000; Cohen, Manion & Morrison, 2007); and multi-faceted, naturally occurring phenomena that occur in a context (Baxter & Jack, 2008; Jacklin, 2011). The plethora of definitions for case study research design clearly has a number of common elements, which can simply be summarised as being an in-depth study of contemporary phenomena that is bounded within real-life contexts. These definitions resonate more with the qualitative research approach than the quantitative research approach. Hence, Denzin and Lincoln (2011) categorise case study research design as a distinct qualitative research approach.

Drawing upon the contributions of a number of authors, qualitative research can be comprehensively summarised as the collection of data by interacting with selected individuals in their settings (Neil, 2007) to gain insight into their attitudes, behaviour and views (Richie & Lewis, 2003), in such a manner that the idiosyncrasies (Neil, 2007) and complexity (Stake, 2005) of the situation can be grasped, thereby providing a comprehensive perspective of a particular phenomenon (Babbie, 2010). Qualitative research, therefore, demands a high degree of rigour to assert the trustworthiness of findings (Saumure & Given, 2012).

Qualitative researchers, in pursuit of trustworthiness, often seek to satisfy the following four criteria, as identified by Guba (1981): dependability, confirmability, transferability and credibility. Dependability relates to the measure to which the rationale and methodological decisions are reported or provides an audit trail, thereby enabling the study to be replicated (Casey et al., 2013). Confirmability relates to the accuracy and neutrality of the data (Tobin & Begley, 2004). Using reflexivity, the researcher explains how personal biases, philosophical positions, experiences and perspectives have been accounted for (Noble & Smith, 2015). Transferability refers to the extent to which sufficient contextual information is reported in the research report to generalise the findings to other situations (Shenton, 2004).
Credibility refers to how believable findings are (Lincoln & Guba, 1985) or the extent to which the findings are congruent with reality (Merriam, 1998). Case study research design has been frequently debated with regard to its credibility (Hyett et al., 2014). Case study research design undertaken without sufficient detail with regard to rationale may be interpreted as lacking credibility (Morse, 2011). For instance, in their study of 34 articles, in the fields of health, social sciences and anthropology, published in three high impact qualitative methods journals, Hyett et al. (2014) found that in 26 of them, virtually no reference was made of the foremost case study authors and in some cases:

(i) no justification or rationale was provided for using a case study design
(ii) there were very few in-text references for case study research design
(iii) there was an insufficient description of why the case was selected.

There should be some rationale for selecting a case study research design as opposed to other research designs. In this regard, Asimiran & Njie (2014: 37) assert that a case study research design is ‘necessitated by the specificity of the case which is informed by its boundedness’. In other words, a case study research design is not by choice on the part of the researcher but is rather dictated by the context within which the phenomenon of interest is bounded. According to Yin (2009), case study research would be most appropriate or should be considered when the focus is on answering ‘how’ and ‘why’ questions; the contextual conditions are pertinent to the phenomenon being studied; and the boundaries between the context and phenomenon are unclear. Such a rationale would be in synchrony with the various definitions of case studies discussed earlier.

Case study research design has often been classified according to the following two categories: purpose and type (Asimiran & Njie, 2014). For instance, the three purposes of case study research as described by Yin (2009) are:

(i) explanatory: where the focus is on seeking to find answers to questions around causal links within real-life phenomena
(ii) exploratory: to explore situations where the outcomes for the phenomenon are unclear
(iii) descriptive: used to describe the phenomenon of interest.

The approach selected for a particular study should be aligned to and determined by the research objectives (Yin, 2014), which would map the rest of the study.

Stake (2005) emphasised that the type of case selected depends upon the purpose of the study and the researcher needs to present a convincing argument for case selection (Merriam, 2009). The topologies for case selection evidenced in the literature can be summarised as follows:

(i) A purposefully or analytically selected case is selected by virtue of being unique, deviant or extreme (Patton, 2002; Yin, 1994; Flyvbjerg, 2011; Gerring, 2008), revelatory (Yin, 1994), critical (Yin, 1994), intense or rich in information (Yin, 1994; Stake, 2005; Patton, 2002), an outlier or key case (Thomas, 2011a).
(ii) A typical case is representative of the broader set of cases that it is selected from and can be best described as being average or normal (Patton, 2002; Gerring, 2008).
(iii) An intrinsic case focuses on one specific phenomenon with the source of interest being rarity or uniqueness, the focus of which is on the particulars of one specific phenomenon (Willig, 2008). There may be an intrinsic interest focusing on understanding the case (Johansson, 2003) with the intent to have a better understanding of the case (Stake, 2005) rather than seeking generalisations (Johansson, 2003; Willig, 2008) and the purpose is not to understand abstract constructs, generic phenomena or to build theory (Stake, 2005).

(iv) An instrumental case involves more general phenomena where the case is not of primary interest and serves a supporting role to facilitate an understanding of phenomena (Stake, 2005; Yin, 2009).

It is apparent that within the topologies mentioned above, there are clear dichotomies that could serve as robust guidelines to case selection, thus contributing to the credibility of the research design. In this study, the extent to which topologies were used as a basis for case selection was evaluated.

Arising from their study, Hyett et al. (2014) contend that case study research design needs to be further developed with regard to issues relating to methodological credibility. It is common practice for teaching, in a research methodology course, to be aligned to a prescribed text, and generalist texts afford only limited opportunity for those master’s degree students who wish to pursue their studies via a case study research design. Gerring (2008) noted that case study research continues to receive very little attention in literature pertaining to methodology. Mills, Durepos and Wiebe (2010) found that very few books approach case study research design as the main theme. In this regard, Tight (2010) interrogated many research methodology texts and concluded that some texts barely mention case study research while others devote just a few pages or make a brief reference to it at the end of a chapter.

Due to the minimal attention that is paid to case study research design, Zucker (2009) developed a useful guide for teaching case study design in the research methods curriculum for Humanities and Social Sciences, which focuses on the rationale, data collection, management, analysis and establishing rigour. Thomas’s (2011b) publication ‘How to do your case study: A guide for students and researchers’ which was reviewed by Pierce (2014), was found to be helpful in providing the researcher with a comprehensive and valuable guide. Another useful text, Rule and Vaughn’s (2011) book ‘Your guide to case study research’ which incorporates African and South African contexts and exemplars, was reviewed by Naicker (2013) who found it to provide a stepwise guide to executing case study research.

METHODOLOGY

The lack of rigour evidenced in the journal articles in the study undertaken by Hyett et al. (2014) was used as a point of departure to focus the objectives of this study, by building on what has already been done and by extending the focus to master’s degree dissertations. Research practice regarding the methodology used in master’s degree dissertations, at South African universities, employing a case study research design, has not been previously evaluated. In this descriptive study, a quantitative methodology was adopted wherein data were collected through documentary analyses (master’s degree dissertations). The aim of this study was to explore the rigour of case study research design in master’s degree dissertations within the Social Sciences at South African universities.

The South African public higher education landscape currently comprises 26 universities and in 2014, the total student population was 969 165 with about 5.5% of the students registered for master’s degrees (Department of Higher Education and Training, 2016). In this study, masters’ degree dissertations in the
Social Sciences at South African universities, featuring the phrase ‘a case study of’ in their titles, were analysed.

According to the Quacquarelli Symonds World rankings, the top four South African universities, based on academic reputation in 2015, were the University of Cape Town (UCT), University of Witwatersrand (WITS), Stellenbosch University (SUN), and the University of Pretoria (UP). Secondary data were accessed through the institutional repository or research space of the identified universities where full-text versions of all completed dissertations were located. The search for the relevant dissertations was executed using the embedded search function in the respective portals, using the keywords ‘case study of’ in titles for the period 2013 to 2015. The years were selected on the basis of being most recent with completely updated datasets. WITS was excluded from this study, as no dissertations satisfying the search conditions could be located in its institutional repository. Eighty-six master’s degree dissertations that met the criterion were identified.

In this study, only the methodology chapter of the dissertations was subjected to quantitative content analysis. Hsieh and Shannon (2005: 12) define content analysis as ‘a research method for the interpretation of the content of text data (usually of Keywords or content) through the systematic classification process of coding and identifying themes or patterns’. By using prior research or theory, researchers identify key variables as coding categories (Rose, Spinks & Canhoto, 2015). The coding categories for this study were guided by those used in a previous related study by Hyett et al. (2014), due to a similar phenomenon, which was investigated. For this study, the identified categories included: whether case study research design authors were cited (Table 1), whether the rationale used for employing a case study research design was mentioned (Table 2) and whether topologies of case study were used for case selection (Table 3). These categories have been unpacked in the literature review.

Depending on the manner in which the text in the dissertations was written, the process entailed the extraction of objective content from texts, but in a few other cases, it entailed the extraction of themes that were more latent in the texts. For example, in one case, for the objective content ‘contextually bounded’, it was stated in a more latent form as ‘the problem can only be understood when the circumstances under which the phenomenon manifests itself is considered’. Such latent content was not overlooked and was considered to convey the same information as the objective content for the particular category. However, the contribution of latent content to the data was minimal (two cases in one dissertation from UCT and one case each in three dissertations from SUN).

The limitation of this study was that it was restricted to the analysis of master’s degree dissertations in the Social Sciences. Hence, the findings cannot be generalised to other disciplines.

**RESULTS AND INTERPRETATION**

A total of 86 dissertations were identified for analysis (37 from UCT, 25 from UP and 24 dissertations from SUN). Methodology refers to the framework for the paradigm within which the study is conducted and maps the way in which subject matter can be investigated within a discipline (Samkange, 2012). It would therefore be expected that any study that employed a case study research design, would include a definition or, at the very least, an explanation of what case study research design entails. Figure 1 illustrates the number of dissertations that furnished a definition for case study research design.
By way of counting, only 15 (17%) of the dissertations provided a definition for a case study research design. The same pattern was observed at UCT (7 out of 37 or 19%), UP (5 out of 25 or 20%) and SUN (3 out of 24 or 13%). Hence, it was found that the majority of the dissertations did not furnish definitions of a case study research design.

Possible reasons for the lack of rigour in this regard could relate to the issue raised by Yin (2014) regarding the scarcity of methodological texts regarding case study research design. Despite the plethora of definitions for case study research design, their distribution in generalist methodological texts are rather limited and feature in texts that deal specifically with case study research. It is therefore imperative that for those students who intend on pursuing a case study research design, an addendum of support material be made available, including a list of texts that focuses primarily on case study research design. Due to there being a limited number of such texts, the list will be exhaustive and should constitute a ‘must read’ list. While it could be argued that it is the duty of the student to undertake appropriate readings, the risk of the student overlooking key readings is a real one, given the availability of numerous generalist texts on methodology.

Webb and Kevern (2000) recommend that seminal authors be cited in the methodology. Table 1 provides a summary of the extent to which the primary and secondary authors were cited in the methodology section of the dissertations. The data were extracted by way of counting whether an author was cited in the methodology section of the dissertations. If an author was cited once or more than once, then the author was counted only once.

<table>
<thead>
<tr>
<th>Primary authors</th>
<th>Secondary authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>7</td>
</tr>
</tbody>
</table>
For the purposes of analysis, the first group of authors (Yin and Stake) have been categorised as the primary authors and the second group as secondary authors in view of the works of the former group being primarily about case study research and the works of the latter group being generalist texts. There were 34 counts of reference to primary authors. There was a total of 39 (45%) citations of secondary authors in the 86 dissertations. Ten dissertations did not cite any of the primary or secondary authors. Hence, it was found that the majority of dissertations did not cite key authors on case study research design.

The norm, in academic writing, is that seminal authors are referenced and the expectation is, therefore, that either primary or secondary or both groups of authors are cited in a study that follows a case study research design. It would therefore appear that the shortcoming that was identified by Hyett et al. (2014) regarding the lack of reference to the foremost authors on case study research, manifests itself in master’s degree dissertations in the Social Sciences as well.

When embarking on case study research, there should be some rationale provided for choosing a case study research design over other types of research design and the rationale provided should be in resonance with the various definitions of case study research design. The coding for the rationale for employing a case study research design comprised the dimensions, as indicated in Table 2, which was created by drawing from the elements of the various definitions discussed earlier.

Table 2: Rationale for employing a case study research design

<table>
<thead>
<tr>
<th>Rationale for a case study research design</th>
<th>Contextually bounded</th>
<th>Contemporary</th>
<th>Complexity (multifaceted, multi-perspective)</th>
<th>In-depth insight</th>
<th>Natural setting</th>
<th>Multiple sources of evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>10</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

The data were extracted by counting whether each dimension was mentioned. If the dimension was mentioned more than once in a dissertation then the count was recorded as 1. In a few cases (5), the dimensions were not stated as per the identified categories but included phrases that were deemed to convey the same information as the dimensions and were counted. Only 13 of the dissertations approached the issue of rationale directly. Hence, it was found that the majority of the dissertations did not make mention of the rationale employed for embarking on a case study research design, therefore undermining the trustworthiness, in particular dependability, of the studies.

Interestingly, despite the small number of the dissertations where a rationale was provided, all of them made reference to the phenomenon under study being contextually bounded, requiring in-depth insight, within a natural setting and drawing upon multiple sources of evidence. Ten of them also made reference to the complexity and contemporariness of the phenomenon. These students demonstrated an exemplary understanding of the rationale needed to be employed in case study research design and, therefore, may be good examples to follow and could be included in teaching research methodology curricula as good exemplars.

When one embarks on a case study research design, it is vital that the research purpose and the reason for case selection be explained. Table 3 illustrates the extent to which the research purpose was considered and topologies of a case study design were employed in case selection.
Table 3: Research purpose and topologies used for case selection

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Topologies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>explanatory</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Sixty-four (74%) of the dissertations were silent on the issue of the purpose of the study, thereby undermining rigour. Twenty-two of the dissertations gave an account of the purpose of the study. Hence, it was found that the majority of the dissertations did not give an account of the purpose of the study. However, it should be noted that this problem is not necessarily limited to case study research design and is a general problem in postgraduate research-based studies.

Six dissertations made reference to topologies used in case selection, with two being purposely selected, four being selected on the grounds of being instrumental and none were chosen on the grounds of being intrinsic or typical. Eighty (93%) made no reference to topologies used in case study selection. While the literature review was deemed to have saturated the search for topologies used in case selection, it was considered possible that the identified topologies may not have been necessarily exhaustive. However, no other topologies surfaced when the texts of the methodology sections of the dissertations were analysed. While no other topologies were identified, those, which were noted, gave reasons such as ‘ease of access to the study site’, ‘due to economic reasons’, ‘for convenience’. These were not considered to be valid topologies for case selection as they were viewed as the prioritisation of the needs of the researcher instead of prioritising the case.

It was concluded that the majority of the cases were selected without taking into account criteria for case selection, which undermines the credibility of the research, due to the topologies mentioned in this research or similar or any other topologies not being employed. It is conceivable that researchers may choose cases based on ease of access rather than on the criteria discussed above – an area that warrants further research. Cases are typically accessed through individuals occupying positions of authority within organisations (Bell, 2003; Berg, 2004) and individuals (friends, relatives, colleagues and others) who may vouch for a researcher. Seawright and Gering (2008) posit that researchers tend to lean on practical considerations such as time, money and ease of access. While these may be legitimate factors in case selection, from the researcher’s perspective, they do not provide justification for case selection from a methodological perspective.

CONCLUSIONS AND RECOMMENDATIONS

While a dissertation may provide evidence of scholarly achievement, the process involved in producing the dissertation constitutes a socialisation process into the academic community and validates a student’s entry into the academic community, setting the stage for future scholarly efforts. The pursuit of a master’s degree extends beyond the mere attainment of a qualification and the researcher has to firstly contribute to disciplinary knowledge and, secondly, communicate the contribution to the scholarly community, hence, the need for the research output to be robust and rigorous.

This study concludes that the majority of master’s degree dissertations did not define case study research design; did not cite the seminal authors on case study research design; did not provide a rationale for undertaking research by a case study research design; and did not make mention of criteria or topologies employed in selecting cases. This article highlights the shortcomings and challenges in employing a case
study research design and brings into question the credibility of master’s degree dissertations undertaken by case study research design. It also highlights the need for more rigour to be demonstrated by master’s degree students undertaking research and a greater degree of guidance to be provided by supervisors about case study research design.

The findings of this study of master’s dissertations, largely, mirror the findings of the study conducted by Hyett et al. (2014). Causes for concern are that in the latter articles that have met the bar of peer review in high-impact journals were found to be lacking in rigour, and in this study, dissertations that passed the scrutiny of an external examination process were found to be lacking with respect to methodology, thus lending strength to Yin’s (2014) claim regarding the lack of rigour in case study research design.

In the short-term, it is recommended that specific guidelines be developed within faculties to address the gaps regarding case study research design. The guidelines should be shaped by giving consideration to the rationale to adopt a case study research design, purpose of the research and criteria used for case selection. A checklist should be developed according to the main headings of rationale, purpose and criteria for case selection. Each main heading could then be further divided in sub-categories against which checks could be made.

The sub-categories for rationale would be contextually bounded, contemporary, complexity, in-depth insight, natural setting and multiple sources of evidence. The sub-categories for purpose would be explanatory, exploratory, and descriptive. The sub-categories for criteria for case selection would be intrinsic, instrumental, purposeful and typical. By having such a check list and ticking off against the appropriate sub-categories, students would then be able to ensure that they have covered the critical elements of case study research design.

Such guidelines could be incorporated into existing research methodology modules and research methodology workshops and they could serve as a readily available guide to students and supervisors. In the long-term, publishers should take note of the shortage of appropriate texts in case study research design and consider commissioning publications to address this gap.

It is also recommended that supervisors make available to their students:

(i) a list of recommended texts on case study research design (the majority of them already appear in the reference list of this article)
(ii) exemplars of good case study research design methodology (previous students’ efforts)
(iii) a list of readings (journal articles) pertaining to case study research.

Master’s degree dissertations are subject to examination by examiners whose competency to undertake such a task is sanctioned by faculty research committees at universities. It is recommended that in instances where master’s degree dissertations are undertaken by case study research design (with the words ‘a case study of’ in the title), examiners who have expertise in case study research design be appointed. This may require a more focused assessment of the curriculum vitae of nominated examiners to ascertain whether the potential examiner has the necessary expertise to undertake the examination.

This study contributes to the field of research methodology by (i) responding to the notion of a deficiency in the understanding of case study research design; (ii) casting light on any shortcomings in research done by case study design; and (iii) suggesting strategies to enhance rigour in case study research design.
REFERENCES


To use electronic assessment or paper-based assessment? That is the question (apologies to Shakespeare)\(^1\)

Rehana Minty, University of Johannesburg, South Africa

**ABSTRACT**

This investigation, conducted in a Higher Education Institution (HEI) aimed to compare the results of an electronic assessment with a paper-based assessment on MS Excel in the module End User Computing (EUC) that equips students with the necessary computer literacy skills for the workplace. Three hundred and thirty-seven (337) students registered for the module EUC participated in this investigation. Students wrote two assessments, namely an electronic assessment followed by a paper-based assessment in a controlled environment. The same concepts were assessed in both assessments. The results of each assessment were captured and compared to establish how students performed in each of the assessments. What was evident in this investigation at one HEI, is that more students passed the paper-based assessment when compared to the electronic assessment. Both the merits and demerits of the electronic and paper-based assessments were highlighted, thereby concluding that neither method is superior to the other. Consequently, a ‘blended’ method of assessment is recommended since one method of assessment complements the other. Additionally, the blended method of assessment accommodates students with diverse abilities, thereby eliminating the possibility of disadvantaging some students. This investigation despite its limitations could pave the way for more in-depth studies to be conducted.

**Keywords:** assessment, electronic assessment, paper-based assessment, End-User Computing, computer literacy skills, blended approach

**INTRODUCTION AND BACKGROUND TO THE INQUIRY**

Technology dominates life in the 21st century, every facet of life whether it be education, work, home or play is currently a significant aspect of education. There is a variety of computer software that may be used as an alternative to teaching and learning in a traditional classroom, such as computer software that allows the user to interact with the subject content, to gain the requisite computer literacy skills (Varank, 2006). Similarly, lecturers choose to use computer-based assessment tools to assess basic computer literacy skills. Initially, computer literacy was defined as the knowledge and skills that an individual should have about computers to operate proficiently in society (Halaris & Sloan, 1985 in Masouras & Avgousti, 2010). However, a more recent definition is provided by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA, 2005: 2) who define computer literacy as ‘the ability

\(^1\) Date of submission 28 March 2017
Date of review outcome 30 August 2017
Date of final acceptance 11 November 2017
of individuals to use ICT appropriately to access, manage, integrate and evaluate information, develop new understandings, and communicate with others in order to participate effectively in society. The use of ICTs in Higher Education Institutions (HEIs) is integral to teaching and learning and for students to function competently in society and the workplace. Consequently, it is incumbent upon HEIs to ensure that students entering the workplace have the requisite computer literacy skills.

MS Excel is a component of the End User Computing (EUC) module at a selected HEI and is a compulsory module for a number of qualifications. This module focuses on basic computer literacy skills such as Word Processing, Spreadsheets, Presentations and Databases. Assessment is compulsory to ascertain whether students have attained the above-mentioned computer literacy skills. According to Mohamad, Dahlan, Talmizie, Rizman and Rabi’ah (2013: 191) ‘competence expects a person to be able to exhibit a hands-on expertise with a software application’. Competence is determined through assessments. Assessments may be conducted using either the paper-based assessment method or an electronic assessment, thereby affording students the opportunity to ‘demonstrate their competencies in the given tasks’ (Mohamad et al., 2013: 191). For this module, all assessments are conducted with the use of an electronic testing tool. Consequently, the intention of this investigation was to compare the results obtained by students who wrote both an electronic assessment and a paper-based assessment that assessed the same MS Excel concepts, to determine whether assessments for this module should be solely electronic, paper-based or blended. For the purpose of this paper it is necessary to distinguish between a paper-based assessment and an electronic assessment.

A paper-based assessment is a question paper (hard copy) that is distributed to students during an assessment, requiring them to answer the questions using a software program, in this case MS Excel. The student’s document is saved on a removable storage device, which is later marked by a lecturer. However, with electronic assessment, an electronic assessment tool is used, in the form of a software program that assesses students’ computer skills in a simulated environment which presents ‘only limited functionality to the user’ (Masouras & Avgousti, 2010: 4). Limited functionality with regard to this online assessment tool is that the student has to know on which tab the icon is found and if s/he clicks for example, on another tab, this will be recorded as one submission attempt. At this particular HEI, students are allowed only three attempts per question in an electronic assessment for the EUC module. If the electronic testing tool limits this functionality of allowing the student to browse the different tabs to find the solution, this could be disadvantageous to the student because in a ‘live’ environment in MS Excel, the student is allowed unlimited attempts to search for the appropriate icon to answer the question.

Since lecturers are able to gauge through assessments whether learning has taken place or not, assessment forms an integral part of teaching and learning in HEIs. The use of technology in assessment could assist lecturers to re-examine their teaching and learning methods, as well as to introduce new or innovative methods of assessing students. However, a variety of assessment strategies should be used to ascertain whether learning has taken place or not. Since technology may be used to enhance students’ learning experiences, it is imperative that assessors take cognisance of this when including the use of technology in assessment. Phillips (1998 in Coetzee 2009: 27) contends that ‘a sound pedagogical basis must be in place for the application of technology to succeed. We must not let the media limit our approaches; technology without pedagogy is nothing’. The teaching and learning centre at Macquarie University (2011) supports this claim and points out that when technology is used in assessment, it is necessary to plan carefully and manage the assessment because the assessment should focus on improving learning while being cognisant of not placing students with disabilities at a disadvantage. Although electronic assessment is recommended, there are both advantages and disadvantages experienced by both students and lecturers.
An advantage of an electronic assessment is that lecturers find compiling an electronic assessment easier as questions are selected from a database. Since questions are selected from a database, the time spent on compiling an electronic assessment is reduced when compared with compiling a paper-based assessment, which requires a lecturer to formulate questions as well as structure and compile the assessment on paper. In addition, on completion of an electronic assessment, results are available immediately to both students and lecturers as the electronic testing tool is responsible for marking the assessment. However, assessing students using the paper-based method of assessment is labour intensive and time-consuming as each assessment has to be marked manually by the lecturer. According to this particular HEI’s assessment policy, results should be published within seven to 10 working days from the date of the assessment. Rising student numbers per module would increase the pressure and workload on lecturers to mark the paper-based assessments during this specified time. Electronic assessments on the other hand give rise to an easier assessment process especially when dealing with large student numbers and could reduce the workload of lecturers since the electronic testing tool marks assessments. However, Bull and Danson (2004: 4) caution that electronic testing tools are ‘not a panacea for rising student numbers and marking overload though if used appropriately, it can support and enhance student learning in ways which are not possible with paper-based assessments’. In addition, when lecturers mark a paper-based assessment, there is a possibility that subjectivity may influence the marking whereas if an electronic assessment tool is used, subjectivity is eliminated.

Capturing of results when using an electronic assessment tool is also advantageous to the lecturer (Chalmers & McAusland, 2002). The results of an entire class may be exported from the electronic assessment tool into a spreadsheet in a matter of seconds whereas the results of individual students from a paper-based assessment have to be captured ‘manually’ on a spreadsheet, this exercise is time-consuming and the possibility of the occurrence of errors while capturing results, exists (Chalmers & McAusland, 2002). Additionally, with electronic assessment, feedback in the form of an automated report is available to each student on completion of the assessment, also allowing lecturers to identify ‘at risk’ students as early as in the first assessment task (Conole & Warburton, 2005). Consequently, lecturers prefer the use of electronic assessment tools to conduct assessments since electronic assessment tools do not require much effort on the part of the lecturer (Coetzee, 2009).

Despite electronic assessments having advantages, lecturers at this HEI need to take cognisance of the fact that the intention of assessment in EUC is to establish students’ competence levels and whether the necessary module outcomes have been achieved. It is therefore imperative that lecturers take into consideration the aims of assessment and that ‘academic aims determine the framework of assessment that is adopted and not vice versa’ (Chalmers & McAusland, 2002: 5). Another important aspect to consider when deciding to use electronic assessments is ‘although in many cases these systems appear to be impressive and resemble to a very high degree to the actual application software, a closer look immediately reveals their limitations’ (Masouras & Avgousti, 2010: 4). The initial limitation identified in this particular electronic testing tool is that there is only one question per concept in the database. Consequently, a lecturer has no choice but to repeat the question in consecutive assessments that the student may be required to write because of admission to a sick assessment, supplementary assessment or a special assessment. This begs the following question: ‘Did the student pass the module because of the repetition of the questions or did s/he understand the concepts being assessed?’

In a paper-based assessment, the student is required initially to determine the correct function in MS Excel to use in order to answer the question before typing or inserting the function. Whereas, in the electronic assessment, the actual function name is visible to students using the ‘show task list’ on the screen (see Figure 1 below, questions 6 and 7). This task list indicates to students exactly which function to use in MS Excel to answer a question. This implies that the use of the electronic testing tool does not require any cognitive function but the mere application of the listed function. The fact that the questions in the electronic
assessment informs students which functions to employ is not a true reflection of what is required in the workplace. Consequently, the electronic assessment method may not adequately prepare students for the workplace.

Figure 1: Screen layout in an electronic assessment tool

As mentioned previously, yet another limitation is that students are not allowed the opportunity to browse the different tabs in order to find the correct icon or solution to a question in an electronic assessment. The paper-based assessment, which closely replicates the work environment, is more beneficial in preparing students for the workplace because they will have to decide for themselves the appropriate functions to use. Additionally, Harding and Raikes (2002) add that assessments and learning should be effected within an identical educational environment for summative assessment to be authentic. In this regard, the paper-based assessment replicates the teaching environment. It is therefore advisable that before an assessment method is chosen, the advantages and disadvantages of each assessment method, which are the paper-based assessment and the electronic assessment, be considered.

The rationale for conducting this study emanated from numerous concerns voiced by both students and lecturers regarding the ‘difficulty and unfairness’ of electronic assessments. Students were of the opinion that electronic assessments were unfair and difficult because they were not allowed to browse the different tabs to answer the questions as they were taught during lectures and were only permitted three attempts to answer each question. Additionally, if the duration of the test was for example, 60 minutes and the student completed all attempts per question in less than the allotted time, the test would ‘shut down’ and the result of the assessment would appear on the screen, giving students no time to peruse or change their answers. In contrast, a paper-based assessment would allow students to browse and utilise the full time allocated to the assessment. Lecturers who teach this module at this HEI concur with the students regarding the unfairness
and difficulty of electronic assessments. Furthermore, since the majority of the students registered for the EUC module are second language speakers of English in this HEI, and English spoken in South Africa is Standard South African English, students may encounter difficulty comprehending the requirements of the electronic assessment tool, which uses American English. Additionally, in an electronic assessment, certain concepts may be assessed using the ‘fill in the blanks’ method of questioning where students are required to type an answer. In the event of the student misspelling the concept, the electronic assessment tool will mark the answer as incorrect because of the spelling error. Regarding spelling errors in students’ answers, a lecturer in the paper-based assessment may be more flexible and disregard incorrect spelling. Lecturers also claimed that students who had failed the electronic assessment could have improved their results had they been given a paper-based assessment instead. Bearing the above concerns in mind, this investigation was conducted at an HEI and attempted to examine the veracity of these concerns. The sample was chosen from the population of students registered for the EUC course at the selected HEI.

Sample of participants
The sample included 337 participants and comprised part-time students from the workplace as well as full-time students, who are currently registered for the EUC module. No specific criteria were used in the selection of these participants regarding gender, age or race. The only criterion was that they had to be registered for the EUC module.

METHOD OF DATA COLLECTION
This investigation compared two types of assessment methods which focused on assessing the acquisition of skills on a particular component in the EUC module. Students’ results from an electronic assessment and a paper-based assessment were compared looking for similarities and differences, thereby highlighting the advantages and disadvantages associated with each assessment strategy. The paper-based and the electronic assessment comprised 50 questions each and the duration of each assessment was 75 minutes. Both assessments focused on identical concepts, thereby enabling the comparison of the results obtained in each assessment. The electronic assessment was conducted first as the electronic assessment tool does not allow the student to search for answers to a question, however, to reiterate, students were allowed only three attempts to answer each question in an assessment. On completion of the electronic assessment, the same students proceeded to complete the paper-based assessment. Both assessments were conducted in a controlled environment with two invigilators per venue. A controlled environment was necessary to ensure that students did not have access to any assistance and there was no time lapse between the two assessments, namely the electronic and paper-based. This controlled environment was necessary to prevent participants from consulting sources for assistance. Once the results were available, the data were analysed.

ANALYSIS OF RAW DATA
Initially, the results for both the assessments were analysed by assigning a ‘pass’ or ‘fail’ to each student’s result. At this HEI, a student is required to attain 50% or more to pass an assessment. The analysis revealed that 194 students passed the electronic assessment whereas 202 students passed the paper-based assessment, indicating that the pass rate for the paper-based assessment was higher when compared to the electronic assessment. On further investigation, the results revealed that 57 students, who had failed the electronic assessment, had passed the paper-based assessment, whereas 44 students who failed the paper-based assessment had passed the electronic assessment. An explanation as to why more students failed the electronic assessment than those who failed the paper-based assessment is discussed below. Additionally, the competence levels of those students who failed the paper-based assessment but passed the electronic assessment is of concern and perhaps the discussion that follows could shed light on these issues.
To reiterate, in order for the student to attain the correct answer in an electronic assessment, s/he should know exactly on which tab in MS Excel as well as on which icon on the ribbon to click. Additionally, the electronic assessment currently used at this HEI allows students three attempts at answering a question. If students do not answer the question correctly on either of the first two attempts, the message as displayed in Figure 2 below, appears on the screen.

![Figure 2: Results box in electronic assessment tool](image)

The above message ‘Answer Incorrect’ indicates to the student that the choice of method used to answer the question was incorrect. Consider the following example of a question on MS Excel from an electronic assessment; ‘Change the font color of the selected text to standard blue’. In the electronic assessment, the student may click on the ‘Fill Color’ icon on the home tab. Since this is not the correct icon to answer the question, the above box as indicated in Figure 2 will appear on the screen. Consequently, the student has the option to use another method or icon in the second and third attempts. The student is aware that another icon that refers to colour may be used and will therefore use the ‘font color’ icon. In this case, the student is directed to the correct answer, as there are only two icons on the ribbon that refer to colour, indicating that the student did not understand the difference between the concepts pertaining to colour. However, in a paper-based assessment, if the student had to follow the identical steps to answer the question, there will be no prompt by the computer to use another method if the ‘fill color’ icon was chosen initially.

Additionally, an instruction like ‘Bold the selected text’ which is a sample question from the electronic assessment tool only assesses whether the student can click on the bold icon, whereas in a paper-based Excel test the student should first select the text before clicking on the bold icon. This instruction as assessed in the electronic testing tool once again requires no cognitive effort on the part of the student as it is merely a ‘mechanical’ exercise. Whereas, in a paper-based assessment, students must first know how to select the text before they can click on the bold icon. In addition, in paper-based assessments, students are able to return to their answers to revise or change accordingly if they realise that they have answered the question incorrectly (Masouras & Avgousti, 2010). What is important to note is that there is no prompt, as indicated in Figure 2, in a paper-based assessment to indicate to students that they have clicked on the wrong icon. Consequently, a paper-based assessment is more authentic since the teaching environment is replicated as well as highlighting the necessary skills that are required in the workplace.

Another drawback of the electronic testing tool is evident in the explanation that is based on Figure 3 below.
Above is a spreadsheet that comprises instructions that may be found in both, a paper-based assessment and an electronic assessment. In the comment column in Figure 3 above, students are required to ‘type’ the appropriate function to insert the comment ‘excellent profit’ if the value in the profit (box) column is greater than R10. If the value is R10 or lower in the profit (box) column, students are required to leave the cells in the comment column blank. The appropriate solution to such an instruction in the electronic assessment tool that specifically requires the student to type the function, is as follows: =IF(H5>10,”excellent profit”,””). If the student does not type “is equal to (=)”, then this is not regarded as a calculation in MS Excel. If s/he does not use a comma (,) to separate the three different sections as indicated in the above solution or leaves out a comma (,) the attempt is marked as incorrect. Additionally, to leave a cell blank the student needs to know that the correct syntax to be used is an open double quotation mark immediately followed by a closed double quotation mark (””) with no space left in-between the quotation marks. The complex syntax used when typing such a solution may lead to students failing to carry out the instruction correctly. However, if this instruction was asked in a paper-based MS Excel assessment, the lecturer would be able to apply his/her expertise and make a judgement on awarding marks for a partly correct solution (JISC, 2010).

In the above-mentioned example using the electronic testing tool, students were required to ‘type’ the appropriate function, however, another way in which the same function could be tested also using an electronic testing tool is to ‘insert’ the appropriate function. In this case, the student would click on the FORMULAS tab and then click on the icon as indicated in Figure 4 below.
The Independent Journal of Teaching and Learning - Volume 13 (1) / 2018
Formerly The Journal of Independent Teaching and Learning

Figure 4:
Excel Screen

The dialog box, as depicted in Figure 5 below will then appear on the screen where the student is required to type.

Figure 5:
Inserting the IF function in Excel

In Figure 5 above, it is evident that the student is not required to type the syntax (, or “”) which makes it an easier task that is ‘user friendly’. This method affords students a greater probability of obtaining the correct solution. If a paper-based assessment is employed as opposed to an electronic assessment, students have the option of using either method, depending upon the individual’s preferred method. This could be another reason why more students passed the paper-based assessment as opposed to students who passed the electronic assessment. Another reason why more students could have passed the paper-based assessment as opposed to the electronic assessment, is having unlimited attempts to find the correct answer, which once again replicates the teaching and learning environment and the reality of the workplace. When formulating assessments, lecturers should be aware that students will naturally choose the easier method to answer a question.

Prescribing the method, ‘type the appropriate function’ in an electronic assessment, could disadvantage some students because they are required to know the syntax when typing the answer whereas if they inserted the function it would not be necessary for them to have knowledge of the syntax, as indicated in Figure 5 above. This could be yet another reason as to why fewer students passed the electronic assessment when compared to the paper-based assessment. It is important to point out that although students are taught both
methods of inserting and typing functions in MS Excel, they should not be limited by the prescription of the method to be used in an assessment as in the real world, which is the workplace, students have a choice as to the method they feel comfortable to use. The paper-based assessment therefore offers the student the opportunity to either insert or type the appropriate function.

The data were analysed to determine the difference between the results obtained for the paper-based assessment and electronic assessment for each student respectively. In order to accomplish this, symbols were assigned to students’ results obtained for each assessment as indicated in Table 1 below, to investigate whether there were any significant differences in the symbols obtained between the two assessment strategies used.

<table>
<thead>
<tr>
<th>RESULT IN %</th>
<th>SYMBOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-49</td>
<td>F</td>
</tr>
<tr>
<td>50-59</td>
<td>E</td>
</tr>
<tr>
<td>60-69</td>
<td>C</td>
</tr>
<tr>
<td>70-79</td>
<td>B</td>
</tr>
<tr>
<td>80-89</td>
<td>A</td>
</tr>
<tr>
<td>90-100</td>
<td>A+</td>
</tr>
</tbody>
</table>

The analysis revealed that 129 students improved their symbols when they wrote the paper-based test, whereas 86 students obtained a higher symbol in the electronic test. Some students improved their mark in the paper-based assessment by up to 25%, which is an indication that perhaps the prescription of the method to be used to answer a question could be an inhibitor to students obtaining a higher percentage in the electronic assessment. This may be applicable where a student obtained 64% for the electronic assessment but 72% in the paper-based assessment. This particular student’s symbol moved from a C to a B, while a student who attained 72% in the electronic assessment, attained 94% for the paper-based assessment. In this case, the student’s symbol moved from a B to an A+, which is a significant difference. The implication of this student’s attainment in the paper-based assessment may be attributed to the fact that in the paper-based assessment s/he had the advantage of both unlimited attempts to respond to the instructions as well as the advantage of being able to use the entire duration allotted to the assessment. The final assumption emanating from this investigation is discussed below.

DISCUSSION AND CONCLUSIONS

In the HEI where the investigation was conducted, a lecturer teaches the skills required to use MS Excel, in a computer laboratory. The instructions given by the lecturer during lectures requires a ‘hands on’ approach and is similar to the type of questions that would appear in a paper-based assessment, if they were to write paper-based assessments. However, at this HEI, students are exposed only to electronic assessments for both formative and summative assessments for this module.

The results from this investigation at one HEI indicated that some students fared well in the paper-based assessment while others achieved higher results in the electronic assessment. This is evidence that neither the paper-based nor the electronic assessment is superior to the other. Since the focus of the module is to assess whether students have acquired the necessary knowledge and skills on MS Excel, from the
above discussion it is apparent that certain concepts are better suited to be assessed using an electronic assessment. It is also evident that the paper-based assessment method could offer additional advantages. Consequently, it is important that before lecturers set assessments the strengths and weaknesses of each assessment method are considered and the assessment method chosen should ensure that students are not disadvantaged in any way. Therefore, a ‘blended’ method of assessment is recommended, as the disadvantages of an electronic assessment may be resolved by the use of a paper-based assessment and vice versa.

To reiterate, the results emanating from this investigation are not conclusive regarding the superiority of either the electronic assessment method or the paper-based method. The onus is upon the lecturer to use a ‘blended’ approach to assessment and decide which method of assessment is more appropriate to assess the content that was taught. What emerged from this minor investigation is that more students passed the paper-based assessment when compared to the electronic assessment; this could perhaps be related to the mode of delivery that is similar to a paper-based assessment. Although the trend in a global society is towards technology, it is necessary to take cognisance of the fact that both the paper-based and electronic methods of assessment are necessary, specifically where readiness and competence for the workplace is a pre-requisite.

REFERENCES


Inquiry-based approach: Reconstructing the undergraduate teaching and learning space

Maitumeleng Albertina Nthontho, University of Pretoria, South Africa

ABSTRACT

Student completion is a concern in public universities in South Africa and elsewhere. Poor approach to teaching and learning is one of the known causes of the foregoing challenge, yet, it has hardly received attention. Research on the inquiry-based approach to teaching and learning has often focused on its application in science and maths education, but the approach is equally well-suited to the teaching of the humanities. In this conceptual paper, I argue that in as much as universities place much value on components of research skills, so they should on student teachers’ knowledge construction and understanding of content. Based on the responses to the three questions that I set as I entered the teaching and learning field, I seek to shed light on how the inquiry-based approach to teaching and learning has changed the perceptions of student teachers and the teacher educator about schooling in higher education. In so doing, I share my undergraduate teaching experience hence I recommend the guideline principles that I followed throughout this process.

Keywords: higher education, inquiry-based approach, student completion, undergraduate teaching and learning

INTRODUCTION

One of the aims of the South African government is to develop the economy of the country through knowledge production. This is aligned to the country’s Vision 2030 of the National Development Plan (NDP) (RSA, 2012). In order to realise this dream, among other functions, public universities are intended to produce new knowledge, assess and find new applications for existing knowledge (DHET, 2016). This puts universities under the pressure of increasing the number of doctoral graduates from 1800 to 6000 per year in 2030 (RSA, 2012). By implication, the connections between higher education and the economy are a key concern in South Africa, where restructuring and multiple policy processes are affecting the core business of institutions. Globalisation and the development of knowledge-based economies oblige universities’ curricula to be economically responsive and produce graduates who can meet the country’s resource needs and participate in the world of the 21st century (Griesel, 2003).

1 Date of submission 11 April 2017
Date of review outcome 11 August 2017
Date of final acceptance 12 November 2017
This specific role has been stated in the Education White Paper 3 of 1997; the role of higher education in a knowledge-driven world includes production, acquisition and application of new knowledge (DoE, 1997). The intention is, therefore, that universities must engage in a vibrant research and development system, which integrates the research and training capacity with the needs of industry and of social reconstruction (DoE, 1997). This signifies that the relationship between teaching and research goes to the heart of the meaning and purpose of higher education. In other words, the fundamentalist view of the university is that teaching which is not linked to research carried out by academics and student teachers is not higher education. For this reason, Neary and Winn (2009) view university as a ‘liberal humanist institution’ with a role to engage student teachers in the main function of academia - the production of new knowledge (Higher Education Academy, 2012).

Looking at the manner in which universities treat teaching - splitting between teaching and research (Brew, 2003) and the completion rates of both undergraduate and postgraduate students as presented in sections to follow - one doubts the visibility of Vision 2030 (CHE, 2016). In addition to the proposal of undergraduate curriculum reform in South Africa (CHE, 2013), I recommend the transformation of the undergraduate approach to teaching and learning. Studies on the approach to teaching were undertaken in South Africa and elsewhere. While some of the studies focused on the theories of teaching and learning (Vygotsky, 1978; Bruner, 1966) others were interested in the comparison of both ‘traditional’ and ‘inquiry-based’ approaches to teaching and learning (Khalid & Azeem, 2012; Spronken-Smith & Walker, 2010; Serbessa, 2006; Brew, 2003; Silcock & Brundritt, 2001). Although the effectiveness of inquiry teaching has been supported by empirical studies, most of the evidence was collected from research settings (Jiang & MacComas, 2015; Aditomo, Goodyear, Bluc & Ellis, 2013; Levy & Petrulis, 2012; Minner, Levy & Century, 2010) and in science education (Sever, Oguz-Unver & Yurumezoglu, 2013). Very few, if any, studies shed light into how the ‘inquiry-based teaching’ is employed in the classroom setting in higher education. The current study spells this out from first-hand experience.

The uniqueness of the current study is also that the focus is mainly on the teaching and learning of the undergraduate curriculum, with an understanding that it has a great impact on the throughput rate both at undergraduate and postgraduate levels. It is against this backdrop that in this article I aim to share my teaching and learning experience of the ‘inquiry-based approach to teaching and learning’. Based on this experience, I consider it is the best teaching and learning approach to be employed as it created an avenue for knowledge creation for undergraduate students while at the same time exposed them to an array of research skills. It is also in this process where I, as the facilitator, learned to release power and shared it with student teachers for the purpose of a fruitful collaboration between student teachers themselves and student teachers and I where each had complementary roles, rather than one being subsidiary to the other (Serbessa, 2006). The question then is ‘how did one go about the research methodology applied in this study?’

**STUDY METHODOLOGY**

I used to hear how large classes are for this particular module. I used to hear how uncomfortable some of my colleagues would be with teaching and training student teachers on this module – my turn just came. I found myself faced with a few dilemmas that were not easy to dodge. These included, 2017 being my first year of appointment as an academic, my first experience of the teaching of the module, large class sizes coupled with preconceived beliefs that I must be an expert in the area, as well as 2016 that ended in an unusual way for most of the South African universities – student unrest.

---

2 This article describes a student teacher to be someone enrolled for teacher training courses in a university.
I then looked back and recalled my experience as I was pursuing a Bachelor of Education degree in one of the universities in South Africa. Although I graduated the programme *cum laude*, research modules frustrated me so much that I had negative attitudes towards research. I could not tell by then whether I was the problem or if something else was to blame. I remember very well telling my husband ‘should I have a choice; I would substitute research modules with elective modules’. Typically, I was to teach a non-research but teaching module (Brew, 2003). Nonetheless, because I did not want the student teachers that I teach and train to experience the same, I found it my role to transform my teaching approach. Several but different questions flocked my mind. Amongst those questions were: (a) How must I treat teaching and learning different from others? (b) How would student teachers find the new way of teaching and learning? (c) What resources do I have to handle the emerging challenges? These questions were enough to suggest the data sources.

In order to respond to these questions, I explored a few teaching and learning theories. I also reviewed a number of journal articles. All these sources were published in English from peer-reviewed journals that follow a certain standard of article writing and reporting. I used Google and Google Scholar as search engines. The key terms used for the search included ‘teaching and learning approaches’, ‘approaches to teaching and learning’, ‘democratising teaching and learning’, ‘research-based teaching and learning’ and ‘students as knowledge constructors’.

I chose the articles using the following criteria: focusing on defining (a) who students and teachers are; (b) what their perceptions about teaching and learning are; and (c) how their perceptions affect their approach to teaching and learning. The findings from the reviewed articles were inductively analysed. This means that I used the information from the articles to narrow the scope of my study without imposing any theory (Creswell, 2013). In addition to this criterion, I always used to refer back to my previous lessons before planning the next activity – *planning and reflection* (Epstein, 2003: 28-36). That enabled me to rectify the mistakes that I had made and learn from them as I and the student teachers continued with the journey. In other words, I used my previous experiences as learning opportunities (Costa & Kallick, 2008) that enabled me to prepare my lessons in a manner that they communicated to one another. In so doing, I acted beyond the journal (Epstein, 2003) and learned through reflection (Costa & Kallick, 2008). Having related the data sources of this study, I find it imperative to present the lens through which I viewed the inquiry-based approach to teaching and learning and how this lens directed the review of literature in this study.

**INQUIRY-BASED APPROACH – THE THEORETICAL LENS**

The concept of inquiry-based learning (IBL) is commonly used to describe a range of pedagogical approaches that place student teachers at the centre. According to Dewey (1997) and Bruner (1961), all learning tasks, assessments, resources and guidance are designed to support the inquiry process. Some forms of IBL aim to engage student teachers with established, ‘certain’ knowledge, but this approach frequently is conceived as a means of highlighting contestation and the challenges of authentically messy, open-ended problems and lines of investigation (Levy & Petrulis, 2012).

In arguing, Spronken-Smith, Walker, O’Steen, Matthews, Batchelor and Angelo (2008) describe IBL as a form of active learning that designs tasks to stimulate inquiry and these may include problem or case scenarios, fieldwork investigations or experiential learning projects, as well as research projects of different kinds. For this reason, scholars such as Hutchings (2007) regard inquiry-based learning as an umbrella term for a variety of related approaches.

However, in conceptualising IBL, Savin-Baden, McFarland and Savin-Baden (2008) see it as requiring clarification. This definition concurs with that of Elton (2009) who finds IBL as a powerful means of...
engaging student teachers actively with an existing knowledge base. In that case, IBL is seen as ‘research-like’ learning that differs from experiences in which student teachers ‘actually conduct research’ leading to ‘outcomes of interest and value to the research community’ (Elton, 2009: 129-139). On the contrary, Hodge, Haynes, LePore, Pasquesi, and Hirsh (2008) take IBL to encompass the potential for student teachers to participate in the production of genuinely new knowledge or meaning. One grey area in these interpretations would be the question of what is meant by the intention to enable student teachers to ‘experience the processes of knowledge creation’ (Spronken-Smith et al., 2012).

Given the above definitions, Bereiter’s (2002) makes a distinction between ‘knowledge construction’ and ‘knowledge building’. As per his distinction, the former implies personal conceptual development (learning), whereas the latter signifies contribution to the improvement of ideas in a domain. It is also important to mention that inquiry-based learning has types (Spronken-Smith & Walker, 2010). These include:

- **structured inquiry** – where teacher educators provide an issue or problem and an outline for addressing it
- **guided inquiry** – where teacher educators provide questions to stimulate inquiry but student teachers are self-directed in terms of exploring these questions
- **inquiry** – where student teachers formulate the questions themselves as well as going through the full inquiry cycle.

It is for the said distinctions that knowledge construction becomes focal to this study. It is also within these perimeters that the concept of the guided inquiry-based approach to teaching and learning is adopted. Grounded in ‘the Inquiry-based’ approach, in this article I argue that there is a useful relationship between research and teaching and when the two are treated as such, student teachers’ learning takes place (Spronken-Smith & Walker, 2010). Central to the success of such a relationship is the understanding of research and scholarship by teacher educators (Brew, 2003). Consequently, I consider the inquiry-based approach to teaching and learning to be a unifying tool between the teacher educator and student teachers (Neary & Winn, 2009; Brew, 2003). To illustrate, when the teacher educator carries out the inquiry in partnership with student teachers, the teaching and learning process fosters dispositions, intellectual and practical capabilities of particular importance to life and work in contemporary societies (Levy & Petrulis, 2012).

Typically, I find the inquiry-based approach to teaching and learning to have the potential to develop student teachers’ capacity to understand and participate in different ways of creating knowledge in different contexts (Goodyear & Zenios, 2007). In other words, it supports student teachers on their developmental journeys towards ‘self-authorship’ (Baxter, 2009: 144). This suggests that the inquiry-based approach enables student teachers to reach the epistemological, intra-personal and interpersonal maturity stage. At this stage, they become aware that knowledge is constructed and contextual; they develop self-belief that they possess the capacity to create new knowledge, and the ability to play a part within knowledge-producing communities (Levy & Petrulis, 2012). Within this frame of mind, below I present and discuss the traditional (Brew’s [2003] mechanism of splitting between teaching and research) approach to teaching and learning.

---

3 This article describes a teacher educator as someone who enables teaching and learning to take place regardless the environment. For the purpose of this article, the concept of student educator not teacher or lecturer is used for someone who fulfils this role at the university level.
TRADITIONAL/BANKING APPROACH TO TEACHING

It is well-known that student teachers learn in various and different ways and have their own individual styles and strategies of learning. While some enjoy group work, others favor individual work. Some may prefer teacher educators’ firm instructions rather than self-directed research projects. Overall, student teachers learn in numerous ways. However, because most great teacher educators began their education in a traditional classroom, its influence on the strategies employed in the teaching and learning process remain very strong and dominate the education system (Serbessa, 2006). Those teacher educators, who have traditional teaching backgrounds, teach and train the way they received their teacher training. Put differently, this traditional approach to teaching and learning (i.e. oral exposition, lecture and explication) is not limited to only those who have a traditional education background, but is also transmitted to teacher educators during their teacher training. It is therefore not surprising that the traditional approach is the most preferred teaching and learning approach in higher education in South Africa and elsewhere (Brew, 2003; Olivier, 1998).

In the traditional approach to teaching and learning, the teacher educator becomes the controller of the learning environment (Novak, 1998). The teacher educator holds power and responsibility and s/he plays the role of the instructor (in the form of lectures) and decision-maker (with regard to curriculum content and specific outcomes). In this process, teacher educators regard student teachers as ‘knowledge holes’ that need to be filled with information. In other words, the teacher educator views that the teacher educator makes learning occur. In his point of view, Brew (2003) contends that teacher educators who conceptualise their teaching as being about transferring information from the syllabus to student teachers regard themselves as the focal point.

From a similar point of view, Freire (1970) debates that teacher educators perceive themselves as bankers of knowledge and see student teachers as empty ampoules or containers waiting for them to deposit the dominant cultural group’s bodies of knowledge. Freire (1970: 73-75) terms this approach the ‘banking method’ of education. According to him, student teachers’ role is of a passive recepter of bodies of knowledge that often are foreign to their lived experiences and the knowledge is often withdrawn from the student teachers in the form of tests and exams (Freire, 1970).

In the same point of view, Khalid and Azeem (2012) argue that the traditional classroom often looks like a one-person show with largely uninvolved student teachers. These scholars add that traditional classrooms are usually dominated by direct and unilateral instruction. Followers of the traditional approach to teaching assume that there is a fixed body of knowledge that the student teacher must know (Serbessa, 2006). They expect a student teacher to accept the information given to them blindly without questioning the instructor (Stofflett, 1999). The teacher educator seeks to transfer thoughts and meanings to the passive student teacher, leaving little room for student teacher-initiated questions, independent thought or interaction between student teachers (Khalid & Azeem, 2012). Even in activity-based subjects, although activities are done in a group, they do not encourage discussion or exploration of the concepts involved (Serbessa, 2006).

Like any other teaching and learning approach, the traditional approach has advantages of student teachers focusing on the subject at hand. The student teacher who prefers to remain in his/her comfort zone has liberty to do that. Should the teacher educator for a particular module be absent, student teachers find time to pursue either their personal matters or studies in other modules or courses. The approach has, however, received criticisms. Most classes involve rote learning, where student teachers depend on memorisation without having a complete understanding of the subject. Just passing the tests consisting of descriptions, matching and other forms of indicators are all that matter to completing the curriculum. Long lectures and dictations, rote memorisation and little interaction in the classroom often
leave student teachers less attentive and less engaged. Research evidence suggests that student teachers in a traditional class have little opportunity to interact with their classmates or their teacher educator and they are prone to skipping classes and missing lessons altogether (Brew, 2003). With this background in mind, I decided to put into perspective this new approach – the inquiry-based approach to teaching and learning and below I reflect on my first experience.

**INQUIRY-BASED TEACHING AND LEARNING PRACTICES**

As the preceding sections have alluded, some of us are the products while others are both products and reproducers of traditional classrooms. In this section, I present how the inquiry-based approach to my teaching made my role easier as well as how it contributed to student teachers’ knowledge and understanding of content. As I do this, I relate my experience by responding to the questions that I asked myself and have outlined earlier. In these discussions, the pronoun ‘we’ is mostly used to refer to the student teachers and me because I regard us to be learning partners.

*What stood out to be different?*

I was one of the four staff members that offered the module by the name of Globalisation, Markets and Education as part of a year 3 course at undergraduate level. It was my first exposure to the module and the group of student teachers I was to teach. Although that was my first experience with both the module and student teachers, my expectations were high and surely, they (student teachers) were expectant of what the module entailed and what my approach would be. Since minimal guided inquiry-based teaching and learning is less effective and less efficient (Kirschner, Sweller & Clark, 2006), I dedicated the first two hours to the introduction, defining and explaining the methodologies and practices to be engaged in our class in particular. I put more emphasis on ‘teamwork’ detailing the connotations attached to the concept ‘group’ with thorough discussion on qualities of teamwork. Student teachers’ main expectation was to pass the course.

As experience is the best teacher, of course they were expecting the ‘banking method’ approach as it is discussed in the previous section. This I also noticed by the flashes of cell-phone cameras capturing the presentation slides of my introduction. As part of the study package, student teachers are presented with Study Guides and the Reader with journal articles in which the content of the course is embodied. We posted the same material on clickUP (the university online system). Instead of presenting my understanding and interpretation of how globalisation affects markets and education, I decided to engage student teachers in the investigation process. I therefore teamed them up and entered into a project partnership with them.

*Why teams?*

Firstly, I had 346 students in my class. Individual tasks would not be effective so they would not fulfil good teaching and learning practice. Secondly and most important, students bring with them a diverse range of backgrounds, experiences and expectations. When these characteristics are brought together, chances are high that learning is going to take place. Thirdly, research evidence suggests that ethnicity, race, and religion are amongst sources of segregation in South Africa and most societies (Lubbe, 1998; Kilian, 1993).

The sources of segregation highlighted above resulted in student teacher enrolments that grow in opposite directions racially, ethnically, socially, and religiously (Gay & Howard, 2000). Hence, I found teamwork to be the best instrument to encourage respect and tolerance of one another. Especially, teamwork requires members to set rules and norms that will define the desired system of relationships in the team and expectations of the teamwork (Bashan & Holsblat, 2017). Such interaction enabled student teachers to learn about negotiation and cognitive skills needed for problem solving and collaboration (Hmelo-Silver,
2004). After long negotiations, we finally had 23 teams with 15 members comprising student teachers from diverse backgrounds. Team building became extremely costly in terms of time, emotions and the like (detailed report in the following sections). For each team task, students identified team leaders, scribes, timekeepers and reporters.

We were supposed to deliver the module in eleven weeks with four hours per week, which comprised 44 teaching and learning hours. I had a theme for each week. I must also explain that the Reader had (14) peer-reviewed journal articles in a form of the reading sources that carried the themes intended for the module. We used the articles also as teaching and learning tools that would introduce student teachers into parts of an article (i.e. abstract) – introduction into research tools. Taking into account the university’s initiative to engage a ‘Hybrid teaching and learning’ model – combination of contact and online delivery, I followed a sequential mode of instructional delivery. I would begin the day’s lesson with a brief introduction bridging the previous and current lessons, have a video show with a few questions at the end followed by a PowerPoint presentation then the team task. As I indicated earlier, I followed Spronken-Smith and Walker’s (2010) model of guided inquiry-based approach. Bearing in mind that this was our first attempt at inquiry-based teaching and learning I had to wear two hats. One of the facilitator and the other of the co-learner (Hmelo-Silver, 2004).

In guiding the inquiry, I played the role of the ‘Provocateur’ (Student Achievement Division, 2013: 2). In most cases, the tasks would refer student teachers to the articles in their Reader, to the YouTube videos and additional sources of information such as media, internet, classmates and/or anyone on campus. The guiding tool would always be in a form of questions. We often tested the questions along the following elements: open-ended leading to defensible answers; focused on areas that have more than one possible outcome; enabled the process of knowledge construction; encouraged critical thinking; incorporated elements of research; and transferability of intended skills (Spronken-Smith & Walker, 2010). Guidelines on issues of care during their investigation processes were always emphasised. These included what constitutes a good question, note taking, photo shooting and audio recordings where necessary (Hmelo-Silver, 2004). I would always accompany each team task with a principle that, they should be open-minded to ‘learn from anyone, anywhere and at any time’ since learning is not confined to the classroom. In so doing, we approached research and teaching as activities where individuals and teams negotiated meanings and constructed knowledge within a social context (Amaratunga & Senaratne, 2009).

Student teachers’ reactions towards inquiry-based approach

Student teachers’ reactions manifested themselves in several and different ways depending on the case at hand. To begin with, teaming up was not that easy. As I indicated earlier on, our student teachers find comfort from people of the same racial, ethnic, religious, and political orientation. Now, there is still a strong resistance to diversity. Student teachers are socialised to devalue, suspect, and pretend to ignore differences, especially those that derive from class, race, ethnicity, and culture and much of this socialisation equates differences with deficiencies (Gay, 2002).

Issues related to grades (marks) awarded for team tasks, communication with members, building a relationship of trust, acknowledging members who could not contribute flooded my desk and mailbox (Bashan & Holsblat, 2017). My experience turned out not to be unique. Research literature suggests that student teachers have concerns about teamwork. Their concerns include:

- inadvertently saying something stupid or hurtful and embarrassing themselves or offending team members from other racial/ethnic groups
- political correctness being so strong that honest and substantive discussions would not occur
- worrying over race and ethnicity while losing sight of ‘valid’ educational objectives
• being unable to move beyond superficial knowledge of racial/ethnic groups and therefore perpetuating stereotypes (Gay & Howard, 2000).

I knew about the concerns and I was expecting them. I, however, hardly addressed them fully. Firstly, I was afraid of engaging student teachers in racially and ethnically related issues in their classroom. Secondly, multicultural/multiracial education was not part of the curriculum I was to teach (Gay & Howard, 2000). Thirdly, although one of my objectives for teamwork was to create awareness that diverse social groups should not become the wall between learning and us, I was reluctant to confront issues of racial, ethnic, and cultural diversity directly (Gay, 2002).

Lastly, we were a team of four, offering the same module due to large enrolments in this course. It was upon an individual to decide on the teaching and learning methodologies and practices. Hence, teamwork was not a collective decision. This suggests that awarding grades for teamwork would disadvantage student teachers in three other classes. As a result, I did not have a convincing response to this matter besides their ‘learning’ and ‘knowledge construction, and application’. By not addressing this matter convincingly, some student teachers lost interest and the confidence of team tasks. It is imperative to mention that, although their withdrawal from teamwork could not have an impact on academic performance, student teachers missed the collaborative learning that took place during teamwork (Hmelo-Silver, 2004). In other words, such student teachers missed the journey of investigation, exploration, search, quest, research, pursuit and study of processes (Kuklthau, Maniotes & Caspari, 2007).

Nonetheless, I must comment also that almost all concerns had breakthroughs. Instead of completely abandoning tasks, most of the student teachers would either join existing teams or establish a new one. This movement resulted in either more or less teams with more or less members than initially planned and that was not an issue anymore. The focus was then to build the ‘academic community of practice’ where members actively participate in research and learning regardless of race, ethnicity, and religion (Brew, 2003). I would like to express that student teachers’ presentations were full of life depending on what the task and idea were. They were animated; they had concrete and contextualised examples. I must also admit that as their teacher educator, I would not be able to cover all that they presented, not even in the way that they presented them. It was therefore indicative that the inquiry-based approach encouraged collaborative teamwork that enabled us to construct knowledge actively (Hmelo-Silver, 2004) rather than becoming recipients of research-based knowledge (Levy & Petrulis, 2012).

After a team had presented, we analysed the presentation and identified emerging concepts or ideas and they became the foundation of our next inquiry. That is, concepts or ideas that emerged from presentations built on the existing content for discussion and more investigation – planning and reflection (Costa & Kallick, 2008: 38). Class presentations provided student teachers with the opportunity to address the audience as well as encourage them to express ideas and respectfully challenge and test one another’s ideas. In addition, the student teachers’ level of thinking changed as they argued their ideas (Hmelo-Silver, 2004). In other words, student teachers’ ideas were clarified and re-voiced (e.g., through repeating, rephrasing, expanding) in order to keep the core ideas accessible to all class members (Strom, Kemeny, Lehrer & Forman, 2001). We achieved this spirit of inquiry by welcoming ideas and trusting that even the simplest questions could lead to something greater and not yet evident (Student Achievement Division, 2013: 4).

Due to there being many teams and a limited number of hours, four of the teams could not present their teamwork with the rest of the teams. We agreed on the creation of a special link for ‘later presentations’ on clickUP where they were loaded. In the final week of the semester, we discovered that four hours of the course were still available and used them for that purpose. We regarded the sessions to be special hence; we termed them ‘special sessions’. In preparation for these sessions, I made a special call on
clickUP that the presentations would also serve as a basis to address matters arising from the module. We therefore made it clear that we welcomed questions, queries, comments and recommendations as long as they were module related and could contribute to knowledge construction. Although they were not well attended, these sessions were of benefit to our teaching and learning experiences. The assessment comprised the individual assignment and the examination. We achieved a 98.2% pass and that was a great achievement.

Support for the inquiry-based approach

I indicated in preceding discussions that it is the aim of the university to engage ‘hybrid learning’, the use of technology to supplement campus-based learning with a view to enhance the teaching and learning experience (Kafyulilo & Keengwe, 2014). For this reason, the university has a variety of promising technologies and massive support put in place in this regard. These include computing and networking technologies like clickUP that offered me dramatic and new opportunities to support the inquiry-based approach to teaching and learning (Edelson, Gordin & Pea, 1999) and technical and administrative staff.

Blumenfeld, Soloway, Man, Krajcik, Guzdial & Palincsar (1991), as cited in Edelson, Gordin and Pea (1999), identified six contributions that technology can make to the teaching and learning process. These included: (a) enhancement of interest and motivation, (b) provision of access to information, (c) allowance of active, manipulable representations, (d) structuring the process with tactical and strategic support, (e) diagnosing and correcting errors, and managing complexity and aiding production. I confess that I am one of those teacher educators with limited confidence in using technology to facilitate specific concepts or skills, to support creativity, and to support student teachers to learn complex concepts (Kafyulilo & Keengwe, 2014). This was then my learning experience as I earlier regarded myself as the co-learner in the inquiry-based approach to the teaching and learning process. The first person I involved in this process was the ‘tutor’ whom I referred to as the ‘teaching and learning supporter’, since that was what she did. My first learning opportunity was the ability to engage with the clickUP system through her support. We created several links on clickUP and for the focus of this study; I will mention and discuss a few.

In order to continue discussions of ideas from previous presentations, I created the ‘discussion board’ on clickUP. The teacher educator and student teachers connected through this link. We would engage in the form of questions, comments, pictures, diagrams, responses and others. This concurs with Vygotskian (1978) tradition that it is through the social practice of learning and thinking that student teachers learn to think for themselves. Through our partnership, the inquiry led to a richer, more varied internal dialogue, and as a result, better, more reasonable thinking, through self-correction (Student Achievement Division, 2013: 4).

We also made use of the ‘announcements’ link. I announced everything that called student teachers’ attention including a reminder about due dates. The YouTube video, digital lectures and PowerPoint presentation links were of importance in this forum, because we would post relevant videos, digital lectures and presentations for reference and catch up with missed lessons at their own time and space. Student teachers had to submit their assignments through ‘Turnitin’ (a programme that detects the originality of student teachers’ work). The golden rule was that, we accepted assignments whose similarity index was 10% or below only. The fact that assignments could go through signifies a huge achievement in terms of student teachers owning the assignments.

In conclusion, the clickUP system together with the technical and administrative staff made the inquiry-based approach to teaching and learning possible for the teacher educator and student teachers (Edelson, Gordin & Pea, 1999). We were able to store and manipulate large quantities of information, to present and permit interaction with information in a variety of visual and audio formats, to perform complex
computations, to support our communication and expression, and to respond rapidly and individually to users (Edelson, Gordin & Pea, 1999).

CONCLUSION

It is evident from the preceding discussions that the inquiry-based approach to teaching and learning gave both the teacher educator and student teachers a wealth of experience – both rewarding and challenging. From this approach, I learned that student teachers are not passive recipients of transmitted information, as they have been perceived to be. Instead, they have a wealth of information, creativity and innovation and they can make us great teacher educators, should we create such a space. Issues of technologies, teaming and grading of tasks became challenges in this journey. I, however, regard those challenges as the stepping-stones to a better teaching and learning experience. In conclusion, I recommend that as part of curriculum transformation in higher education, ‘multicultural education’ where diversity is dealt with in detail becomes a compulsory module. I also urge teacher educators to tap into student teachers’ creativity and innovation and make them learning partners by involving them in planning the lessons. That can only be done through the inquiry-based approach to teaching and learning. In so doing, we shall be paving the way for them to become members of communities of practice.

REFERENCES


To see someone else’s perspective: A case for digital stories in schools

Gaye Pieterse, University of KwaZulu-Natal, South Africa
Rosemary Quilling, University of KwaZulu-Natal, South Africa

ABSTRACT

Education is key to building South Africa’s human capital. In particular, it is necessary to prepare teenagers to enter society as fully functional, skilled adults. This case study, of 172 pupils in a South African Girls’ high school, explored the potential of a range of digital storytelling interventions to foster new perspectives on issues and potentially support more informed decision-making. This qualitative research showed participants reaching a new understanding of their emotions and behaviour by experiencing multiple, alternative views of a situation: from peers, parents and other adults. During this process, they engaged in a reflexive practice as they were able to see aspects such as peer pressure and cultural differences more objectively, allowing them to evaluate the situation critically, develop appropriate knowledge and employ this in decision-making. The discussion explores how the creation of digital stories has shaped the outcomes. While this approach could be used to assist pupils in developing critical thinking skills, there were challenges that require further consideration. This case study points the way toward an in-depth look at incorporating digital storytelling in South African classrooms.

Keywords: digital storytelling, participative video documentary, perspective, pupils, decision-making

INTRODUCTION

When you are a Bear of very Little Brain, and you Think of Things, you find sometimes that a Thing which seemed very Thingish inside you is quite different when it gets out into the open and has other people looking at it (Winnie the Pooh, Milne, 2001: 34).

Anyone who has lived with teenagers may have regarded them, at times, as having ‘very Little Brain’ in the manner in which they make decisions and conduct themselves. As a consequence of how the brain

1 Date of submission 12 May 2017
Date of review outcome 12 August 2017
Date of acceptance 12 November 2017

2 The development of this paper was supported by the UKZN University Teaching & Learning Office who sponsored the first author’s attendance at a writing workshop in the early stages of the development of the paper. In addition, a UKZN College of Law and Management Studies writing retreat facilitated a later iteration of the development of the paper. This work involves, and is an extension of, the qualitative portion of the first author’s Master’s thesis. The principal and pupils of the school at which the study was completed are recognised and thanked for the opportunity to undertake this study.

3 This article is being published posthumously as Gaye Pieterse (first author) passed away in 2017.
develops during adolescence; those aged between 15 and 19 are recognised as more likely to engage in risky behaviour than at any other time of their lives (Cauffman, Shulman, Steinberg, Claus, Banich, Graham & Woolard, 2010). Teenagers’ abilities to express their motivations and opinions and to consider other perspectives during decision-making are limited by cognitive and affective abilities that are not yet fully developed (Cauffman et al., 2010).

Teenagers are fundamentally in a vulnerable position. This pressure is exacerbated by the pervasive social changes and challenges, which have arisen due to global connectivity and the anonymity of the Internet (Hinduja & Patchin, 2007; Pittaro, 2007; Stephenson & Walter, 2011). It is widely acknowledged that a large proportion of high school pupils are inadequately prepared to enter the real-world as fully functional, contributing adults (Abrami, Bernard, Borokhovski, Wade, Surkes, Tamim & Zhang, 2008; Miri, David & Uri, 2007; Marin & Halpern, 2011). Kalantzis, Cope and Harvey (2003: 23) stress that ‘learning will increasingly be about creating a kind of person, with kinds of dispositions and orientations to the world, and not just persons who are in command of a body of knowledge’. The danger exists that if these issues of unpreparedness are not addressed teenagers will become marginalised; lacking the skills necessary to transition into adulthood (Marin & Halpern, 2011).

The skills teenagers require include the ability to apply ‘reasonable’ and ‘reflective’ thinking in deciding ‘what to believe and do’ (Kwan & Wong, 2015: 69, 73) i.e. to employ critical thinking. More generally the need for teaching and learning to prepare pupils for an ever-changing reality has been recognised and conceptualised as ‘productive diversity … (which) attempts to capitalise on the talents of diversity’ (Cope & Kalantzis, 1997: 471) emphasising the significance of diversity and pluralism; and the need for skills in negotiation and compromise, specifically within civic public forums. However, more research is needed to explore how pedagogies involving participation, pupil-centred learning and fostering critical thinking can be used to better equip teenagers (Cheung & Jhaveri, 2014; Haberland, 2012; Samoilov, 2014).

An overview of a number of studies suggests that constructivist-learning approaches may have a positive impact; leading to a better, more personalised understanding of the need for, and use of, critical thinking skills (Kwan & Wong, 2015). A constructivist approach requires the use of social negotiation skills in the process of presenting, and being required to reconsider opinions. Numerous media are available for self-expression or reflection but visual media currently dominate communication (Cheung & Jhaveri, 2014), and should thus be presented as familiar if used pedagogically. One of the methods available is digital storytelling (also referred to as participatory video). Creating and critically engaging with ‘visual text’ should not be seen as merely reflecting reality as a digital story is ‘constructed from a (specific) viewpoint, with a communicative purpose and a calculated effect in mind’ (Cheung & Jhaveri, 2014: 6). Teachers can elicit discussions and stimulate critical thought through visual media and thereby create critical producers, and critical consumers of visual content.

In order to explore the extent to which a range of visual pedagogical methods could foster critical thinking and open up new perspectives on decision-making among teenagers, a case study methodology was adopted. An all-girls’ school in Durban, KwaZulu-Natal, South Africa was selected as the site for the study. An all-girls’ school was selected because female South African teenagers represent a particularly vulnerable group; living in a country with one of the highest HIV and AIDS rates in the world (SANAC, 2009), exposed to high levels of gender-based violence and gender inequalities (Jewkes, Levin & Penn-Kekana, 2003; Morrell & Jewkes, 2010), and living in a context where female teenagers feel powerless to voice objections against their male partners (Varga, 1997).
LITERATURE REVIEW

The literature review explores the nature, use, and context of digital storytelling in education. Digital storytelling can be defined as a vehicle for creative storytelling; leveraging multimedia tools that allow for inclusion of text, images, video clips, audio and music (Robin, 2008). Technology can provide the affordances required to support visual pedagogies: for example, the availability of multimedia tools, digital storage, and the means of capturing visual and audio data along with the necessary software to manipulate the inputs, at reasonable cost, are fundamental enablers of digital storytelling (Robin, 2008). Digital stories can be captured on mobile phones, with cameras or webcams, and edited in easily available software such as iMovie, Movie Maker, Photo Story and PowerPoint. These stories can be shared over the Internet via YouTube or Vimeo, podcasts and other electronic distribution systems. VoiceThread (http://www.voicethread.com/) allows the uploading and sharing of audio and images as well as collaboration between media creators and viewers.

Digital storytelling allows: (1) the pupils to be the producer and the consumer of knowledge, (2) the learning to be pupil-centred, (3) participation on an individual or a group basis, and (4) for reflective and reflexive practice. Web2.0 tools, employed for digital storytelling, allow the average user to publish knowledge on the web without requiring specialised skills (O'Reilly, 2005). This empowers pupils as it provides a public space for their voice and artefacts (Cope & Kalantzis, 1997). Most teenagers are conversant with social media and networking platforms and value this form of interaction; making it meaningful and enjoyable to pupils (Cheung & Jhaveri, 2014; de Lange, Olivier & Wood, 2008). In developing, or watching a digital story the participants are, either actively or passively, encouraged to reflect on their own situation and positionality in terms of the subject matter. The process of viewing and reviewing a digital story provides a forum for teenagers to refine their skills of assessment, communication, and constructive criticism. It presents an opportunity to understand others’ cultures and thinking processes, to enhance their understanding by ‘add(ing) something of themselves to the meaning’ (Cope & Kalantzis, 1997: 476); and by suspending their own beliefs (‘bracketing’), gaining a greater depth of understanding.

Practically, teachers can employ digital storytelling in a number of ways. They can show previously created stories (public videos), create their own stories to share and allow pupils to create and share their own stories. While teachers have used digital stories to educate, inspire and encourage debate, it has been found that the greatest benefit came from the pupils creating their own digital stories, either alone or in small groups (Robin, 2008). Social constructionists also claim that pupils learn best when creating their own material and that learning is even more effective when pupils experience the product as meaningful (Papert & Harel, 1991). This conclusion requires additional investigation. The meta-analysis of Abrami et al. (2008) only provides tentative support for this conclusion as some of the studies they reviewed do not support this result. The impact of technology on pupils is, however, never neutral (Prain, 1998) because of its potential to impact the beliefs, perceptions and practices of the intended audience. This places additional responsibility on those considering its use as part of an educational intervention.

South African literature on digital storytelling, dealing with its use as an intervention in education, provides the most directly comparable academic work for this study. Five articles were identified which deal with specific projects (de Lange et al., 2008; Moletsane, Mitchell, de Lange, Stuart, Buthelezi & Taylor, 2009; Mitchell, Dillon, Strong-Wilson, et al., 2010; Khau, de Lange & Athiemoolum, 2013; Mitchell & de Lange, 2013). The individual papers relate to work done in the Eastern Cape, South Africa (de Lange et al., 2008; Khau et al., 2013; Mitchell et al., 2010) and KwaZulu-Natal (Moletsane et al., 2009). Digital storytelling, applied in teaching contexts in South Africa, has a history of being used as an intervention in studies which are participatory, have a clear contextual foundation and a focus on reflection, knowledge-sharing and enabling change in participants, communities or the broader context (Ebersöhn, Ferreira & Beukes, 2012). These papers place attention on the agency of individuals. The degree to which this
agency is actualised varies depending on the degree to which they are allowed to negotiate topics and the content of the digital stories created. In all of these studies, the storytellers were allowed to decide the specific focus of their story, even when broad contexts for discussion were created. This is not purely a characteristic of South African studies but is also seen elsewhere, for example, Wheeler (2009) working in Rio de Janeiro and Brazil, and Waite and Conn (2011) in the Jinga district, Busoga, in Eastern Uganda.

In addition to understanding how digital storytelling has been employed in education in South Africa, it is also important to foreground the results of studies focusing on stimulating reasonable and reflective critical thought in young people. The work by Abrami et al. (2008: 1108) is useful as it provides a meta-analysis of 117 studies that address ‘the issue of CT (critical thinking) development, improvement and/or active use’ that includes ‘some kind of instructional intervention’ and provides quantitative data on the intervention. The literature indicates that the age at which interventions are attempted is important. While elementary (6-10 years old) and secondary (11-15 years old) pupils’ gains are not significantly different from each other, they are significantly higher than those for undergraduates (Abrami et al., 2008). These findings are supported by the work of Cheung and Jhaveri (2014) and Kwan and Wong (2015) working with teenagers aged approximately 14-16 years. It thus appears reflective thought can be stimulated in children from the age of six years till approximately 15 years, but most notably before completion of high school. In addition, if this teaching is both explicit and embedded within subject content, critical thinking objectives are explicitly stated and the pedagogy allows for collaboration and a constructivist approach, the gains in critical thinking skills appear to be notable (Abrami et al., 2008).

The South African government addresses the joint issues of exposure to technology and development of critical thinking skills (Department of Education [DoE], 2004) via the six critical levels of thinking listed in the current South African Curriculum Assessment Policy Statements (CAPS) (2014). These policies are based on the revised Bloom’s taxonomy where the three higher-order cognitive levels require the ability to analyse, evaluate and create (Conklin, 2005). While these are important educational requirements, the reality is that there is little integration into lessons in South African classrooms, even when computers are available (Wilson-Strydom, Thomson & Williams, 2005). Added to this, teachers often do not have time to ‘Think of Things’ (Milne, 2001: 34) and explore new pedagogical tools due to curriculum pressures. Exploratory methodologies are time consuming and add additional pressure to both pupils and staff when the volume of content in the curriculum is high (de Lange et al., 2008). It was found that even in government-funded computer rooms, access is limited and ICT competencies are poor. In addition, when teachers are competent and enthusiastic about integrating ICT into their lessons, they are further frustrated by unreliable Internet access (Draper, 2010).

The need to develop a critical, analytical skill in order for teenagers to become fully functional, contributing citizens is clear from the societal challenges and economic needs in South Africa. This is further emphasised by the fact that these requirements are built into the national education curricula and are recognised as being necessary for teenagers on a global scale. In addition, it appears necessary to target interventions at school, rather than at tertiary education level. The potential to achieve this via constructivist and constructionist pedagogies by employing multimedia technologies is suggested by prior research, although variable outcomes are reported. To what extent benefits are realised when different digital storytelling interventions are employed remains unclear and forms the focus for this study.

**THE STUDY DESIGN**

The research was designed as a case study and is conducted within an all-girls’ school in Durban, South Africa because of the already established vulnerable status of teenage girls in South Africa (UKZN ethical clearance HSS/132/010M). This research formed part of a larger project on digital storytelling including a quantitative study (not considered here), which required that participant groups experienced a range of
exposures to digital storytelling. While this has created an element of artificiality in the qualitative data, this has allowed for insights into the phenomenon that may not have arisen if these restrictions had not been imposed. Stratified sampling was used, with Grade 9 and 10 pupils selected for the study as they met the age criterion (Abrami et al., 2008) and the fact that they are faced with critical career-related subject choices and social decisions and could thus directly benefit from the timing of the intervention.

Practically, the study is made possible by the availability of digital devices at the school as well as the researcher being a teacher of computer literacy at the school. The researcher taught all the intervention groups, ensuring a consistency in participant experiences. In total, there were 172 female pupils of mixed racial groups and of urban origin, with an average of 22 pupils per class and four classes per grade (89 were from Grade 9 and 83 from Grade 10). Each of the four grade classes were randomly assigned an alphabetic identifier (A, B, C and D), which determined the particular intervention they would experience. The interventions employed are depicted in Table 1 below.

Table 1:
Grade 9 and 10 digital storytelling interventions

<table>
<thead>
<tr>
<th>Class</th>
<th>Intervention</th>
<th># Videos created</th>
</tr>
</thead>
<tbody>
<tr>
<td>9A &amp; 10A</td>
<td>Watch and comment on public videos. Create own digital stories and comment on peer videos.</td>
<td>9A = 7, 10A = 6</td>
</tr>
<tr>
<td>9B &amp; 10B</td>
<td>Watch and comment on public and peer videos.</td>
<td></td>
</tr>
<tr>
<td>9C &amp; 10C</td>
<td>Watch and comment on public videos.</td>
<td></td>
</tr>
<tr>
<td>9D &amp; 10D</td>
<td>None – Control group for the quantitative study within the project</td>
<td></td>
</tr>
</tbody>
</table>

Grades 9A and 10A were shown public videos in class that were chosen for their inspirational value (people who overcame adversity). Three public (YouTube) videos were shown, namely: Nick Vujicic (Moreira, 2011), Susan Boyle (Leyland, 2009) and seven year old Connie Talbot (Behindthesecret, 2007). Their assignment required them to create their own digital story and comment on peer videos. They worked in self-selected groups of two to four members in order to facilitate meeting after school hours. They were required to write and act in a five to 10 minute screenplay called ‘Inside Outside’, which suggested dealing with internal psychological factors as well as external environmental factors in their lives. The target market was their peers. Thirteen digital stories were produced (Grade 9A = seven, Grade 10A = six). Recordings were made using Sony podcast videos, mobile cellular phones or webcams. A video screenplay template was downloaded from a website (Nab’Ubomi) and provided to these pupils. The basic storyboard and a first edit version of the videos allowed for formative input from peers and the teacher. Groups A and B were given peer-assessment forms, based on the assessment criteria for digital stories as per South African curriculum standards. This form used three types of emoticons to aid quick feedback. In addition, a closed social networking and collaborative site, Voice Thread, allowed for commentary on the videos.

None of the other classes (B, C and D classes) had the opportunity to create a video. The pupils of Grade 9B and Grade 10B could only watch and comment on peer and public videos. Those in Grade 9C and Grade 10C could only watch and comment on public videos. Grades 9D and 10D had no intervention; acting as the control group for the quantitative study that formed part of the overall project. The differences in group interventions were explained to the pupils and they were given the assurance they would make their own videos later in the year. These subsequent digital storytelling experiences did not form part of the study.
The research activity lasted three school terms and all eight classes involved in the research were subject to qualitative questionnaires, which polled their particular experience at the end of the activity. In order to see whether there were any lasting or further changes that could be attributed to the interventions, an informal discussion among some of the A groups (who created videos) were hosted to determine whether there were any long-term effects from making their own videos.

To present the data graphically a word cloud format is used. The qualitative questionnaires run at the end of the activity were used as the data source and all comments that would normally be coded have been used to generate the word cloud. The size of a word in the cloud thus represents the frequency of the word as it appears in the coded text. The top 50 words are displayed. The free software wordle (http://www.wordle.net/create) and tagcrowd (http://tagcrowd.com/) were used to generate the information used. It should be noted that sizes of words are only relative to those within the same cloud. The inherent bias within the data is that it privileges the voice of those who choose to comment over those who do not. In addition, synonyms are represented in word clouds as totally different words with no obvious link to each other. Notwithstanding these limitations, the pattern-based view of the data potentially allows for a useful perspective and mode of comparison.

**RESULTS**

The results are presented in two parts: the first, considers to what extent the teenagers’ experiences are dependent on the intervention they experienced, while the second reflects on the unintended consequences of the interventions.

**Part 1: A range of reflective experiences**

... and you Think of Things, you find sometimes that a Thing which seemed very Thingish inside you is quite different when it gets out into the open and has other people looking at it.

This quote represents teenagers’ vulnerability (‘inside’) and difficulty in relating their own emotions and circumstances (‘outside’) as well as being able to relate to the experiences of others (‘outside’); and to incorporate these into their frame of reference and decision-making (‘inside’). This study was designed to provide a variety of digital storytelling interventions with the intention to stimulate reflective, critical thought. With the exception of the control, Group D, all groups were moved emotionally and felt challenged to reconsider their own circumstances from the perspective presented by other peoples’ life experience (see Figures 1, 2 and 3).

![Figure 1: Comparison of wordle word clouds for pupils watching public digital stories (Group C)](image-url)
The dominant words in Group C are ‘emotions’, ‘think’, ‘feel/felt’, teamed with words such as ‘critically’, ‘aware’, ‘evaluate’, and ‘learn’ (Figure 1). In Group B they speak of ‘see’, ‘felt’, ‘thought’, ‘aware’, ‘interesting’ and ‘happy’ (Figure 2) and Group A speaks of ‘feelings/felt’, ‘emotions’, ‘think’, ‘learnt’, and ‘people’ (Figure 3). (Note that the word ‘group’ which dominates the Group A discussions will be discussed in part two of the results.) A member of Group C commented that the videos

made me aware of my emotions and I could critically evaluate my feelings, which I have never done before.

This was echoed by others who felt more appreciative of their own situation, became more sympathetic and considerate of others, less judgemental and determined to change for the better. While those in Group 10B expressed similar responses to those from Group C, those from 9B appeared more removed and a little less engaged, more like spectators in the intervention rather than participants. While overall the intervention with Group B presents positive results (Figure 4) these should be viewed as requiring further investigation to unravel the contradictions presented by the more removed response of the 9B group versus the more engaged responses of 10B.
Figure 4:
Comments made by Group B pupils in relation to the perceived impact on their view of themselves, other pupils and role players in their lives

**Group B: Comments about Self**
- ‘I felt they did sort of touch on my emotions and make me think’
- ‘They made me feel happy as they were made by girls my own age’
- ‘helped me accept who I am’
- ‘taught me some valuable lessons’
- ‘They really made me look deep into myself’
- ‘There are so many things in the world I am not aware of. … I asked myself questions I’ve never asked before, it was a good exercise’
- ‘make me think about my state very carefully and question what I am like … and how I go about living’

**Group B: Comments about Other Role Players in their life**
- ‘I personally feel movie making is a great way to express the teenage emotions. In the films you see peer-pressure, school pressure, life pressure, love, hate, anger and disappointment. You see our lives and I think by doing these movies we make a greater impact of understanding to the adults’

**Group B: Comments about Other Pupils**
- ‘showed what others thought was a problem’
- ‘it was nice to see my friends act … and to see that they are aware of what people could be going through and that they’re not just boy- and party-obsessed’
- ‘It was comforting to know that others face some of the same difficulties’
- ‘the movies showed the true reflection of what is really going on between us as a grade’
- Experiencing rejection and secrets held by friends. … how we relate in the issues we have between our parents’

Figure 4 highlights their reflections on how they felt in relation to themselves, their peers, as well as other role players in their lives. They felt challenged to explore issues in greater depth and in ways not previously considered. They suggest that for future studies it would be valuable to share peer videos with other adults in their lives and explore ways to achieve this while still protecting the boundaries of privacy of the participants.

Overall, the reactions of Group A were similar to other groups but this video-‘maker’ group showed a deeper level of thought, reflection and reflexivity when compared to the rest (Figure 5). It is clear the intervention provided the students with a platform for their voice. Grade 9 and 10 pupils made 13 digital stories reflecting similar concerns or interests. ‘Outside’ topics dealt with physical abuse, peer pressure, autocratic parental expectations, boyfriend issues and school pressures such as work overload and expectations of teachers. ‘Inside’ topics related to communication, eating disorders, identity, trust issues with parents (ramifications of lying to them) and understanding cultural differences (inside I am still like you although I dress differently and have a different religion). It appears the creative process may have triggered levels of reflection and self-analysis not activated in those viewing the videos, as exemplified by comments in Figure 5.
Figure 5: Comments made by Group A pupils in relation to the perceived impact on their view of themselves, other pupils and their context, and their own behaviour

<table>
<thead>
<tr>
<th>Group A: Comments about Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ‘writing the movie and trying to create characters helped me to understand my own feelings, thoughts and attitudes towards people, events and circumstances. It helped me to define my feelings. It was very stressful sometimes’</td>
</tr>
<tr>
<td>• ‘I am not used to doing these type of things where I have to re-evaluate and look at myself and what I do’</td>
</tr>
<tr>
<td>• ‘made me think about things about myself that I usually would not have’</td>
</tr>
<tr>
<td>• ‘My movie made me want to try and be myself and to tell others not to try and change me. But I don’t try to be myself around everyone because, like in my movie, it showed a girl saying ‘no’ to being changed but it doesn’t show her afterwards and how she copes because most times we don’t’</td>
</tr>
<tr>
<td>• ‘some of the things I learnt were upsetting to me, but I realised it was reality’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Changes in behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ‘I’m more sensitive to people’s emotions’</td>
</tr>
<tr>
<td>• ‘I could identify other people’s emotions more easily’</td>
</tr>
<tr>
<td>• ‘with the silent movies you really had to look at body language and non-verbal communication so now I tend to pay more attention to those things’</td>
</tr>
<tr>
<td>• ‘I learnt to compromise’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group A: Comments about Other People</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ‘people are not who they are on the outside. They just portray that image ‘to impress people’</td>
</tr>
<tr>
<td>• ‘Our movie was a bit of a controversial topic. It affected my feelings because as we were acting out the different people in it, we realised that people act like that a lot and it felt good to bring awareness to [the] moral of the movie’</td>
</tr>
<tr>
<td>• ‘It doesn’t show her afterwards and how she copes because most times we don’t’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group A: Comments about their Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘It was also a time of re-evaluating our surroundings-what was happening at this time in our lives’</td>
</tr>
<tr>
<td>‘in some ways it was quite disheartening to know that we face these problems as pupils’</td>
</tr>
</tbody>
</table>

In addition to ‘inside’ or personal aspects of this reflection, pupils also considered the ‘outside’: i.e. their relation to others and their context. These comments suggest a social awareness of a potential, perceived similarity between ‘self’ and someone who may have previously been identified as ‘other’. A new level of self- and other-awareness was clear in many pupil statements but it is of note that this awareness is also reported to have changed behaviour. When pupils from Group A were interviewed roughly nine months after the intervention they reported cognitive, perceptual and behavioural changes long after the project ended. One group created ‘A Dream that Ain’t Mine’, focusing on parental expectations for their daughter’s future, which were opposite to her own. A group member reported that recently, while arguing over a similar matter,

out of nowhere the movie we made popped into my head and I could suddenly see both sides of the story and realised that my parents had some valid points. I could see that, as a parent, they were concerned about my safety.

It changed the whole discussion and a compromise was easily reached, which, she claimed, was most unusual. Another group who created ‘Masked’, about coming to school with masked emotions and not revealing one’s true self and challenges reported that ‘putting it outside of ourselves, telling our story’ made it easier to accept that most of their peers were masked as well. This resulted in reduced feelings of
isolation and an understanding that they were ‘all in this together’, so that there was a more mature, and kinder, perception of their peers.

Part 2: Unintended consequences

Equally important as the impacts of the digital storytelling interventions are the challenges experienced and lessons learned. Four aspects are identified: the need to ensure an inclusive experience for all; managing the emotionally disruptive experience of the intervention; controlling for the effects of technically poor quality digital stories; and dealing with the challenges arising out of group work.

Control Group D (no intervention) felt ambivalent about the experience. On the surface of it they appeared accepting of the situation (most common word = ‘Fine’) as they knew they would make their own videos later. However, the majority of commentators expressed a sense of unfairness, isolation from peers and a sense that they had been victimised in some way: ‘I was a bit irritated … (it) looked like fun’, ‘I feel sad … I felt very left out’ and ‘I feel very upset to be excluded from this’. As this control group was necessary for the quantitative study this situation could not be avoided, but it serves to stress the importance of ensuring inclusivity in educational interventions.

It is important that the reactions, which may be put in motion by an intervention, are appropriately managed. In this study, insufficient attention was paid to the potentially destabilising influence of the intervention on the participants’ current frame of reference and their ability to manage their responses. All groups experienced this situation. Group C students reported feeling ‘intimidated’, ‘confused’, ‘uneasy’, ‘upset and emotional’. They expressed a sense of frustration … saying you going to believe in yourself it is easier said than done and the videos taught me how to handle situations but the situations that they faced (are) different from the situations that we face now.

Group B also expressed a sense of dissatisfaction when issues were raised and yet remained unresolved. This was echoed by Group A who felt the intervention did not go far enough in providing skills and coping mechanisms when issues arose during the study (see Figure 5). Participants in Group A found the pressures of group work (discussed later, Figure 6) placed pressure on existing relationships. These pupils reported that ‘a Thing’ inside them was ‘quite different when it gets out into the open and has other people looking at it’, but equally that it is not only the ‘Thing’ itself which may make one vulnerable but also the process by which the ‘Thing’ ‘gets out into the open’ which can make one vulnerable.

Participants in Groups A and B viewed and critiqued the digital stories produced by their peers. While this was a purposeful part of the study design intended to prompt students to think more deeply about the video they were viewing, it also resulted in a ‘film-critic’ styled distancing of the audience. This may have inhibited some of the participants from experiencing a personalised, immersive response to the digital story. The irritation of watching badly-made videos marred the event for many. It would appear that well-made public videos may have an equal, or greater, effect than badly-made peer videos. However, this needs to be balanced against the obvious impact experienced when they could relate to issues being expressed by their peers (Figure 4: Comments about other pupils).

All Group A pupils chose to work in groups. The making of their own digital stories raised numerous issues directly related to working in a group. These impacts influenced group members in a variety of ways, which need to be considered alongside the benefits already mentioned. As an example, there were
challenges in negotiating topics. Pupils appreciated having a range of ideas from team members but some felt strongly about their personal message and questioned if the topic related to the actual experience of any team member or represented a constructed reality. The Figure 3 word clouds clearly show the predominance of comments relating to group work. Reactions were mixed in terms of whether or not it was better to work in a group or individually. The benefits of being in a team were very clear and highly regarded but small teams complained that they had to work harder to complete, yet larger groups felt that working in a smaller team, or alone, was better (Figure 6). Opinions were divided, if being in a group of friends was better or if teams should be randomly assigned. Problems experienced included scheduling, a shared commitment to the task and reaching consensus (Figure 6).

Figure 6:
Group A comments relating to working in groups

**Group A: Positive Comments about Working in Groups**
- 'added value'
- 'you get different ideas and ways of making one (movie)'
- 'people to help'

**Group A: Comments about Size of Group**
'Our group was small ... We did have a lot of difficulty' vs 'I would have preferred to work in a group of 2 or if necessary alone'

**Group A: General Comment**
- 'why the group chooses that topic for the movie? Does it have anything to do with someone's personal life or maybe something they see everyday'
- 'I got to learn about the other person in my group. It showed me that most people only care for themselves'

**Group A: Negative Comments about Working in Groups**
- 'Difficult to meet as we all live within a 120km radius'
- 'We all do different extra-mural activities'
- 'other people are not always reliable'
- 'commitment was a problem! As I previously said my group didn’t help'
- 'others who did not pull their weight'
- 'We also found it hard to agree on important issues like voice projection, acting etc.'
- 'the group couldn’t get a good story and script'
- 'it was annoying sometimes to try and incorporate everyone’s ideas even if you thought your own idea was great'
- 'getting my own personal message across instead of a general thing that applies to very many people'
- 'when working with your friends you suddenly know too much about them .... and at the end you fight (and or) lose a friend but it might be for the best'

**DISCUSSION**

The results of this study support many of the premises suggested by the existing literature. The use of constructivist and constructionist pedagogy, employing collaboration and visual media have led to personal reflection and changes in behaviour. This illustrates the development of critical thinking skills in numerous participants as suggested by prior studies (Cheung & Jhaveri, 2014; Kwan & Wong, 2015). The results of the study support the decision to use digital storytelling as an accessible medium for understanding others, and for self-expression. The feedback from these digital storytelling experiences shows extensive, detailed evidence of pupils reflecting on the emotions felt and questions raised by the intervention as well as how they have contextualised this in terms of their personal situation and the world in which they live. There is substantive evidence of the consideration of differing viewpoints: including views expressed by an individual, friend, group member, peer who may have previously been considered ‘other’, parent or other adults. The Grade 9 and 10 (14-16 years old) participants of this study have provided comments, which suggest they have reflected on, and in some instances, revised their way of thinking and behaving, illustrating the skills that are seen to represent the use of critical thinking; including reflective and reflexive
practice. The results thus show that digital storytelling is able to stimulate critical thought, deeper understanding and personal change in individuals as suggested by Ebersöhn et al. (2012). These results support the findings of those studies claiming critical thinking skills can be effectively taught to children of school-going age (Abrami et al., 2008; Cheung & Jhaveri, 2014; Kwan & Wong, 2015).

Digital storytelling is inclusive, allowing the pupil to be both the producer and the consumer of knowledge. This was clearly demonstrated in all participant groups (A, B and C). Although the teacher provided a broad topic to direct the intervention, the choice of the title ‘Inside Out’ appeared to provide sufficient scope without limiting pupils’ choice. Pupils’ sense of agency in their choice of content led to positive results. Pupils’ greatest benefit appears to be derived from creating their own stories (Group A), as in Robin (2008), although there are two clear caveats from the results of this study. Firstly, if one is required to work in a group the group dynamics may negatively impact the personal outcomes experienced and; secondly, well-made public videos involving relatable characters may be equally, or more useful, than poorly-made peer videos. These situations were not explored during the study but are observations noted for further study.

In addition, the digital stories created demonstrate that students have endeavoured to communicate a specific message with their story, having a specific intent and audience, in mind. Cheung and Jhaveri (2014) suggest that videos which achieve this, rather than merely reflecting reality, represent a good example of critical thinking. Only two examples of the digital stories were presented here; namely ‘A Dream that Ain’t Mine’ and ‘Masked’. While not explored in the study, one participant even suggested that topics may have been specifically selected for the response they could elicit; querying if any team member had in fact experienced the event portrayed.

Unintended consequences of the study suggest that care must be taken to ensure no group of students feels disadvantaged in the design of an intervention. In addition, including students in the critical review of digital stories should be designed as a second-phase of an intervention to prevent it causing them to distance themselves from actually experiencing the material. This positionality may also be explained by Gee, Allen and Clinton’s (2001) claim that teens in different social strata use language differently when describing their experiences. They suggest that pupils from upper middle-/upper-class families (such as those in this study), use language in a ‘more abstracted and elaborated’ way (Gee et al., 2001: 191). This makes it appear as if

something seems to stand between the upper middle class teens and their relationship to their language and the world. It is almost as if they have, in their heads, a map of how (they think) people, families, and institutions are related in society in terms of achieving professional (elite, specialised) success’ (Gee et al., 2001: 192).

They thus appear to distance themselves from personal experiences through this ‘sidelong glance’ at norms. This study did not explore the reasons for this distanced stance but it may suggest that the socio-economic status of participants may play a role in the results reported by participants.

A debriefing at the end of the exercise, involving all groups, appears to be necessary to help pupils deal with: (a) inter-group tensions, (b) intragroup, interpersonal and other issues, (c) feedback on the different experiences of each group of pupils, and (d) the management of self and relationships moving forward. In South African schools, this could be achieved by collaborating with a school psychologist or ‘Life Orientation’ teacher (a compulsory subject equipping ‘learners for meaningful and successful living in a rapidly changing and transforming society’ (DoE, 2002: 4).
All pupils chose to work in groups and learning was thus socially mediated. In feedback, some did indicate; perhaps with hindsight, they would have preferred to work as individuals. Group work led to scheduling and interpersonal problems but overall pupils appeared to find the benefits of working in groups outweighed the disadvantages. This supports the tentative findings of Abrami et al. (2008) that collaboration is advantageous. The practical, social dynamics of group work appear to dominate the experiences of pupils while making the videos and thus it is suggested that teacher training in group work should be a precursor to implementing this pedagogy.

The outcomes of the study need to be contextualised in terms of the limitations of the study. In particular, the impact of the digital storytelling activity may have been influenced by the fact that these pupils simultaneously participated in a quantitative study involving standard trait emotional intelligence (EI) questionnaires.

CONCLUSION

In conclusion, for those of ‘very Little Brain’ or, to be kinder, those who are going through major neurological and physiological changes in the brain’s dopaminergic system during puberty, digital storytelling could be a useful pedagogical tool. Putting issues ‘out into the open’ and having ‘other people looking at it’, allows pupils to gain new perspectives. The assignment title – ‘Inside Outside’ – allowed for individual and group interpretations that were meaningful to the pupils and facilitated learning.

As has been explained, digital storytelling proved to be a worthwhile, empowering and educational exercise for all pupils participating in the study. There was a greater appreciation of shared issues. Participants came to feel they were not alone in experiencing their external problems such as physical abuse, peer pressure, autocratic parental expectations, boyfriend issues and schoolwork pressures as well as internal psychological ones of eating disorders, communication, identity, trust issues with parents and understanding cultural differences. They enjoyed the process and the comments showed good critical analysis. The qualitative data showed that group work provided opportunities for understanding another’s point of view and proved to be a source of new ideas.

The greatest short- and long-term gains were found in the pupils that created their own digital stories. Pupils, who might sometimes be ‘of very Little Brain’, therefore clearly find value in putting their story ‘out there’; but equally pupils who watched peer and public videos were exposed to alternate viewpoints, engaged in self-reflection, and experienced improved critical thinking skills, which could positively alter their decision-making processes. Bearing in mind the physiological and social pressures at this critical age, further research on digital storytelling in the education of the teenager is highly recommended.

There is scope for further research among boys and mixed (co-educational) schools as well as government schools, and rural schools, where both ‘internal’ and ‘external’ experiences could differ significantly from those experienced by the pupils from the school in this study. As this research is based in South Africa, it would be fruitful to determine whether there are any similarities with schools in other countries.

REFERENCES


Promoting quality learning experiences in teacher education: What mentor teachers expect from pre-service teachers during teaching practice

Moeniera Moosa, University of the Witwatersrand, South Africa

ABSTRACT

The main goal of initial teacher educator (ITE) programmes is to prepare pre-service teachers to teach effectively in diverse classrooms. During teaching practice (TP), both in-service teachers and university tutors have expectations of pre-service teachers; the two groups however may differ in their expectations. This paper reports on findings from a case study of what teachers expect of students during TP. Data were collected from 77 teachers using a qualitative research method. Teachers were requested to complete an open-ended questionnaire. Findings from a deductive thematic content analysis indicated that teachers confused what students should know with what they should do during TP. The data indicate that teachers found it beneficial to have students at their schools for TP but expected students to have comprehensive content, curriculum and general pedagogical knowledge. Teachers also expected students to have knowledge about more generic aspects of teaching, such as knowledge of specific school context, what it means to be professional, willingness to learn, participation in school activities, being punctual and adhering to the school’s code of conduct. Teachers’ expectations of students are still technicist and unrealistic as they view skills acquisition as involving practice over time. There is thus a dichotomy with regard to the expectation of procedural and principled knowledge for students on TP. This misalignment of expectations will impact negatively on pre-service teachers.

Keywords: Initial teacher education, schools, teaching practice, in-service teachers, pre-service teachers

INTRODUCTION

There is a growing interest in research on how to prepare pre-service teachers effectively to teach in South Africa. Government documents, like the Minimum Requirements for Qualification in Teacher Education (henceforth, MRTEQ) (Department of Higher Education and Training, 2015), indicate competencies of newly qualified teachers to which initial teacher educator (ITE) programmes are expected to adhere. Added to this teaching practicum is a core and compulsory component of student teachers’ professional training and learning (Gebhard, 2009; Tang, 2004; Department of Higher Education and Training, 2015) in ITE programmes. MRTEQ (Department of Higher Education and Training, 2015) adopts a more knowledge-based approach to teaching and rejects a technicist approach that was commonly found pre-1994. At the same time, the needs of learners and the teaching profession at large should be considered
in the process of teacher preparation. However, there is limited knowledge about what in-service teachers expect from pre-service teachers during their teaching practicum. By understanding in-service teachers’ expectations of students more comprehensively, universities will gain insight into how to better prepare students before they are placed in schools for TP. To address this gap, the paper reports on what 77 in-service teachers expect of students when they are on TP.

I firstly situate the study within the wider body of research into teacher education. I then refer to the work of various authors to understand what is required from pre-service teachers during teaching practice. Next, I describe the theoretical framework, research design and outline the findings. I begin by reviewing selected literature on teacher education.

**LITERATURE REVIEW**

Increased pressure has been placed on universities across the globe to find ways of ‘proving their worth not only in the preparation of students, but also how they are linked to business and industry’ (Hénard & Roseveare, 2012: 8). Initial teacher preparation programmes are not exempt from these pressures. There have been numerous changes to the education system in South Africa over the past 20-years. These changes include, but are not limited to, curriculum changes, large class sizes and accommodating learners’ academic and social needs. In the light of this, teaching has become more multifaceted and requires teachers to have an understanding of the ‘complexity of the profession and can think on multiple levels’ (Hoban, 2005: 1) in order to be operationally sound in the classroom. Hence a more dynamic teacher is required in schools. Yet, newly qualified teachers feel unprepared to assume their roles in the classroom (Goodwin, Smith, Souto-Manning, Cheruvu, Tan, Reed & Taveras, 2014). If we leave new teachers to sink or swim they will become overwhelmed and end up leaving the profession or develop a personal survival agenda that will not serve the needs of these learners (Feiman-Nemser, 2003: 27). This has implications for how pre-service teachers are trained as their capabilities for meeting these needs have to be developed in ITE programmes. There is also a need for a far stronger alignment between what schools need and university outcomes (Feiman-Nemser, 2001).

**Preparing students for practice**

Teachers’ expectations of students during teaching practice should be regarded as an important source of information for initial teacher training institutes. In the absence of this information, it could be claimed that what is taught in ITE programmes is not what is expected in the profession. Furthermore, in the absence of this alignment, schools might regard initial teacher education programmes as removed from the realities of the practice. This is what some researchers frame as the divide between theory and practice (Korthagen, 2010). This divide will perpetuate the common misconception of students that theory is only ‘good’ when it is ‘relevant’ to assist them in practice without the realisation that the ‘relevance’ is in the theories’ potential to act as a tool for pedagogical intervention (Deng, 2004). Teachers might feel the need to ‘protect students from the impractical ideas promoted by lecturers who are out of touch with the realities of the classroom’ (Feiman-Nemser, 2001: 1020). This view, according to Grossman, Compton, Igra, Ronfeldt, Shahan and Williamson (2009: 2060), would perpetuate the ‘all too familiar divide between theory and practice’. Bridging the gap between theory and practice is critical as it would assist in preventing pre-service teachers from feeling lost during teaching practice (Hong, 2010: 1540). Hence, attempting to promote depth and rigour in the execution of an ITE programme will remain an unserviceable experience until school and university expectations become more aligned.

The absence of this alignment in terms of a common goal and understanding of teaching will result in a non-productive relationship between schools and teacher training institutes and a lack of sharing of expertise (Feiman-Nemser, 2001). Thus, in-service teachers and ITE programmes should have a common understanding of what is important and relevant for teachers to know. Tom (1997 cited in Hoban, 2005)
states that one of the problems associated with teacher education is the discontinuity between university courses and school practices. If there was more of a match between the two, the schools would be equipped to build on and extend what pre-service teachers have been taught during teaching practice (Hoban, 2005). A further concern is that initial teacher education programmes could view what pre-service teachers observe in schools as ‘bad practice’ (Goodlad, 1993 cited in Hoban, 2005: 3). With experience, in-service teachers could develop strategies to cope with the various challenges of teaching that are not necessarily aligned to any theoretical stances or specific pedagogical or methodological practices. These skills can be viewed as technical skills which are seen as equivalent to ‘survival skills’ (McDonough, 2012: 7).

Teachers might, nonetheless, feel that through their trial and error method these practices are effective. These practices might become a set of how to techniques (Gamble, 2009) or simply ‘good ideas for the classroom’ (Ensor, 2004: 229) that are not in conjunction with what pre-service teachers are taught during their ITE programmes. It would thus be significant to gain an understanding of what ITE programmes regard as vital for teachers to know and what schools deem as relevant. Initial teacher training institutes are faced with a challenge of deciding what should be included in the curriculum for pre-service teachers and what they would best learn by being exposed to schools during teaching experience (Grossman et al., 2009). The reality is that although ITE programmes cannot fully prepare pre-service teachers for all the challenges of being in a school, they play a vital role in creating an authentic setting in which the demands of teaching are highlighted for pre-service students (Gravett, Henning & Eiselen, 2011).

In the absence of an understanding of the various stakeholder expectations, there might be a misalignment of expectations. This could result in the pre-service teaching students feeling uncertain and ill prepared. They might very well find themselves in a position where they only learn about what teaching entails when they qualify and begin teaching. The aim of this research is to gain a deeper understanding of what these expectations are, I hope to gain a better understanding of how the curriculum can be improved to meet the needs of schools, the university, as well as pre-service teachers.

Initial teacher education programmes

The emphasis of ITE programmes should be to prepare pre-service teachers to be equipped with knowledge, skills and processes needed for teaching. This is not a painless task as teaching is a ‘complex practice’ (Grossman, et al., 2009: 2059), which is ‘influenced by many interconnected factors’ (Hoban, 2005: 2). In order to achieve this, ITE institutes promote what Shay (2012: 13) refers to as ‘professional knowledge and theoretical knowledge’. ITE programmes are professional and theoretical in nature because teaching practices are derived from theory and the logic of a specific discipline is explored with pre-service teachers. Added to this, teaching should be viewed as a profession, with the focus of teacher education programmes being on pre-service teachers to develop a skill set of strategies that will allow them to be in a position to make personal judgements in various classroom contexts (Hoban, 2005; Berliner, 1994).

There are various views on what a teacher educator programme should include and not compromise on. These include programmes not only being limited to students’ mastery of specific instructional techniques (Goodman, 1988) but should also be ‘organized around a core set of practices’ (Grossman, Hammersness & McDonald, 2009: 274). To achieve this, teacher educators must focus upon helping pre-service teachers develop and refine a set of core practices for teaching (Grossman et al., 2009). These core skills are guided by the MRTEQ (Department of Higher Education and Training, 2015 document which highlights the basic competences of a beginner teacher). They include sound content knowledge, subject methodology, understanding individual learners’ needs, the ability to communicate effectively, knowledge about the school curriculum, and understanding diversity in the South African context.
It must be noted that what universities prioritise in their curricula is influenced by the amount of time students have to qualify. Thus it is not possible for a teacher educator programme to cover all aspects of teaching. It therefore becomes important for students to be placed in schools for teaching practice so that they are exposed to aspects of teaching from experts who have experience of being in the classroom (Berliner, 1994).

**The role of teaching practice (TP)**

TP is a time when students are exposed to the professional challenges that service teachers experience on a daily basis. Being at a school for TP exposes pre-service teachers to the complexities of being in a classroom, this experience, for some, can be a reality shock (Rots, Aelterman, Devos & Vlerick, 2010). TP thus gives students the opportunity to implement what they have been taught and at the same time allows them to develop a practical skill set which they obtain from observing teachers on TP. Schools should be spaces where generic knowledge and practical knowledge (Shay, 2012) are developed and applied as well as spaces that create opportunities for pre-service teachers to employ problem-solving techniques; thus providing students with ‘more powerful learning opportunities’ (Feiman-Nemser, 2001: 1014). Furthermore, students also view this time as an opportunity to secure future employment (Caires, Almeida & Martins, 2010). Yet, the reality is that it is not always easy or possible for students to transfer or apply the theoretical knowledge to actual classroom practice (Reeves & Robinson, 2014). TP can be regarded by most students as the most stressful experience during their teacher preparation qualification (Chaplain, 2008). Hence the time spent at school for TP can be viewed as a ‘psychologically demanding period of professional preparation’ (Klassen & Durksen, 2014: 158) for students. Students’ ability to understand and meet the demands of teachers can assist in minimising the stress they experience during TP.

In-service teachers have the responsibility to induct students into the profession and expose them to aspects of ‘school life’. Experienced teachers have developed a set of skills that they have found effective when teaching and which they often refer to when faced with decisions. Teachers might regard these skills as full-proof mechanisms when solving problems or coping within a classroom context because it is what has allowed them to be successful or survive within the classroom. Teachers are often also very eager to impart these kinds of ‘teaching tips’ to students during TP which may sometimes contradict the professional and theoretical knowledge that they have acquired. According to Hoban (2005: 7) when teaching gets diminished to a ‘set of goals’ and ‘skills’ it moves from being a profession to a craft. This is because it is assumed that teachers can understand what to do in the classroom through mere trial and error. In the next section I will discuss the theoretical framework which sets the scene for the study.

**THEORETICAL FRAMEWORK**

In order to understand what teacher knowledge should comprise, the work of Ryle (1971) and Shulman (1987, 2004) will be used as a theoretical framework. Ryle (1971) suggests a more generic way of understanding teacher knowledge by incorporating the concept of knowing ‘how’ and knowing ‘what’. These ideas are further expanded by Gamble (2009) who describes knowing how as procedural knowledge and knowing what as principled knowledge. Procedural knowledge can be regarded as practical knowledge which is learnt informally as it is difficult to make this form of knowledge explicit in a textual form. Thus practical knowledge must be informed by understanding and should draw from both academic and technical knowledge (Morrow, 2007); thus it is acquired by means of social interaction and can be ‘context-specific knowledge’ (Wilson & Demetriou, 2007). This kind of knowledge would be regarded as knowledge acquired in practice (Cochran-Smith & Lytle, 1999). Principled knowledge on the other hand can be regarded as codified knowledge that is taught formally (Wilson & Demetriou, 2007). This can be viewed as knowledge of practice (Cochran-Smith & Lytle, 1999) that is taught at university.
Shulman’s (1987) model of teacher knowledge is the second theoretical framework used as he grappled with the question of what teachers should know. This paper specifically makes reference to his explanations of content knowledge, general pedagogical knowledge, pedagogical content knowledge, knowledge of educational contexts and curriculum knowledge.

Content knowledge is the knowledge teachers have of the subject they are teaching (Shulman, 1987). This does not include knowledge of the curriculum. For teachers to be effective they need to have deep knowledge and a strong understanding of the subjects they teach. General pedagogical knowledge for Shulman (1987: 227) refers to ‘broad principles and strategies of classroom management and organization that appears to transcend subject matter’. This further includes teaching strategies, planning techniques (including efficient use of time) and assessment techniques. Students would acquire this kind of knowledge not only at university but in schools as a form of practical knowledge as it not always easy to make this kind of knowledge explicit in the form of text. Pedagogical content knowledge (PCK) refers to knowledge a teacher has that ‘goes beyond knowledge of subject matter per se to the dimension of subject matter knowledge for teaching’ (Shulman, 2004: 203). It is the ways in which a teacher re-contextualises the content knowledge that allows it to be understood by the learners (Bertram, 2011). PCK further includes an understanding of what makes learning easy or difficult from learners’ perspectives (Shulman, 2004). Teachers develop PCK through ‘reflection-in-action and reflection-on-action’ (Park & Oliver, 2008: 261) within instructional contexts. Knowledge of educational contexts includes knowing about the background of the learners at the school as well as the organisational culture of the school (Bertram, 2011). Curriculum knowledge refers to teachers who need to have a comprehensive understanding of the ‘materials and programs that serve as “tools of the trade”’ (Shulman, 1987: 227). Currently this would include an understanding of the Curriculum Assessment Policy Statements (CAPS) documents.

RESEARCH METHODOLOGY

A qualitative research design methodology was used in this study to understand and interpret in-service teachers’ expectations of students on TP. This design is suitable because this research study requires one to ‘make sense of data in terms of the participants’ views (Cohen, Manion & Morrison, 2007). Furthermore, a qualitative research paradigm will allow in-service teachers to articulate their experiences and perceptions (Schurink, 1998) of what students are expected to know on TP. The research design aims to see the world from the participant’s perspective (Scott & Morrison, 2006). This will be done by exploring the ‘common experiences’ (Creswell, 2012: 20) of in-service teachers of what students need to know when on TP.

Data were collected by means of an open-ended questionnaire that was emailed to schools. Participants were requested to answer the following questions:

1. What is your schools’ criteria for accepting students for TP?
2. What are the benefits to your school of having student teachers?
3. What do you expect from students during TP?

By drawing on the responses completed on the questionnaires, I was able to gain a better understanding of the tensions between teachers’ expectations of students as compared to what the university deems relevant for teachers to know.

Students at our institute complete their TP at various selected schools in-and-around Johannesburg. This includes public schools in townships, public schools in the suburbs, and independent schools that are linked to a specific religion as well as a-religious Independent Schools. A total of 250 schools who accept students for TP were requested to participate in this research. Twenty schools declined the invitation.
Seventy-seven schools in total agreed to participate; 10 were public school in a township, 49 public schools in a suburb, 14 independent schools that are linked to a specific religion and four a-religious independent schools. Thirty of these schools were high schools, 41 primary schools and six combined schools. The rest of the schools did not respond to the invitation despite a follow-up email. The validity of the data is ensured because of the multiple views expressed by a heterogeneous group of participants from various school contexts. Thus, the information presented is not from a one-sided view point. Furthermore, the theoretical frameworks used to derive themes are widely acceptable in the ITE domain. To ensure reliability, only information that was repeated by participants has been discussed and in that way, consistency will be achieved. Information and viewpoints which are regarded as anomalies have not been discussed in detail.

From the 77 participants who volunteered to complete the questionnaires, 17 were males and 60 were female. The participants comprised 21 principals, 28 deputy principals, 16 liaison teachers and 13 teachers from various school contexts who regularly had students in their classes during TP. In order to ensure confidentiality, no names of schools have been used in this paper. Furthermore, participants’ identity has been kept anonymous by referring to them as teachers irrespective of their specific designations. No names or pseudonyms have been used in the write up of the data.

Data were analysed by means of an ‘open coding method’ as indicated by Tesch (Creswell 1994: 155). The open coding method allowed for the classification of phenomenon. This was done by reading through the raw data several times to identify key concepts and ideas which were then divided into themes (Henning, 2010). These ideas were then grouped into different themes. The themes were further derived by means of a deductive approach using Shulman’s (1987) model of teacher knowledge as well as Gamble’s (2009) concepts of ‘procedural knowledge’ and knowing what as ‘principled knowledge’. A deductive approach assisted in limiting false conclusions during the analysis process as the findings will be explained using established frameworks. This will also allow for the findings to be generalised. The disadvantage of using this approach is that it does not encourage divergent thinking.

FINDINGS AND DISCUSSION

This section will be focusing on the overall findings as indicated in the questionnaires completed by participants. Firstly, I will be discussing the criteria used by schools to accept students for TP, followed by the benefits schools gain from having students at their school. Lastly I will present an analytical discussion of what teachers expect students to know when on TP.

Criteria for accepting students to complete TP at school

From the analysis of teachers’ responses it was evident that the majority of teachers, 39%, had no specific criteria for accepting students to complete their TP at their schools. These schools indicated that they ‘rely on the university to send a list of students and then … allocate them accordingly’. Furthermore, the teachers at these schools stated that because they were ‘students once and in order to develop good teachers in the future’, they felt that it was important to give students ‘the opportunity to observe good teaching practice and experience teaching classes themselves’. The next criterion used by 13% was that students needed to be registered at an accredited institute. This was followed by 13% of teachers indicating limited school space to accommodate many students as the school was a ‘relatively small school with only two units of each grade’.

Ten percent of teachers indicated a preference for accommodating third and fourth year students. Nine percent of teachers indicated that they ‘prefer not to accept any students in Term 3’, hence the timing of TP is important. Furthermore, they also mentioned that student subject choices were often another factor that impeded students being accommodated at their schools. Fewer significant criteria were that 6% suggested that the availability of mentor teachers was an important factor. This was followed by 2% of the teachers...
indicating that the character of students is important and lastly that schools accommodated students on a ‘first come first serve basis’. In general, teachers are willing and pleased to accept students at their schools for TP, the only restriction being limited space for accommodating students. I will now focus on what teachers indicate as the main benefits for having students at their school.

Benefits of accepting students to complete their teaching practice

Overall, teachers felt that there were benefits in having students at their schools for TP, with 5% of teachers indicating that there was no benefit for them because they felt that ‘students are onlookers’ who ‘seldom seem as if they know how to be professional in their approach to their choice of profession’. The majority of teachers (65%) indicated that the greatest benefit for them in having students on TP was that students were familiar with the ‘latest trends in education, and these can be carried over to staff members of a school’. For them, students were regarded as ‘new blood’ with ‘new energy and innovative ideas to lessons’ which led to an overall ‘positive input’ for teachers and learners.

Thirty one percent of teachers stated that accepting students assists them find ‘possible candidates for possible future employment’. This resonates with Caires et al.’s (2010) view that students see TP as an opportunity to secure employment. Thus, having students at their school was envisaged as a head hunting opportunity as well as an opportunity for schools to promote their schools. Similarly, teachers regarded students as a source of ‘great help in all aspects of teaching and learning and teachers appreciated being relieved of some duties from time to time’. Thus, students were used as assistant teachers as stated by 21% of teachers as there was ‘an immediate relief on the teaching staff having two teachers instead of one in the classroom’. In addition, students were also used to ‘assist with supervision and administrative tasks’. Fourteen percent of teachers also indicated that having students at their school was viewed as an opportunity to develop future teachers and it was ‘a way of also giving back to the profession’. Teachers suggested that students are viewed as role models, by 12% of teachers for learners, because they ‘are almost in their age-groups thus reaching learners becomes easy’. Lastly, 12% of teachers found personal benefit in having students in their schools as this gave them an opportunity ‘to practise their mentorship skills’. In sum, teachers found it more beneficial to have students at their school than not to have them. I will now focus on what teachers expect from students on TP.

What teachers expect from students

From the data collected, teachers expected students to have knowledge of teaching which can be linked to content knowledge, general pedagogical knowledge, context knowledge and curriculum knowledge. Moreover, they also expected students to conduct themselves in a professional manner, participate in school activities and be willing to learn. I will start by discussing what teachers expected students to know about teaching followed by what they expected students to do when on TP.

What teachers expect students to know about teaching on TP

Overall, teachers expected students to have a strong general pedagogical knowledge, content knowledge, knowledge of the specific school context and knowledge of the current curriculum. Each one of these will be discussed below.

As previously stated, Shulman’s (1987) model of teacher knowledge was one of the models used to analyse the data and will be used to discuss the findings. For 69% of teachers it was imperative that students had a sound general pedagogical knowledge including a clear understanding of teaching strategies, planning and assessment techniques.

According to teachers this involved students being able to engage effectively with aspects of ‘teaching and learning’ including ‘how to teach a specific lesson according to a lesson plan with specific aims and
objectives’. Furthermore, students were expected to be able to adapt ‘lesson plans according to teaching
differentiation, i.e. taking into consideration the different ability groups’. Knowledge of teaching and
learning resonates with the notion that teachers need to play a leading role in this process as planning
coherent learning opportunities is ‘not something that most people know how to do intuitively or that
they learn from unguided classroom experience’ (Darling-Hammond, Banks, Zumwalt, Gomez, Sherin,
Griesdorn & Finn, 2005: 176). Similarly, this links to the notion of how teachers are able to develop
PCK (Park & Oliver, 2008; Shulman, 1987). According to teachers, students need to ‘know the different
learning areas, the time allocation of teaching each specific learning area’. The data reflect that teachers
want students to ‘research and prepare content for lessons, [as] they seem to rely very heavily on the
supervising teacher or a textbook’. Furthermore, students should also be familiar with ‘various forms of
assessment’ which includes ‘baseline, formative and summative’ assessment. Interestingly, teachers did not
express the need to students to have strong classroom management skills, specifically classroom discipline
techniques. The expectations regarding general pedagogical knowledge as argued by Cochran-Smith
and Lytle (1999) and Shulman (1987) in terms of the mismatch between theory and practice are evident in
the data. Thus, teachers are conflating what can be learnt in practice with what can be learnt of practice.

With regard to content knowledge, 40% of teachers expected students to have knowledge of the specific
‘subject matter’ that they were teaching as well as a deep understanding of the subject (Shulman, 1987;
Hagger & McIntyre, 2006; Ball, Thames & Phelps, 2008). Teachers felt that often students were ‘unfamiliar
with the subject content’. Teachers expected students to have strong content knowledge of the subjects they
are majoring in as well as their sub majors.

In relation to knowledge of the schooling context, 34% of teachers expected students to ‘have a reasonable
sense of the school demographics, socio-economic circumstance’ before coming to the school for TP.
This included having ‘some idea of the school ethos’ and ‘overall culture’ of the school. Thus, teachers
must have an understanding of the context in which they are teaching, specifically in relation to the
background of the learners in order to meet their educational needs (Thrupp & Lupton, 2006; Shulman,
1987). Some teachers expected the university to ‘offer some background information of specific school’
to students before they selected schools for TP. What teachers expect from students with regard to context
knowledge is only something students can truly understand and apply once they are in a specific context.
An understanding of individual school ethos and culture is not easily explained to someone, but instead
has to be experienced in practice.

Regarding implementation of the curriculum, 14% of teachers stated that students must be familiar with
the ‘CAPS document for their subject or phase’. In addition students should also know ‘how to use the
appropriate CAPS document to prepare lessons and assessment’. Thus, teachers expected students to
have knowledge of the current curriculum. This is aligned to Shulman’s (1987) view that the curriculum is
regarded as a ‘tool of the trade’ that teachers cannot function without. This is what Biggs (2003) would
refer to as constructive alignment. It is also linked to one of the competencies of newly qualified teachers as
indicated in MRTEQ (Department of Higher Education and Training, 2015). Students are being exposed
to specific curriculum knowledge but what is evident from teacher’s comments is that students are not able
to transfer what they have been taught into practice (Reeves & Robinson, 2014).

What teachers expected students to do when on TP

The data showed that teachers expected students to act professionally, be willing to learn, be punctual,
to adhere to the school’s code of conduct, participate in extra murals, be involved in school activities and
lastly, students needed to be familiar with general educational policies.

With regard to professional conduct, 64% of teachers expected students to ‘dress appropriately’ and have
‘acceptable social skills’. However, there was no elaboration as to why these aspects were considered
important. Fifty two percent of teachers wanted students to be ‘willing to participate in all activities offered by the school’ as this was a part of ‘every day school life’. In addition, teachers wanted students to ‘mingle with [them] in order to better understand how the school works’. For 48% of teachers, this was perceived as students showing a willingness to learn. Furthermore, it was important for students to have ‘a love for teaching and not regard teaching as just another job opportunity’. For 47% of teachers, it was imperative that students ‘be on time’, thus punctuality was a non-negotiable factor. Furthermore, issues of punctuality were deemed essential as teachers expressed that universities need to take the responsibility for ensuring that students understand the importance of punctuality. Twenty five percent of teachers wanted students to be aware of the ‘vision of the school’ as well as the ‘culture of the school and its community’ akin to the view that students need to have knowledge of the context of the school as described above. Next, 19% of teachers expected students to be ‘actively involved in all extramural activities’. Another 10% of teachers wanted students to be aware of general school policies, specifically the ‘SACE code of conduct’. The expectation is indicated in this section to relate to Gamble’s (2009) concept of students being aware of procedural knowledge about what to do at school. The challenge is whether universities can prepare students for these expectations, if at all. It is evident that teachers expect students to have a certain mindset and willingness regarding teaching as a profession. This mindset can be said to be very specific to certain contexts and school cultures and hence is not possible to ‘teach’ at university. Possessing a mindset of school cultures is akin to procedural knowledge as described by Berliner (1994) who states that this knowledge can only be learnt from experts in practice.

Much of what schools expected from students is based on aspects pertaining to generic aspects of teaching that can and should be learnt in practice. Dress codes vary from school to school and thus it is not easy or possible for universities to ‘teach’ students how to dress for TP. It can also be argued that different and unique school settings encapsulate different norms and values regarding how teachers view students on TP and what their expectations are. This is something students will need to learn in practice. Interestingly, teachers have not made reference to the need for pre-service teachers to have knowledge about the use of ICT or mention the importance of effective communication. It is apparent that teachers are much more concerned with students’ craft knowledge as well as issues like punctuality and professionalism, aspects that can be enforced by individual schools if they have systems in place. Currently, ITE programmes are focused on preparing teachers to develop content knowledge and enable various exposure to strategies for teaching and learning. This, teachers viewed as beneficial to them at a personal level because they were able to access information about the latest trends in education via students. Thus, universities should be viewed as spaces where propositional knowledge is acquired and TP is an opportunity for students to apply the theoretical knowledge they have acquired into practice (Wideen, Mayer-Smith & Moon, 1998).

In sum, what teachers expect students to know and do in certain circumstances remains technicist and unrealistic as consideration needs to be taken for the skills one learns when in practice. With this misalignment of expectations, students often find themselves wearing two different caps on TP; one for when they are being observed during lesson observations by their university tutors and another in the presence of their supervising teachers. In conclusion, in order for pre-service teachers not to feel totally overwhelmed by what they are taught at university as compared to what in-service teachers regard as fundamental for their survival, there needs to be a stronger synergy between what teachers deem as crucial and the university’s intended learning outcomes for teachers. Schools should be exposed and trained on the curriculum and vision of ITE programmes for a more coherent alignment to occur. In this way, schools and universities can be viewed as sites where knowledge is generated in mutual support. In order to achieve this, students need to be able to make the connection between the ‘theoretical ideas generated in university classes and comparing these to practice in school settings’ (Hoban, 2005: 114). For this to happen, there needs to be a stronger collaboration between in-service teachers and ITE programmes.
In the absence of this, newly qualified teachers will continue to feel overwhelmed and so increase the likelihood of them exiting the teaching profession. ITE programmes would need to take cognisance of the schools’ needs for more craft knowledge and the strengthening of professional conduct of students. Hence, it might be worthwhile to include this in a module for fourth year students so that students are not placed in a position of feeling ill-prepared to meet teacher expectations when they start teaching.

This paper has highlighted the need for further research pertaining to the preparation of students for TP with regard to content knowledge, general pedagogic knowledge, context knowledge and curriculum knowledge as well as how they view their role as teachers in practice.

REFERENCES


Exploring and understanding rural teachers’ conceptions of learning and teaching in schools of Acornhoek district, Mpumalanga Province

Annie Mafunganyika, University of the Witwatersrand, South Africa
Thabisile Nkambule, University of the Witwatersrand, South Africa

ABSTRACT

There is a dearth of research that explores teachers’ conceptions of learning and teaching in South Africa, especially in rural schools. We argue that although educational researchers are slowly showing interest in researching the dynamics and multifaceted nature of teaching and learning in rural schools, there are no studies that have focused on understanding rural teachers’ conceptions of learning and teaching. This article will contribute to this research gap in the field and add the place-based knowledge. The study used qualitative phenomenological methodology, and collected audio-recorded individual semi-structured interviews with six teachers in grades 10 and 11 and three grade 7 teachers. Each participant’s responses were analysed to identify and make sense of the conceptions, experiences, and reasons in detail, resulting in the recognition of significant statements. Findings showed a correlation between teachers’ conceptions of learning and teaching. Conceptions of learning as rote memorisation correlated with conceptions of teaching as telling and spoon-feeding, while conceptions of learning as internalising information, restructuring it for meaning making and eventually understanding, correlated with teaching as unlocking the mind and transforming learners.

Keywords: learning, teaching, conception, rural, schools, First Additional Language, generational curse

INTRODUCTION

Any attempt to improve the quality of teaching, according to Sethusha (2013), must begin with the teachers’ understanding of their conceptions of learning and teaching, and whether and how these relate to their pedagogical practices during teaching. Similarly, Copur Gencturk (2012: 8) states that teachers’ beliefs and meanings that they have of learning, teaching and their knowledge of the subject, seem to ‘... influence what and how they teach’.

It is thus important to conduct research with teachers to gain insight into their conceptions of learning and teaching in South Africa, especially due to the dearth of research in general, and particularly with rural teachers. Although it is important to understand the relationship between the conceptions and enactment in the classroom, the latter was not the focus of this article due to limitation of space. We position the paper within the post-apartheid curriculum reforms in South Africa which expected teachers to transform...
their pedagogical practices without understanding the original meaning of learning and teaching. There is existing research that explores the nature of teachers’ content knowledge in different subjects, and especially in mathematics and science education. This article critically engaged with teachers to explore their views about learning and teaching in rural schools to understand the emergence and the nature of their conceptions.

In this paper, conception can be understood as ‘teachers’ beliefs as individual mental constructs, value laden and subjectively true, being the result, relatively stable, of some significant social experiences and having an increased impact over teacher’s interpretations and contributions in the context of their teaching’ as well as their educational experiences (Skott, 2015: 19). Conceptions develop over time, depending on new information attained in time and space. Conceptions of learning and teaching ‘act as filters through which new information passes as it is processed’ (Jacobs, van Luijk, Galindo-Garre, Muijtjens, van der Vleuten, Croiset & Scheele, 2014: 1). Learning, according to Biggs (2011: 23) is

\[ \text{Learning = \ldots a way of interacting with the world. As we learn our conceptions of phenomena change, and we see the world differently. The acquisition of information in itself does not bring about such a change, but the way we structure that information and think with it does. This means that education is about conceptual change, not just acquisition of information.} \]

Teaching is defined as the ‘act of using method x to enable students to learn y, a process that has structure and form, situated in, and governed by, place, space, time and patterns of pupil organisation, and undertaken for a purpose of building microcultures’ (Alexander, 2015: 255).

The paper presents data of six teachers in grades 10 and 11 and three grade 7 teachers about the correlation between teachers’ conceptions of learning and teaching in Acornhoek district. In addition, the paper outlines the literature review on the study of conceptions of learning and teaching to signify the little research that has been conducted internationally and in the South African context since Marton and Säljö’s (1976a, 1976b) study.

There is no doubt that the relationship between learning and teaching is complex; moreover, one cannot dissociate the one from the other if quality education is to be achieved. In recent years, there has been growing literature and research that explores the relationship between learning and teaching as interconnected concepts instead of two separate concepts (Darling-Hammond, 2016; Loughran, 2013). Research on conceptions of learning and teaching has been mainly conducted internationally, and usually with university lecturers and students (Koç & Köybaşi, 2016; Lameras, Levy, Paraskakis & Webber, 2012; Levy & Petrulis, 2012; Collins & Pratt, 2011). According to Opre (2015: 230) ‘teachers’ conceptions or beliefs become key factors, being regarded as essential determinants of the instructional activity and of the students’ ‘learning process’. Teacher’s conceptions shape their instructional decisions in the classroom, because ‘what teachers do in their classrooms is oriented by their conception of teaching which are derived from their beliefs including a teacher’s prior experiences, school practices, and a teacher’s individual personality’ (Canbay & Beceren, 2012: 71). From the reviewed literature, we have identified a research gap concerning teachers’ conceptions of learning and teaching, and also learners’ conceptions of learning and approaches to learning in post-apartheid South Africa. In the article, we discuss teachers’ conceptions of learning and teaching, and specifically examine the significance of interacting with rural teachers to access the unknown experiences and meanings of learning and teaching.

We acknowledge that various research has been undertaken that focused on understanding teachers’ conceptions in different school subjects in South Africa, such as teachers’ conceptions of the nature of
scientific inquiry (Dudu, 2014), teachers’ conceptions of teaching Physical Science in the medium of English (Mokiwa & Msila, 2013), teachers’ conceptions of assessment (Sethusha, 2013). These studies only focused on teaching and assessment and overlooked understanding learning, which influences teaching and assessment. This article addresses the research gap by focusing on conceptions of teaching and learning independent of subject matter. The limited amount of existing research on conceptions by Ebrahim, Martin, Koen, Daries, Olivier and van Zyl (2015) and Sethusha (2013) has not engaged with teachers in rural schools, and Nkambule, Balfour, Pillay and Moletsane (2011: 341) posit that ‘rurality and rural education have been marginalised bodies of knowledge in South Africa’. We therefore argue that in apartheid and democratic dispensations, rural communities, their knowledge, and their educational experiences have been and continue to be overlooked.

In the article, we have prioritised rural teachers to attend to such concerns, and also concentrate on their experiences and knowledge about learning and teaching. Moletsane (2012) encourages that rurality should be perceived as dynamic and generative, which means we should shift from representing rurality with a deficit paradigm. Our article is situated within such discussions that support a move beyond a deficit paradigm, and promote the understanding of socio-historical and experiential forces that influence teachers’ conceptions of learning and teaching.

Conceptions of Learning

The basis for work on conceptions of learning began in Sweden with university students (Säljö, 1975; Marton & Säljö, 1976a, 1976b) who were asked to read parts of chapters in an educational textbook. This marked the emergence of studies on the basis of Säljö’s (1982) results that claimed a relationship between general experiences of learning (conceptions) and ways of reading a text (approaches), thus congruence. Säljö (1975) identified five different conceptions, namely:

- a qualitative increase in knowledge
- memorising
- the acquisition of facts and methods for use when necessary
- the abstraction of meaning
- an interpretative process aimed at understanding reality.

These conceptions were expanded by Marton, Dall’Alba and Beaty (1993) with Open University students in the United Kingdom to develop a sixth conception, changing as a person. However, in recent periods, various studies have been conducted which involved 488 10th, 11th and 12th grade learners from senior high schools in various regions in Taiwan (Lin & Tsai, 2013). The findings in Lin and Tsai’s (2013) study found that learners held the following conceptions of learning science; lower-level conceptions such as ‘Memorizing’, ‘Testing’ and ‘Calculating and practicing’ and higher-level conceptions such as ‘Increase of knowledge’, ‘Applying’ and ‘Understanding and seeing in a new way’. Another study on conceptions of learning was with 101 elementary school learners (51 boys and 50 girls), whose ages were from 10 to 12 years also in Taiwan. The findings of the study were that about 70% of the learners perceived learning as sitting in a classroom with a traditional setting and listening to the teacher’s lectures (Wang & Tsai, 2012). The results from the two studies above were not far from Säljö’s (1982) results: in that learning can be perceived as acquiring information, learning as remembering information, learning as doing hands-on activities respectively.

2 During apartheid the education system was segregated according to race and language, with funding for resources being allocated to white citizens. One of the most distressing marks created by the apartheid system is that rural areas in South Africa were left in miserable and negative conditions, as these were former homelands isolated from big towns and cities (Gardiner, 2008).
Rands and Gansemer-Topf (2016) highlight some limitations of and warnings about phenomenography, which include its reliance on participant and researcher interpretations, contextualisation of experiences, the possibility of different researchers arriving at different categories, and the fact that samples are usually small so that one cannot generalise from the results. For example, in South Africa, Makoe (2008) also identified five of Marton and Säljö’s (1976a, 1976b) conceptions and a key conception of learning as a contribution to the community, due to a belief that learning and education is not only benefiting the individual but also contributing to the community. Earlier, McConnachie (2000) identified grade 7 learners’ conceptions of learning as reading, which seem to suggest that when an individual reads, this is also learning. We argue in the article that the scarcity of such research in South Africa is of concern, considering learners’ continuous poor performances in different international and local tests. Such performances should encourage research with teachers and learners to understand their conceptions of teaching and learning and approaches to teaching and engaging with learning at basic education level.

In order to conceptualise various studies conducted in Africa, there is one study that was conducted in Nigeria by Watkins and Akande (1994). The study consisted of 150 14 to 16 year-old Nigerian secondary students and the findings resulted in four categories of describing learning, which were learning as: increasing knowledge (held by 47.4% of the respondents), memorising and reproducing (8.9%), applying (17%), and understanding (26.7%). They suggest that these four categories were congruent with the first four described by Marton and Säljö (1976a) and Marton et al. (1993) and proposed that the quantitative memorising conception of learning and the conception of learning as understanding are identifiable in the responses of these Nigerian secondary school students. Considering the recurrence of the five original conceptions in various studies from different continents, it is important to observe the dominance of Marton and Säljö (1976a) findings, even a few decades later. Given the above discussion, it is important to examine the factors that influence the conceptions, which is one focus of the article.

From the identified conceptions, Marton and Säljö (1976a) concluded that students could be categorised into one of two groups: those who processed information by memorising important facts, and those who tried to determine the author’s argument and develop some form of understanding from the text. They further labelled the two approaches of processing information as the surface learning approach and the deep learning approach respectively and these are hierarchically organised as reproductive conceptions of learning and constructivist conceptions of learning (Adeyemi & Adeyemi, 2014). While the authors have organised the conceptions hierarchically, we argue that they work together and are all important in the process of learning in education and play different roles in different subjects. We also acknowledge that not all memorisation of information leads to surface learning, especially if studies in Hong Kong and mainland China are taken into consideration. Wang (2010) found that Chinese learners and teachers view memorisation and understanding as complementary processes, and that there was a difference between mechanical memorisation and memorisation with understanding. Memorisation with understanding is a process and approach that students use to retain what they have learned by engaging with information critically and owning the process of learning (Wang, 2010).

Conceptions of Teaching

For Loughran (2010: 3), it is through consciousness that teachers are able to critique whether ‘what we do in our practice is in accord with what we actually do’, which is not an easy task to achieve and a reason it is important for teachers to pay attention to their conceptions of teaching. Gunersel and Etienne (2014: 405) define conceptions of teaching as a ‘way in which educators conceive of, or understand, teaching and learning’. Thus, teaching begins with teachers reflecting and observing their behaviours and those of others, to consciously develop various strategies and approaches of teaching that can be beneficial to high quality learning (Loughran, 2010). Thus, conceptions of teaching involve ideas, beliefs and attitudes that teachers hold of learning and teaching, which shape teaching approaches that are defined as an
‘educator’s actual teaching strategies and intentions’ (Gunersel & Etienne, 2014: 405). This addresses a relationship between conceptualising teaching and the actual practice of teaching in a classroom, although the latter is not the focus of the article. Gunersel and Etienne (2014) posit that conceptions of teaching fall within two forms of orientations, namely teacher-centred orientation and student-centred orientation, and this links with the conceptualisation of learning.

It was noticed that teachers who held teacher-centred conceptions of teaching used a lecturing format and viewed themselves as transmitters of knowledge, with the focus on the subject matter and content (Chen, Brown, Hattie & Millward, 2012). Teachers who held learner-centred conceptions took into account learners’ existing conceptions and facilitated student learning with interactive classroom activities. While the two orientations are presented in the form of a binary, we consider both orientations significant in ensuring that teaching and learning take place. In a cross-cultural comparative study conducted by Alexander (2009: 11), titled Five Cultures, six versions of what constitute teaching were concluded.

Teaching can be summarised as transmission, initiation, negotiation, facilitation, acceleration, and technique. On the other hand, there are various modalities of practice known as visible and invisible pedagogic practices. Visible pedagogic practices are also referred to as performance pedagogy and invisible pedagogies as competence pedagogy (Rogers, & Lapping, 2012). The differences between the two modalities provide a framework to develop different theories of instruction. The emerging pedagogic practices can either be liberal, conservative or radical. In South Africa, curriculum reforms advocate for learner-centred teaching that promotes ‘active and critical thinking’ and not necessarily rote learning and teachers are expected to reform their conceptions to accommodate the constructivist paradigm (Department of Education (DoE), 2011: 4). It is unclear whether and how teachers’ conceptions of teaching changed with the curriculum reforms, a reason this article explores rural teachers’ conceptions to identify whether there is any change.

**RESEARCH DESIGN**

In order to understand teachers’ experiences and meanings of learning and teaching, we have also used the phenomenological qualitative approach, similar to previous studies. Phenomenology is the study of lived human experience within the everyday social milieu in which phenomena occur, from the viewpoint of those who experience them (Van Manen, 2016). This design enabled us to obtain a detailed understanding of participants’ thoughts, beliefs, and experiences regarding learning and teaching. A qualitative researcher makes knowledge claims that are based on individual shared meanings of their lived experiences with other people (Silverman, 2011). These meanings can either be socially or historically constructed, with the intention of developing a pattern of meanings and understandings of a phenomenon (Van Manen, 2016). We believe that teachers’ conceptions could be influenced by past and present experiences, because conceptions are not static but develop over time, place and space.

**Research sampling**

The study was conducted with six secondary and three primary schools, located in Acornhoek, rural Bushbuckridge in Mpumalanga Province. The schools were purposively selected based on partnership with the Wits School of Education Rural Teaching Practicum Project. Teachers were also purposively selected, and only those who acted as mentor teachers to pre-service teachers during teaching practicum were selected for the study. Participants are presented in Table 1, and we had nine teachers overall.
Table 1:
Participants’ Profiles

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Gender</th>
<th>Grade</th>
<th>No. of years teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher A</td>
<td>Male</td>
<td>Grade 11</td>
<td>4</td>
</tr>
<tr>
<td>Teacher B</td>
<td>Female</td>
<td>Grade 10</td>
<td>23</td>
</tr>
<tr>
<td>Teacher C</td>
<td>Male</td>
<td>Grade 11</td>
<td>27</td>
</tr>
<tr>
<td>Teacher D</td>
<td>Female</td>
<td>Grade 10</td>
<td>6</td>
</tr>
<tr>
<td>Teacher E</td>
<td>Male</td>
<td>Grade 11</td>
<td>16</td>
</tr>
<tr>
<td>Teacher F</td>
<td>Male</td>
<td>Grade 10</td>
<td>8</td>
</tr>
<tr>
<td>Teacher G</td>
<td>Male</td>
<td>Grade 7</td>
<td>6</td>
</tr>
<tr>
<td>Teacher H</td>
<td>Female</td>
<td>Grade 7</td>
<td>9</td>
</tr>
<tr>
<td>Teacher I</td>
<td>Female</td>
<td>Grade 7</td>
<td>11</td>
</tr>
</tbody>
</table>

Research Questions
The paper engaged with the following questions:

1) How do First Additional English rural teachers conceptualise learning?
2) What are First Additional English rural teachers’ conceptualisations of teaching?
3) What are the factors that shape teachers’ conceptions of learning and teaching?

Semi-structured interviews
Audio–recorded semi-structured interviews were conducted to gather qualitative data from the teachers. Semi-structured individual interviews ‘take on a variety of different forms, with varying numbers of questions, and varying degrees of adaptation of questions and question order to accommodate the interviewee’ (Rowley, 2012: 262). This means the interviewer brings pre-determined questions, but allows for spontaneity during the interview depending on how the interviewee answers the questions. It is therefore important that a researcher pays attention to participants’ responses so that he/she can be aware of meanings being conveyed. Interviews were effective for this study because research stimulates feelings, actions, attitudes and emotions, and through interviews teachers might become conscious of experiences they take for granted. Edwards and Holland (2013) acknowledge that under such circumstances, interviews play an integral part in gathering detailed information that might be unconscious to the interviewer and interviewee. Teachers chose suitable times and venues to ensure no disturbance, and interviews took approximately one hour to one and a half hours. We noticed that some teachers talked in depth about the experiences and meanings of conceptions, and others took time reflecting on their understandings of learning and teaching.

Ethical Considerations
The interviewees were given two informed consent forms, one a letter asking them to partake in the study and the second asking for the interviewees’ informed consent to be interviewed, audio-taped for validity and reliability purposes of the study. The teachers’ identities were only known to the researcher and supervisor, teachers were also given pseudonyms ‘teacher A-I’, to hide their original identities to ensure anonymity. In addition, all information shared in the interviews was kept confidential and anonymous. The transcriptions from the audio-tape were stored in a password protected folder and remote flash drive.
to which only the researcher and supervisor had access. The participants were informed of the study and its purposes in advance before the interview sessions commenced. The participants were informed that they had the right to withdraw from the research study at any time if they did not wish to continue. Ethical clearance was sought from the Wits School of Education Research Ethics Committee and Mpumalanga Department of Education.

Data Analysis Process
Creswell and Poth (2017: 183) state that data analysis is the process that ‘consists of preparing and organising the data for analysis; then reducing the data into themes through a process of coding and condensing the codes; and finally representing the data’. Each participant’s responses were analysed to identify and make sense of the conceptions, experiences, and reasons in detail (Creswell & Poth, 2017), resulting in the recognition of significant statements. The participants’ responses showed complexity with the understanding of learning, and we were careful during the coding and categorisation of responses which resulted in two broad themes in relation to the research questions: learning as mimicking and reproducing same information; learning as self-initiated. Teachers’ conceptions of teaching also resulted in two themes that correlated with conceptions of learning, which are: teaching as telling and spoon-feeding; teaching as unlocking the mind and transforming learners, and also addressed factors that shape the conceptions.

FINDINGS AND DISCUSSIONS
Responding to the question ‘What is your conception or understanding of learning?’ participants described learning processes to highlight their meanings of learning that showed complexity.

Learning as mimicking and reproducing same information
Learning is the activity that individuals engage with all the time, resulting in it being taken for granted. However, participants talked about learning differently, for example, Teacher C stated:

Learning is memorising information that is taught by teachers … make sure a lot of information is absorbed and memorised not to forget it.

Similarly, Teacher F said:

[Learning] is trying your level best to mimic what the teacher is saying … acquiring knowledge, and be able to remember it, and reproduce it.

Although memorisation is the primary method for bringing learning into knowledge, we argue that the described memorisation and mimicking of information relate to rote learning and memorisation strategy without conscious attention to move towards understanding the relationship involved in the material that is being learned. While Wang (2009: 95) posits that ‘memorization is a key cognitive process of the brain, because almost all human intelligence is functioning based on it’, however learning for participants does not proceed from the basic acquisition of information or facts but ends in short term memory. We acknowledge that memorisation is not a negative or bad practice, as it is a ‘conscious internalising, recalling and retrieving of information’ (Aldhafri, Alkharusi & Al Ismaili, 2015: 1160). However, of concern with teachers’ responses is the lack of association between the absorbed and acquired new information with what is already known, to re-engage, restructure, reconceptualise, and recontextualise learnt information, and to create their own understanding beyond reproducing information.

The understanding of learning as ‘cramming’ and reproducing information was extended to learning out of school context. Teacher A illustrated this point:
Learning is reading the whole chapter and put the textbook aside, and reproduce the very same things I’ve read in my empty book … do that process until it looks like I crammed the information.

On a similar note, Teacher H said:

When I learn at home, I actually soak in the information, whether English or History, to make sure I recall what I have learned at a later time…

Even though textbooks are recognised as important channels of gaining knowledge, regurgitating the same textbook information in the new book signals repetition without understanding. Thus, for these teachers learning is about accumulation of individual pieces of information, with no indication of forming a long-term relationship with knowledge. While Shaik (2016) posits that teachers’ beliefs and conceptions of how children learn plays an important role in the way learning is conceptualised, we argue that participants’ conceptions of learning do not necessarily mean that the knowledge is not perceived as important. Instead, we agree with Marton’s (1981: 31) statement that ‘conceptions are closely related to one’s experience in a set context’, and for participants’ learning experiences, relationships in and out of the school context, and personal traits play a role in the formation of conceptions and the described learning.

The responses indicate that although teachers’ conceptions of learning mainly relate to rote learning and memorisation, we acknowledge that it is perceived as a way of getting basic knowledge. The concern is that if teachers conceptualise learning only as memorisation and acquisition of information, how this then influences their understanding of teaching becomes interesting. These particular conceptions of learning link with Marton and Säljö’s (1976a) original three conceptions, and are perceived as surface and reproducing conceptions of learning.

Learning as self-initiated

Learning that is initiated and generated by a learner is uniquely different from learning that is expected and directed by the teacher, and means learning is an opportunity and essential for future prospects. This is illustrated by Teacher E:

… at school I’ve been motivated to learn … I had developed something inside to read to learn to understand information for a long time…

and this need for comprehension of information from the text through construction of meaning helped to develop critical thinking and critical analytical skills. Freire (1985) regards these skills as crucial for the emancipation of individuals, as it enables them not only to read the word but also to read the world. There is also a sense of intrinsic motivation as the response indicates self-initiated learning which facilitates conceptual learning, performance, and most likely school enjoyment. Similarly, Teacher D thinks of learning as

… internalising what you have read to make sure you remember and use it long after you have learnt it out of school…

which highlights the development of learning identity as proposed by Kolb and Kolb (2009). A particular learning style is adopted focusing on the ongoing process of learning from various experiences rather than for immediate performance, and recognising the potential for future use in different contexts. There is recognition for the significance of meaningful learning experiences to expand the subject content knowledge beyond the classroom. de Vries, van de Grift and Jansen (2013) highlight the role that
personal characteristics (beliefs about learning, prepositions that individuals hold true) play in influencing conceptions of learning.

In addition to the abovementioned responses, the internalisation of information and changing as a person was also mentioned by other participants. To elaborate on learning as internalising information, Teacher G said:

… its tough, learning is internalising information taught or individually learnt … restructure it in your mind, I think asking questions, to make sense of it…

There is critical consciousness in the process of learning which involves the interrogation of knowledge during the process of internalisation which is important for meaning making. Godfrey and Grayman (2014) define critical consciousness as the ability to critically read social conditions and want to change them by actively participating in the change. The notion of change was also identified in Teacher I’s response

…when you learn, you own the information, it stays in you and you can actually change – it changes you...

There is a realisation that learning is engaging and thinking about the learnt information differently, owning it, and changing the way situations are perceived and understood, at the same time changing the individual.

This means learning is not an isolated process but involves being

… a lifelong learner, relating school information with the real social situations and issues, think different about them… (Teacher B)

because personal growth is also a continuous process. Learning is continually improving individual information, to reflect new information and construct one’s own interpretation of reality. There is an element of problem solving in these conceptions of learning, which is the core of learning, thinking, and development (Bhattacharjee, 2015). The participants’ conception of learning links with Marton and Säljö’s (1976a) fifth and sixth conceptions, and the difference in this article is that participants linked self-initiated learning to thinking differently about social issues and changing them.

The following section presents teachers’ conceptions of teaching which demonstrated a correlation with some of their understandings of learning, and only two teachers had different conceptions of teaching from their conceptions of learning.

**Teaching as telling and giving information**

Teaching plays a critical role in ensuring the quality of teaching and learning, making understanding teachers’ conceptions of teaching essential. In a curriculum reform context that requires teachers to change and improve their teaching approach, it is important to understand rural teachers’ conceptions of teaching in post-apartheid South Africa. Teachers’ responses to the question ‘What is your conception of teaching?’ resulted in different responses that interestingly corresponded with their conceptions of learning. For example, Teacher F stated:

When you teach, you must tell learners the information they need, they need to pass at the end, give them information to learn …
because teachers are expected to know their subject and should impart knowledge accurately and clearly to enable learners to pass. This conception of teaching relates to the teacher’s conception of learning as ‘mimicking’ a teacher and acquiring knowledge, which is packaged for regurgitation when needed. In such a teaching and learning context, if the learning outcomes are unsatisfactory, teachers tend to blame learners and not themselves (Mudau, 2014).

Similarly, Teacher H highlighted that

Teaching is not easy … is giving learners knowledge, maybe imparting content they need to acquire as much as they can to make sure they pass… they must remember it as I taught it…

The thinking about teaching is limited to the relationship between ‘imparting’ and ‘acquisition’ of knowledge and the learner is inactive during the teaching and learning process. Considering that learning is about soaking in the information for recalling, it is unsurprising that teaching is about imparting content to ensure passing. This understanding of teaching promotes rote learning and memorisation, because learners are not stimulated to actively, independently and critically engage with knowledge for meaning making (Blane, 2015). For Teacher C, it has not been easy to think about it:

I am not sure what to say … is about instructing or giving learners knowledge or information … they need to perform well, then give them information…

The dominance of teaching as ‘giving’ learners packaged knowledge promotes dependent learning, resulting in passive learning. This conception correlates with the teacher’s conception of learning that perceived a teacher as the expert of knowledge, and that knowledge is absorbed without interrogating its nature. This understanding of teaching is categorised as teacher/content centred and is perceived by researchers as disadvantaging learners’ intellectual development, creative and critical thinking, that is promoted educationally.

We argue that within the curriculum reforms, the context and professional development promote the constructivist learner-centred teaching approach. However, for the teachers to have effective teaching, it is important to begin by understanding the conceptions they are currently holding in order to know how to enhance their own teaching. Jidamva (2012: 18) claims that ‘to be able to improve the quality of secondary school education, clear knowledge is needed from teachers, who are the key actors’. We also recommend understanding teachers’ prior conceptions of teaching, before the introduction of curriculum reforms with different expectations, especially as they influence teaching and learning both in and outside the classroom.

Teaching as transforming learners and being a lifelong learner
Teaching was also perceived - beyond imparting knowledge and telling learners the content - as transforming the way learners think about the information they learn in school. For example, Teacher E stated that teaching is

… unlocking the mind of learners using the knowledge they learn to see life in a different broader sense … it is not a one person’s show but is a democratic classroom as learners are allowed to give their opinions….

This response addresses the importance of encouraging learners to use the knowledge they learn in class to think beyond assessment and interrogate the nature of social structure issues. The shared knowledge should inspire learners to connect and access the unlimited knowledge that exists in the world, by actively
participating in the process of knowledge construction and meaning making to transform and enhance the existing understanding of life. The teacher co-learns with learners as teaching is viewed as negotiation and dialogue about knowledge, as a teacher and learners jointly co-create knowledge (Alexander, 2009). In addition, Massa (2014: 388) states that one of the desirable goals of school is allowing the process of ‘… not only thinking about important problem concerning disciplinary areas but thinking about the political, ethical and social challenges in everyday life’ for students, which possibly depends on the teacher’s conception of learning and teaching that can cultivate critical minds and thinking.

While teaching is about transforming learners’ perceptions of knowledge by encouraging the formation of a dialogic relationship, it is also about the teacher being a lifelong learner. This is illustrated by Teacher B:

I think teaching is about being a lifelong learner as you share knowledge with learners, you continue to improve, research more about content … to transform the way learners think about content also …

Knowledge changes constantly and it is essential for teachers to continue research about their content knowledge, to ensure that they remain relevant. Transformation of learners also depends on seeing teaching as about learning, and Darling-Hammond (2016) presents this as the interplay between teaching and learning and learning and teaching. Thus, being a lifelong learner as a teacher is to be conscious that to build teaching expertise means also to be a learner of the knowledge you are teaching in order to transform as a person, while at the same time transforming learners. Similarly, Teacher G thinks

Teaching is not only about giving information, learners should be encouraged to get involve in their learning … they (learners) need to ask questions about knowledge not only a teacher, to make sense of information and grow…

The multidimensionality of teaching is highlighted in this response; as much as teaching is about giving information it is also learner–centred and promotes higher order critical thinking through asking questions, and questioning knowledge during teaching and learning. The participants’ responses demonstrate a critical and transformative conception of teaching, which is important in competitive and modern contexts.

In responding to the question ‘What are the factors that shape teachers’ conceptions of learning and teaching?’ two dominant factors emerged from the participants’ responses, these are: childhood learning experiences and personal characteristics, and the latter includes family background.

Childhood learning experiences
The schooling experiences during childhood and the teaching practices played a role in the way some participants think of learning, which further shaped their understanding of teaching. For example, Teacher A illustrated this point:

Our teachers, for all subjects, just read the textbook as it is, even copying notes on the board … then to pass I had to do the same … copying the information and read it over and over again…

Whether this was conscious or subconsciously, it indicates that childhood experiences are sometimes repeated if not reflected critically as adults, especially as teachers. Similarly, Teacher F stated that

… our teachers always wanted us to take everything they said … because it will be part of the test or exam, they said … then you only focus on what the teacher said in class, repeat it at home without thinking further…
While it is important in class that learners acquire knowledge from the teachers, discourses shaped their meaning of learning and, in this case, an approach to learning which involved passing without understanding information. Although this might be the case, we have also considered that most participants grew up during the apartheid era and the government wanted teachers to follow a particular teaching approach, thus the participants’ learning experiences were also influenced by that political era. Of interest is that learning continues to be understood at surface level, even though participants are teachers.

**Personal characteristics**

The participants’ responses in this theme indicated issues that shaped the way they make sense of reading and learning, including engaging with learning their subjects, both during childhood and as lifelong teachers. Teacher D said:

> I was raised by a single mother … it was important that I become proactive and do prior learning without waiting for a teacher … I wanted to make sense of the information in class when a teacher teaches and ask questions…

Without overlooking the single parent, taking the initiative and making meaning of information was important for the participant. Although a teacher is important, there is also recognition that asking in-depth questions in class may indicate prior reading to enhance the read information. This response links with the conception of teaching as

allowing learners to ask questions in class, at the beginning … allow them to engage with the information … don’t ask lot of questions, just open the floor… (Teacher D).

Learning is also about asking questions rather than only responding to them, as a way to enhance existing knowledge. In addition, allowing learners to ask questions has the advantage of promoting prior learning, encouraging learners to ask what they do not know, which might also assist learning for understanding.

Teacher B highlighted the importance of the ‘love’ of reading:

> I loved reading a lot when I grew up, because I wanted to know beyond school information … and to be a lifelong learner than just end with school information…

The childhood practices continued to shape the adult practices, because there is recognition that learning does not end at school, but extends beyond schooling by linking information. Similarly, there is understanding for this participant that learning is not only about a teacher giving information, but learning is ‘loving’ reading because that is where all information can be found.

Thus, while childhood experiences influenced both themes, of interest for the second theme is the role of the individual in learning and his/her relationship with information. There is no change of behaviour for participants in the first theme, because they continue to think of learning in relation to childhood experiences and this raises the question of whether they reflect critically on their teaching. The difference with the second theme is the continuing recognition that learning starts with the individual and how s/he thinks about reading and information, which shaped the understanding of teaching. There is acknowledgement that teachers are ‘expected’ to give some knowledge, but learners play a crucial role in the process of learning as they are supposed to illustrate engagement with information through questioning.

The implications for these findings are the need for teachers to be aware of their conceptions of learning, which might indicate whether they have changed the way they think about learning. To be aware as an individual of how a particular phenomenon is conceptualised and that it influences behaviour can make
teachers always conscious of what they think, how they think about it, and why they think in that particular way, whether about content or pedagogical approach(es).

**CONCLUSION**

While it could have been interesting to observe participants teaching to see whether and how the conceptions of learning and teaching influence teaching practices in the classroom, the responses provided information that could be further used to conduct future pedagogical research. Irrespective of the rural context that is perceived as ‘backward’ and ‘poverty stricken’, the majority of the findings indicate that teachers’ conceptions of learning promote critical processing of new information, abstracting meaning making, and learning as changing a person. The importance of developing your own understanding and creating meaning from the given information appeared significant to the conception of learning, as the individual appears to critically connect the old and new information and make meaning of it (Loughran, 2010) thus changing the person’s understanding of knowledge. Furthermore, conceptions of teaching correlate with their learning, thus it is important to encourage participation and accelerate learning by guiding learners to use learnt knowledge to think beyond their current situation. Loughran (2013) talks about a teacher as a learner and that the more their learners are challenged so should the teacher also be challenged and engage with the new ideas that arise.

We recommend that more research be conducted with teachers to understand their conceptions of learning and teaching, because such research makes them aware of their taken for granted understandings. In addition, more research is needed to understand whether and how the conceptions influence teaching approaches in the classroom, in particular after teachers have talked about their conceptions. This kind of research will provide information about pedagogical practices in the classroom, and also teachers’ beliefs and meanings concerning their profession. Lastly, it is also important to conduct research with learners to gain insight into their conceptions of learning and approaches to learning in relation to teachers’ conceptions and teaching approaches. Studies state that teachers’ teaching approaches shape learners’ conceptions of learning and engagement with learning, because teachers spend a lot of time with learners.

**REFERENCES**


Preparationing student teachers for teaching in rural schools using work integrated learning

Moeketsi Elias Dlamini, University of the Free State, South Africa

ABSTRACT

This paper focuses on the preparation of student teachers for teaching in rural schools using Work Integrated Learning (WIL). Generally, teachers are not prepared to teach in rural schools and those that are currently working there want to leave. Amongst other recruitment strategies for rural teaching, South Africa uses the Funza Lushaka bursary scheme for student teachers to work in rural schools after obtaining qualifications, and a rural school allowance for teachers already working there. This paper reports on the findings of 10 student teachers placed in two rural schools for WIL, two rural school teachers, the Teaching Practice (TP) officer and the Subject Advisor for rural schools. Participatory Action Research (PAR) was used as a methodology to allow participants to be co-researchers in generating data. Meeting discussions were conducted to get experience of rural teaching and data were analysed and interpreted through the use of Critical Discourse Analysis (CDA). The findings are that many teachers are not trained for rural teaching during their study, and that there is no collaboration between the rural schools and Teacher Education Institution (TEI). The paper recommends collaboration between TEIs and rural schools and collaboration between the Department of Higher Education and the Department of Basic Education for teacher training programmes.

Keywords: Work Integrated Learning (WIL), Teacher Education Institution (TEI), Student teachers and rural school

INTRODUCTION

Teachers were trained at the Colleges of Education in South Africa (SA) long before the introduction of Initial Professional Education Training (IPET). Students were enrolling for a Teaching Certificate to qualify for teaching. More recently, students had to study for a three-year diploma for their qualification. In all these qualifications to teach, Teaching Practice (TP) was used as a means to expose student teachers to teaching in schools while still studying (DHET, 2000).

In 2007, South Africa introduced IPET to transform teacher education for student teachers while in their field of study (DBE, 2007). The purpose of IPET was to professionalize teaching qualifications for student teachers to study for a four-year Bachelor of Education degree to qualify for the profession, and those

1 Date of submission 23 August 2017
Date of review outcome 4 April 2018
Date of acceptance 25 April 2018
with degrees had to enroll for a one-year Post Graduate Certificate (PGCE) to become fully qualified teachers. IPET was introduced to overcome the teaching challenges experienced by new teachers in schools during their first year in the teaching profession. The minimum requirements for the Teacher Education Qualification (MRTEQ) policy in South Africa, pronounce specific provisions for the development of learning programmes and guidelines for practical and Work Integrated Learning (WIL) structures of student teachers (DHET, 2015). WIL is the placement of student teachers in schools to practise teaching in an authentic environment for a prescribed period.

Another policy, Curriculum Assessment Policy Statement (CAPS), prescribes the same curriculum for delivery in all South African schools irrespective of the socio-economy of the area in which the schools are located (DBE, 2011). Although the MRTEQ policy identifies WIL as important, there is still the challenge of insufficient preparation of student teachers for rural teaching because teacher education in South Africa is urban centric (Bertram & Rusznyak, 2015). The effectiveness of CAPS and MRTEQ can be diminished by rural factors such as geographical distance, low and uneven levels of teacher expertise, a wide-ranging lack of resources, as well as a lack of discipline among a wide cross-section of teachers. WIL is used in other countries like Zimbabwe, USA, Lesotho and others to address the challenges of teacher preparation programmes to prepare teachers while still studying for the profession. Zimbabwe adopted the principle of mentoring where a student teacher is attached to a qualified teacher, who is experienced and knowledgeable during WIL (Makura & Zireva, 2013). The USA emphasises that student teachers must incorporate teaching theories with practising, rather than teaching theories before practising (Karamustafaoolu, 2009). The practice in Lesotho is internship for student teachers in different schools away from the university, while still studying for the profession, with the purpose of learning and practising (Bitso & Fourie, 2014).

Different countries operate WIL in different ways and the duration depends on the uniqueness of the Teacher Education Institutions (TEIs). This paper focuses on how to improve the preparation of teachers for work in rural schools while still studying for the profession. The study recommends that the teacher education institutions should work collaboratively with rural schools to prepare professional teachers for rural learning. Another recommendation is for teachers and student teachers in rural schools to use multiple methods and multiple resources for teaching.

THE TEACHER EDUCATION INSTITUTION AND RURAL SCHOOLS

The Teacher Education Institution (TEI) is an education institution that trains teachers for a teaching career. The TEI prepares student teachers from their first year of study using modules which include content that is theoretical and practical, but some of the practical modules are presented theoretically. Mukeredzi (2013) indicates that South Africa started to reorganise the TEI after 1994 to change the way student teachers were taught during the apartheid teacher education system, by redressing the apartheid legacies related to under-resourcing, particularly in rural schools. There is a difference between the way student teachers were taught then, and today. There is also an existing discrepancy between teacher preparation programmes to teach in urban and in rural schools that needs attention. The TEI referred to in this paper is a university that offers teacher training programmes, namely a four-year Bachelor of Education and a one-year Postgraduate Certificate in Education (PGCE) for students in possession of a junior degree. The Bachelor of Education qualification in this university consists of Foundation phase, Senior and Further Education and Training (FET) phase; and PGCE for the Senior and FET phase.

Student teachers learn theory of teaching from different modules at the university and a teaching practice module which needs practical work in schools. This paper focuses on the practical component of teaching student teachers for the profession with more emphasis on rural schools during WIL. Rusznyak and Bertram (2015) mention that teacher education programmes in South Africa are not sufficiently preparing student
teachers to teach in underprivileged or rural contexts. Avery (2013) defines a rural school as a school in an area that lies outside the urban area, characterised by low population density and a smaller number of learners in a school. A rural school in this paper refers to schools in the area with limited resources that require schools to do more with less, where one teacher is teaching many subjects, it is difficult to attract staff to stay and, as a remote school serves highly poverty-stricken communities with limited economic opportunities (Nkambule & Mukeredzi, 2017). Among other challenges associated with rural teaching, the paper focuses on how student teachers are trained to work away from their homes where there is a shortage of public transport and they must teach many subjects.

**THEORETICAL FRAMEWORK**

The study is guided by Critical Emancipatory Research (CER) as a paradigm to enable interaction among the student teachers with rural school teachers and those involved in rural education to work on an equal basis (Nkoane 2012). Mahlomaholo (2009) affirms that CER is emancipating, it changes the lives of people to liberate them from less important practices and thoughts, and to meet the needs of the life situation. Biesta (2010) also emphasises the idea of emancipation as having a central role in modern educational theories and practices. He states that emancipating people makes them independent and free as result of intervention. For the purposes of this research, I worked together with student teachers in rural schools to address issues affecting education, to come up with the best approaches to improve the situation.

In this study, student teachers and experienced teachers at a rural school participate in the issues related to their own society through rural learning ecologies. Opportunities for discussion to point out views about rural teaching experiences and how to bring about changes and improvements where there is a need, is created through CER. Participants work collaboratively as co-researchers in the marginalised rural ecologies with the main researcher and Teaching Practice (TP) officer, to come to a common understanding of rural learning. The marginalised group of co-researchers contributes to the teacher preparation programme.

The MRTEQ document emphasises WIL to take place in the workplace and includes aspects of learning from practice (DBE, 2015). Dlamini (2017) mentions that WIL enables student teachers to become more socialised and more collaborative in their learning to teach. The collaborative nature of WIL as espoused in this paper changes the lives of student teachers by liberating them from less useful practices and thoughts, to meet the needs of real life (Mahlomaholo, 2009). Furthermore, the transformative nature of the critical theory is founded upon anti-oppressive philosophy as a lens through which to identify and change the root sources of oppression (Moleko, 2014). Student teachers learn holistically by being exposed to different challenging environments to apply their own thoughts.

The WIL in this paper creates a platform for student teachers to be exposed to rural schools’ teaching and be treated equally as partners in the study, not as the researched. They are part of the group in a social setting and all principles of democracy are adhered to while the study is conducted. As student teachers in the study are not prepared to teach in rural schools after completing their teaching qualifications, this paper aims to prepare teachers for rural schools. WIL in rural schools makes it possible for students to respond to the two objectives of the paper. Firstly, to find the solutions to the challenges associated with rural teaching and secondly, to establish the need to send student teachers to rural schools for WIL.

**RESEARCH METHODOLOGY**

Student teachers are assigned to experienced teachers at rural schools for mentoring and assessment in teaching. Lecturers from the TEI also visit the schools on WIL to assess student teachers in classroom teaching. The paper uses a Participatory Action Research (PAR) method with a qualitative approach in
the preparation of student teachers for rural teaching. PAR is chosen to allow freedom of participation
of student teachers and teachers in the rural school, and to commit themselves to the results of the study
(Mallick, 2007). Ten student teachers were sent to two rural schools in the Free State province. These
student teachers were in their third year of study and they volunteered to participate in the study. They all
had no previous experience of rural learning which is characterised by being outside urban areas, with
little resources and low population density (Mukeredzi, 2013; Avery, 2013, Hlalele, 2013). Two rural
school teachers who were mentors to student teachers from each school were requested to be part of the
research team because PAR is an action research which involves the researcher and the participants to
work together in coming up with the best strategy to improve the situation (Biesta, 2010).

The TP officer from the university and the Subject Advisor for rural schools were also part of participants
in the paper. The TP officer was recruited because she is doing administrative duties for teaching practice
at the university. The Subject Advisor was recruited to give credibility to the study as he is responsible for
curriculum quality assurance in rural schools assigned to him by the education district. Data were generated
using observations and group meetings during the WIL period, following a cycle of planning, observing,
reflecting and re-planning until improvement is achieved (Kemmis & McTaggart, 2007). I observed student
teachers presenting lessons in the classroom environment where there are limited resources for teaching
and learning. We also conducted meetings to discuss the teaching of student teachers in rural schools and
other challenges they experienced in rural teaching. Two lessons of 10 student teachers were observed to
initiate discussions. Each of these lessons lasted one hour, meaning each student teacher was observed
for two different lessons.

The first lesson was observed by an experienced teacher in the rural school and the second lesson by
the researcher. The rural school teacher and the researcher used a similar classroom observation form
to generate data. The forms were written in English because the lessons were presented in English. Two
meetings were conducted with student teachers, rural school teachers, the researcher and two parents
of learners in the school. The meetings were conducted for everybody involved in the study to take full
participation, because PAR was used as a method for data collection. The first meeting was conducted
at the end of the first week and the second meeting at the end of the third week of WIL. All the meetings
were conducted in Sesotho to accommodate parents who could not speak English. It was agreed during
this meeting that a voice recorder would be used to record spoken words. This was for the researcher to
have enough time to listen to the comments of all members for the purpose of analyzing data.

The number of students was limited to 10 because of financial constraints. These students were transported
to the school on the first day and were collected after the WIL. The Faculty of Education from the university
assisted with the funding of the students to get food for the period while in a rural school for WIL. The
university provided funding because TP is one of the modules in the teacher training programme. Committed
teachers in the school under study and the rural school Subject Advisor contributed by introducing student
teachers to multi-grade teaching and motivating them for rural school teaching. Parents in the rural school
were involved because of their life experience in the rural area to mentor student teachers on rural life,
which lacks the teaching and learning resources that are found in urban areas. They were members of the
School Governing Body who do not have full-time employment. They were mostly available to participate
in the meetings during the study.

Data were collected from the lesson presentation in the classroom and during the general discussions. Two
instruments were used for data generation: observation forms and a recording device. Observation
forms were used by experienced rural school teachers and the researcher to collect data from classroom
teaching. The two observers used similar observation forms in different lessons to collect data from
classroom teaching. The experienced rural school teachers were used to collect data from the classroom
to avoid the challenge of captive participation that could emerge from student teachers to the researcher. The two objectives identified above were used to generate discussions to generate data collected on the challenges associated with rural teaching and how to implement WIL in rural schools.

Challenges experienced for the whole WIL process by rural school teachers, student teachers, the researcher and parents through observation from in and outside the classroom were discussed in these meetings. The reliability of this study is based on the fact that its data were collected using two methods: observation and group interviews. Student teachers were observed by two different people to avoid captive participation. Each of the 10 student teachers were observed by experienced rural school teachers and the researcher who is a TP lecturer. Observation forms were used to collect data from the lesson presentation. Discussions during meetings were used to confirm validity and reliability of the study. During the meetings, participants were able to voice their observations. A recording device was used to record the responses of participants.

Permission was granted by the Free State Department of Education and the ethical committee of the Faculty of Education at the university to conduct the study. I visited the principals of the two schools to introduce myself as a researcher to indicate the aim of the study. We held separate meetings with teachers of the two different schools to inform the teachers about the aim of the study. I informed them that their participation was voluntary and that they could withdraw at any time during the study if they so wished. We agreed with participants to use a recording device in meetings, to assure correct interpretation of the discussions. The team was guaranteed confidentiality of the discussions during the study and that the records, including the voice recorder, would be kept in a lockable safe until the study was complete. Their real names would not be used in the study and generated data will be destroyed after publication. I promised them to come back after analysing the results, before completing the finding, to confirm whether the text had been captured correctly. All participants signed the consent forms, which were written in English and Sesotho.

Only two rural schools were used to conduct the study because of the geographical distance from the university to take student teachers daily for WIL. The study needed funding to transport student teachers on the first day and back on the last day after the WIL. The other challenge was to place student teachers for such a long time away from their homes without adult supervision, while their parents sent them to the university to study.

**DATA GENERATION AND ANALYSIS**

Data were generated and analyzed from the observations of the classroom teaching and meeting discussions. The two research objectives formed the basis of the lesson presentation and asked the meeting for discussions, the challenges associated with rural teaching and the implementation of WIL in rural schools. Data were analyzed from interpreting the responses on the observation forms of mentor teachers and by using Critical Discourse Analysis (CDA) from meeting discussions, to interpret it at textual, social and discursive levels (Jaekel, 2016). Hamrita (2016) affirms that according to Critical Discourse Analysts, language is a ‘social practice’. This paper analyses written and spoken discourse to explore the sources of power, dominance, and inequality that might occur during discussions. CDA is used to describe, interpret, and explain the relationship between language and rural school communities.

I used observation forms from the experienced rural school teachers and my own observation as a researcher for analysis. The first response addresses the first objective, to find the solutions to the challenges associated with rural teaching and the second response the second one, the need to send student teachers to rural schools for WIL. I took all the responses from observation forms to the discussion meeting to initiate discussions with all the co-researchers, student teachers, TP officer, Subject Advisor and teachers.
Responses were elicited from the lesson observation sheets of the four teachers from the two schools for discussion. The common responses from four rural school teachers indicated that student teachers talk too much in the classroom without engaging learners in their teaching. I took note of the responses to be used to initiate discussions in the meeting. This was to understand whether the teachers expected student teachers to give more notes for learners to copy or give them more activities to do.

Student teachers know their content, however is like they are lazy to write on the chalkboard (Sheet 1 from School A).

Student teachers do not involve learners in their lessons (Sheet 2 from School A).

The students write too much on the chalkboard without explaining important points (Sheet 2 from School B).

They have a challenge of putting important points on chalkboard (Sheet 3 from School B).

Only one teacher from School B indicated not detecting students experiencing challenges in rural teaching.

I did not see anything wrong about chalkboard writing from all students I observed in this question. To me students were teaching as taught from the university and writing on the chalkboard. The challenge I observed is that they relied on one textbook as a source of information.

Failure to allow learners to construct their own knowledge during the lessons was one of the challenges observed during the meeting with participants. The rural school teachers indicated that student teachers lack knowledge of how to facilitate learning using constructivism. It appeared again that they rely more on the textbooks and electronic resources to be used in class. This became a problem for them because there are no such resources in rural schools. For teaching to be effective in rural schools, teachers must first understand constructivist theories and how to implement them. WIL in rural schools is a platform for student teachers to practise the art of teaching while studying. The statement of student teachers about lack of resources hampering teaching indicates the need for student teachers to be prepared for rural teaching while still studying.

Student A: For the rest of the two weeks’ Teaching Practice session, learners had not received stationery. Another challenge is the workshops organised by the DBE affecting the whole school timetable.

Teacher A: The timetable is affecting the whole school because one teacher teaches many subjects. You will find that all other teachers are busy if one teacher has attended the workshop. They will close during the periods for the day.

One student teacher was brave to indicate that they are being abused by experienced teachers to do work that is not theirs, like teaching subjects in which they have not specialised.

...teachers here give us to do subject that we are not specialising with...

The student teacher talked out of curiosity to indicate that something was wrong and indicated that the situation must change. To the other teachers who did not respond to the statement, it is likely that it is the norm for learners not to have stationery at the beginning of the year. They did not respond to that point. Only the teacher responded on the affected timetable during workshops. His response shows that he was defending the situation. This is seen by the point that he responded on why learners are left unattended during workshops.

Responses by teachers from the observation indicated the need for student teachers to do WIL in rural schools. The teachers and parents were happy to have student teachers assisting them in their teaching;
they talked about ‘offloading’ them. They suggested that there should be a working relationship with TEIs to send student teachers regularly for WIL. From the observation form, teachers indicated the lack of collaboration between TEIs and rural schools as one of the challenges. This issue was also highlighted during the meeting.

Teacher B: I am happy to have people who are assisting us in teaching these learners. These student teachers are also assisting us because we also learn new things from them as we observe them teaching in class. The student teacher under my mentorship showed me a different method of doing the introduction to the topic after observing him for two different lessons.

Teacher C: I would suggest that these students come regularly to our school; if the school was closer to the university, they could even come during extra classes to assist.

The teachers showed interest to have the student teachers in their rural school. The presence of student teachers in the school is not what they expected. They forgot that students were there to practise teaching under supervision of experienced teachers, not to replace the teachers. The willingness of the teachers in the school contributed significantly for student teachers to be able to practise their teaching in an authentic environment. This supported the discussion in the first meeting, that it is proper that students do their WIL in a rural school for them to feel the reality of rural school teaching.

The above discussion indicates the need for the TEIs to work closely with schools, for WIL to address the requirements of the MRTEQ policy for integrating theory and practice of teaching practice. This policy insists that the institutions incorporate the types of learning during teacher training programmes for the students to meet the requirements of the qualification. Empirical data found during discussions supported that for teachers to be prepared to work in rural schools, they must practise the art of teaching while still in their training. They need to have thorough practice in the skills for rural learning ecologies. It became evident that there was no collaboration between the institutions of teacher education and the rural schools under study. Participants did not know that they could contribute something to teacher education.

The following comments were captured from the Subject Advisor for rural schools:

Experience is the best teacher; I am sure that if the majority of students could be accommodated in the rural schools during their practice teaching, the government would not decide to close rural schools as many teachers would understand working everywhere in the country.

The TP officer responded to the comment from the Subject Advisor by saying:

This is the only rural school with many characteristics of rurality close to the university. There are many challenges with other rural schools to place students, like daily transport to the school, accommodation and catering, to mention some.

The two participants, the Subject Advisor and TP officer, showed the need for collaboration by the TEIs and the rural schools for learning experience, to prepare rural teachers. The principal from the marginalised rural school is happy to have students coming to the school for WIL. In her text she stated

We usually experience challenges about newly appointed teachers who come to teach here and later they disappear …

as if all newly appointed teachers in the school are not prepared to work in rural schools. The Subject Advisor supported the need for the TEI to work with rural schools. Talking from the side of the DBE, the
Subject Advisor finds that the DBE would benefit if many student teachers could be placed in rural schools for WIL. The TP officer responded from the university side, pointing out the challenges of WIL for many students at rural schools.

One teacher also indicated that he never had a chance to be trained in rural schools’ teaching. He mentioned that he learnt to teach in a rural school by himself after being appointed at that school. The teacher further indicated that he is now used to rural teaching and does not see anything wrong. This is supported by literature that experiential learning typically requires reflective exercises with direct contact with the phenomenon being studied, rather than merely thinking about or discussing the potential for such contact.

Teacher B: The first time when I arrived at this school was a nightmare; I was thinking I will not cope to teach in a rural school, where there are different grades in one classroom. This was because we were not trained to teach a multi-grade class during our teacher’s training...

Student D agreed with Teacher B by saying ‘yes’ and other students nodded, showing that they also agreed with the teacher.

The statement by teacher B indicates that it was hard for him in the beginning to cope with rural teaching. The statement by the teacher, ‘The first time’, shows that he has now developed or adopted the skills to teach in rural schools. This shows he learnt teaching in a rural school from his own experience as a teacher in a rural school; he was not trained during his study for the teaching profession. The nodding by students also shows that they are also not being taught to teach in rural schools. Their facial expressions when responding indicated the need to prepare teachers for rural teaching while studying. PAR created a platform for co-researchers to speak freely in discussions without power relations that could exist among participants while assisting student teachers. The responses by teachers supported PAR by responding freely about the lack of training in rural school teaching, which supports the need for teaching practice for rural teaching as part of learning. The student teachers in the study practised teaching in a school with situations similar to where they will be employed.

**FINDINGS**

Data indicated that there is lack of collaboration between the rural schools and the TEI to better prepare teachers for rural teaching. TEIs run their programmes without exposing student teachers to practise teaching in rural environments as expected by the MRTEQ. This lack of collaboration between rural schools and the TEI was discovered during the study: that students experienced a different teaching and learning environment. They were exposed to multiple rural perspectives like one teacher teaching many subjects, more than one grade classes in one classroom, teaching without resources or with limited resources, and teachers who cannot go for shopping after school because of geographical distance to the shops.

Students took time to understand rural teaching and learning in order for them to be better prepared to teach in that environment. It was discovered that the main problem for the lack of collaboration between TEI and rural schools is that the two institutions belong to two different education departments. TEIs belong to the DHE with its programmes and the schools belong to the DBE with different programmes and school calendar. The TEI would send student teachers to a rural school, only to find that there were other projects organised by the DBE or that teachers refused to cooperate with the requirements of the TEI.

**RECOMMENDATIONS**

The paper suggests that there should be a collective agreement between the DHE and the DBE nationally in the way teachers should be trained, because teachers are trained by the DHE for DBE. This information
should go to the provincial department of education, and down to the education district. The DBE should also monitor the programme for teacher training in different TEIs, to ensure that the programme caters for the needs of all schools in the country. This would assure that student teachers are prepared in totality to teach in all schools, irrespective of diversity. TEIs, on the other hand, should inform the DBE of their teaching practice programme before sending student teachers to the school for WIL. This is to align the WIL of student teachers with the DBE programmes in the schools and to make sure that student teachers are learning everything affecting the rural learning ecologies. The study also suggests that students go to rural schools for WIL as a form of motivation. This could serve to recruit many students to do their WIL in rural schools away from their home place.

It was discovered in the study that student teachers rely more on the use of textbooks as the only teaching resources. They fail to use teaching approaches that are engaging, meaningful and relevant to learners. Rural school teaching needs a teacher who has knowledge of different teaching approach to address the needs of learners. This is to address the challenge of the lack of resources in rural schools. A teacher who always depends on a textbook will not meet the needs of rural learners because many textbooks are only focusing on learning in urban areas and some of them may be outdated copies or be out of context in relation to the learners’ everyday lives. The paper therefore suggests that student teachers should also learn skills that are necessary to cater for teaching in rural schools.

The paper closes the existing gap between theory and practice and student teachers need to be able to teach in rural schools without depending on the textbook but rather to provide opportunities for learner-centred approaches of teaching that require learners to gather the necessary evidence and identify suitable arguments. The paper recommends the use of constructivist teaching as a suitable approach that can foster rural learning. In a classroom where constructivism is employed, the teacher uses the prior knowledge of learners as the base to introduce new concepts, procedures and classifications. Student teachers facilitated the lessons in the rural learning ecologies by promoting dialogue on the material, so that learners could critically think about what they were learning. Student teachers actively construct knowledge rather than passively relying on the textbook (Sharma, 2011) and are able to generate knowledge from their own experience. Therefore, through their engagements they develop an inner drive to engage deeper and learn more about the rural activities.

CONCLUSION

This paper presented the challenges of teaching in rural schools and WIL in rural schools. The study justified the need to prepare teachers for rural teaching and the challenges associated with WIL in rural schools. The result suggests collaboration of the national DHE and the national DBE in the way teachers are trained for the profession. It also suggests that to implement WIL in rural schools, the TEIs on the ground should also collaborate with neighbouring rural schools to better prepare teachers for rural teaching. A further recommendation is for rural school teachers and student teachers to use multiple methods and resources in their teaching to engage all learners in their teaching. Through the implementation of these recommendations rural school communities could be supported by having teachers who are better prepared to teach in rural schools.

REFERENCES


Perceptions regarding the role of social support in academic achievement of adolescents exposed to violence

Lelanie Judeel, BlueRooster, South Africa
Cindy Ramhurry, University of Johannesburg, South Africa

ABSTRACT
This qualitative study explored how adolescents who have been exposed to violence, perceive the role of social support in their academic achievements. Coupled with a collaging process, individual, semi-structured face-to-face interviews were conducted with eight adolescents (two male, six female) in Grade 9, who had the defining characteristics of exposure to violence in their community and an achievement of at least 70% in all school subjects over a period of one year prior to this research study. Drawing on the ideas proposed by Elsaesser, Gorman-Smith and Schoeny (2017) to codify and identify exposure to violence, we specifically included students who knew someone who had been the victim of violence, and/or witnessed a violent incident, and/or was directly victimised (Elsaesser, et al., 2017). The study found that, despite adolescents’ exposure to violence, the encouragement to achieve, the provision of care and support to deal with problems in a proactive manner and the formation of enabling relationships with significant others, facilitated academic achievement. Our study concludes that positive social support can buffer the negative effects that exposure to violence has on the academic achievement of adolescent learners. We argue against a one-size-fits-all approach to social support and suggest that the support which comes from the immediate social systems of adolescents (parents, teachers and peers) takes on a more sharpened character in the sense that individual differences, cultural differences and gender differences are seriously taken into account.

Keywords: social support, academic achievement, early adolescence, violence exposure in South Africa

BACKGROUND
Research over the past 20 years reports significantly high rates of exposure to violence among youth living in disadvantaged communities (Copeland, Keeler, Angold & Castello, 2007; Van der Kolk, 2005; Ceballo, Dahl, Aretakis & Ramirez, 2001; Stein, Jaycox, Kataoka, Rhodes & Vestal, 2003). Various researchers have proposed ways to codify and identify violence. For example, Elsaesser, et al. (2017), cite the work of Kennedy and Ceballo (2014: 2) who see violence as including ‘knowing someone who has been the victim of violence, witnessing a violent incident, and being directly victimized’. A more nuanced perspective is provided by other writers who associate violence with posttraumatic stress.

1 Date of submission 19 April 2017
Date of acceptance 11 August 2017
Date of final acceptance 27 November 2017
disorder, externalising problems, and internalising outcomes (Fowler, Tompsett, Braciszewski, Jacques-Tiura & Baltes, 2009; Margolin & Gordis, 2000 cited in Elsaesser, et al., 2017). Diale (2003) argues that the extent of violence is dependent on circumstances in societies such as warfare, forms of oppression, democracy, freedom, etc. A predominant theme in this body of research is that regardless of the cause of the violence, its effects are damaging at all levels of human life (Diale, 2003; Zinzow, Ruggiero, Resnick, Hanson, Smith, Saunders & Kilpatrick, 2009).

Violence in the South African context

Violence in South Africa is documented to have reached ‘devastating levels’ in all forms (Flood & Fergus, 2011 cited in Diale, 2014). Research shows that political violence has significantly reduced since the first democratic South African elections in 1994, yet violence in the form of home robbery, street robbery, murder, sexual attacks and assault has increased significantly (National Victims of Crime Survey, 2012; Faul, 2013; Malan, 2013). Research in the SA context strongly indicates that adolescents, in particular, suffer as a consequence of the violence on a daily basis (Barbarin & Richter, 2001; Ensink, Robertson, Zissis & Ledger, 1997; Seadat, Nymai, Njenga, Vythilingum & Stein, 2004; Seadat, Van Nood, Vythilingum, Stein & Kaminer, 2000; Ward, Flisher, Zissis, Muller & Lombard, 2001). A study by Seadat et al. (2004) illustrates this trend: they found that more than 80% of school-going adolescents experienced at least one trauma in their lifetimes (with an average of two), as described in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000).

Local and international researchers agree that community violence, in particular, critically impacts the well-being of children and adolescents (Muller, Goebel-Fabbri, Diamond & Dinklage, 2000; Henrich, Schwab-Stone, Fanti, Jones & Ruchkin, 2004; Raviv, Raviv, Shimoni, Fox & Leavitt, 1999; Schwartz & Proctor, 2000; Brady, Gorman-Smith, Henry & Tolan, 2008). The most prevailing traumas reported in South Africa (Statistics South Africa, 2012) are those of witnessing community violence (i.e. street, neighbourhood and school violence; 63%), being robbed or mugged (35%) and witnessing a family member hurt or killed (33%). Shields, Nadasen and Pierce (2008), who examined aspects of the lives of adolescents attending township schools in Cape Town, found high rates of exposure to school, neighbourhood, gang-related and police violence. Their studies found that exposure to community violence in the neighbourhood was the most frequent form of violence exposure, followed by hearing about violence from others. Research in the South African context, supports the argument that, whichever form it might take, violence is one of the most harmful experiences a child or adolescent can encounter (Buckner, Beardslee & Bassuk, 2004; Isaacs, 2010).

The influence of violence on academic achievement

Over a period of 26 years, research has presented compelling evidence that academic achievement is negatively influenced by the trauma of violence (Henrich et al., 2004). Research across time concurs that the impact of violence on school-aged children results in anxiety, depression, disruptive and aggressive behaviour, substance use and school disengagement which in turn impedes children’s academic development from childhood into adolescence and beyond (Gorman-Smith & Tolan, 1998; Jenkins & Bell, 1994; Lorion, Brodsky & Cooley-Quille, 1999; Osofsky, Wevers, Hann & Fick, 1993; Pynoos, Frederick, Nader, Arroyo, Steinberg, Eth & Nunez, 1987; Cooley-Quille, Boyd, Frantz & Walsch, 2001; Pieterse, 2015; Coohy, Renner, Hua, Zhang & Whitney, 2011; Jaffee & Gallop, 2010). The bearing that the trauma of violence has on academic achievement is particularly concerning as high school completion is among the most important tasks of adolescence (Cutler & Lleras-Muney, 2006; Kenkel, Lillard & Mathios, 2006; Sherr, Hensels, Skee, Tomlinson, Roberts & Macedo, 2016).

While earlier research established broadly that violence exposure is associated with lower cognitive functioning (Pynoos et al., 1987), recent studies report on specific effects of violence exposure on
academic performance. Some studies found violence exposure to be linked to classroom behavioural problems (Dyson, 1990) and decreased school attendance (Bowen & Bowen, 1998). Other recent studies show links between adolescents who have experienced violence and grade repeats (Lipshitz, Rasmusson & Anyan, 2000; Hurt, Malmud, Brodsky & Giannetta, 2001), lower reading ability (Delaney-Black, Covington, Ondersma, Nordstrom-Klee, Templin & Ager, 2002) and achievement problems (Delaney-Black et al., 2002; Duplechain, Reigner & Packard, 2008; Hurt et al., 2001; Baker, Jaffe, Ashbourne & Carter, 2002; Haeseler, 2006; Kennedy, 2007; Martinez-Torteya, Bogat, Eye & Levendosky, 2009; Sherr, Hensels, Sken, Tomlinson, Roberts & Macedo, 2016). Lipshitz et al. (2000) studied grade repeats among adolescent girls and found that girls with Posttraumatic Stress Disorder (PTSD) symptoms were significantly more likely to fail a grade, to be suspended from school or to be arrested than girls without PTSD. Berthold (2000) sums up the key findings in recent research, arguing that the most frequently recurrent characteristics of adolescents living in communities with high incidences of violence, were anxiety, concentration problems and a sense of futurelessness. Berthold (2000) concurs with other writers that these factors play a critical role in academic performance.

While a significant body of research establishes an unmistakable relationship between the spheres of violence exposure and academic achievement, these findings are not conclusive. Writers such as Attar, Guerra and Tolan (1994) could not establish that exposure to violence negatively influenced school achievement, nor that violence exposure negatively influences reading achievement. Overstreet and Braun (1999) similarly found that community violence had no adverse effect on academic performance. Rosenthal and Wilson (2003) correspondingly provide evidence that exposure to community violence and psychological symptoms does not influence college performance. Although these findings suggest that the influence of violence on the academic achievement of the adolescent is not irrefutably established, there are many voices which emphasise that it cannot be ignored (Shavers, 2000).

Social support to overcome adversities to achieve academically

Social support, in various forms, is strongly indicated in the research, since the 1980s, as an effective way to buffer the negative effects of trauma due to violence exposure on academic achievement (Bowen & Bowen, 1998; Coohey et al., 2011; Jaffee & Gallop, 2010; Elsaesser et al., 2017; Hamre & Pianta, 2006). Shumaer and Brownell (1984: 13) define social support as an ‘exchange of resources between at least two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient’.

Particular focus in the literature is given to support which is perceived. White (2009) explains that the mere perception or belief of social support holds positive implications for the adolescent, even if the support is not utilised. Garbia-Reid, Reid and Peterson (2005), who investigated perceived social support, parental supervision and classroom participation amongst Latino youths, concur that these factors are salient predictors for positive academic outcomes. Positive perceptions of teacher support are believed not only to keep learners interested in academic work, but also to promote mental wellness which has been linked with increased levels of life satisfaction (Suldo & Shaffer, 2008). These, in turn, may lead to better grades and positive peer relationships (Wentzel, 1998). Debates over the type of support have also characterised the research in this tradition. While earlier researchers distinguished between the quality and quantity of the social support that contributes to learners’ adjustment and well-being (Holahan, Valentiner & Moos, 1995; Nahid & Sarkis, 1994; Ofosky, 1997), recent researchers have looked into the holistic effect of support in providing an enhanced coping and stress-buffering effect (Yasin & Dzulki, 2011). The source of support has also gained fair attention in the literature. Malundecki and Demaray (2006) argue that both the source (e.g. parent/family, peers/classmates and teachers) as well as social support from each source produces beneficial outcomes for adolescent learners. In accordance, some writers single out the value of support from supportive peer relations and argue that it can serve as a protective mental health function as
it has been linked with a drop in peer victimisation as well as with lower rates of anxiety and depression in adolescent learners (Hodges & Rahe, 1999; Crockett, Iturbide, Torres-Stone, McGinley & Carlo, 2007).

Other writers highlight the value of support from parents. For example, Bowen and Chapman (1996) specifically examined the influence of poverty, neighbourhood danger, social support and individual adaptation among at-risk youth in urban areas and concluded that parental support buffered the negative consequences of neighbourhood danger on academic performance. Elsaesser et al. (2017), whose study explored the relationship between community violence exposure and academic engagement over the course of mid-adolescence, found the support of family through interventions and mediations highly beneficial in reducing the negative impact of violence on academic performance. A study by Dass-Brailsford (2005) specifically explored the influence of resilience on academic achievement among disadvantaged black youth in South Africa. The results indicated that strong familial support influenced a resilient response. Evidently, the adolescent learners’ relationships with teachers, role models and supportive community members could be considered as protective factors.

Deficits in social support have also been the focus of much research. This research consistently indicates that a lack of social support can be linked to poor academic and social outcomes for adolescent learners (Demaray & Elliot, 2001). Some writers have found links to poor academic performance through problems such as depression, loneliness and anxiety (Eskin, 2003). Mental health problems have been explicitly linked to significant negative impairments regarding an adolescent’s quality of life and academic success, and this negative impact is argued to continue well into adulthood (Knopf, Park & Mulye, 2008). A lack of social support is also identified in trauma literature as the key factor that prevents adolescents from recovering from trauma thereby increasing adolescents’ risk of developing psychological problems (Phynoos, Steinberg & Wraith, 1995; Rutter, 1990). The above research which shows a significant negative correlation between social support and psychological problems, echoes a strong sentiment in the research: that high social support lowers psychological problems (Yasin & Dzulkifi, 2011).

**AIM OF THE STUDY**

The research discussed above suggests a strong interrelatedness between the domains of exposure to violence during adolescence, academic achievement and social support. Despite this salient theoretical proposition, few published studies have examined the relationship of these domains in the South African context (Garbia-Reid et al., 2005). Important questions therefore remain. To address the gap in the knowledge, this study aimed to explore the perceptions of adolescents, who were exposed to violence in their communities, regarding the possible role of social support in the facilitation of their academic achievement. The research question addressed in this paper is: **How do adolescents who are exposed to violence, perceive the role of social support in facilitating their academic achievement?**

Bronfenbrenner’s Ecological Systems Theory (1998) provided an approach to answering this question. Bronfenbrenner and Morris (1998) argued that the development of any person is influenced at all levels by five different systems within which they interact: the microsystem, the mesosystem, the exosystem, the macrosystem, and the chronosystem. An individual is believed to be enmeshed in these different ecosystems, from the intimate space of the home outward to the larger school system and the most expansive system which is society and culture. Each of these systems unavoidably interact with and influence each other in every aspect of the child’s life.

Bronfenbrenner’s ideas around all the systems are recognised as critical to gaining a holistic understanding of the role of social support in the academic performance of adolescents who have been exposed to violence in South Africa. Research shows that there are many deficiencies which can be examined through the lens of all five nested systems. Changes or conflict in any one layer will inevitably ripple throughout
other layers (Bronfenbrenner & Ceci, 1994). For example, support is not readily available in South African schools due to limitations regarding human resources in the education support services (Kleintjes, Lund & Flisher, 2010). The above writers establish that whilst policies are in place, the allocation of resources, to implement support programmes are limited. Another tension is that the current economic status of the country is such that many families cannot afford private services. The consequences are that these adolescents often have to find alternative ways to deal with the trauma associated with the exposure that might jeopardise their well-being. While these issues have pertinence, they are outside the scope of the study because they affect the individual in an indirect way relating specifically to the exosystem, the macrosystem, and the chronosystem.

Our study, which focused on the role of social support in the academic achievement of adolescents exposed to violence, was interested in the individual's most immediate layer of the nested systems: the individual's human relationships, their interpersonal interactions and immediate surroundings. The second level, the mesosystem, was of further interest to our study because it encompasses the different interactions between the characters of the microsystem. For example, connections between home and school, between peer group and family and school teachers or administrators. In order for an interaction to be considered part of the mesosystem, it has to be a direct interaction between two aspects of the microsystem that influences the development of the individual (Bronfenbrenner & Morris, 1998). The bio-ecological model offered by Bronfenbrenner and Ceci (1994) offered a framework to examine the contexts, or nested structures on those levels most immediate to the lives of adolescents exposed to violence. To guide this study, we therefore adopted aspects of the model relating only to the level of the microsystem and the level of the mesosystem. The following two sub-questions were drawn from Bronfenbrenner and Morris's (1998) concept of the microsystem and the mesosystem respectively:

a) How do participants perceive the role of social support in their interpersonal interactions?
b) How do participants perceive the role of social support in their immediate surroundings?

**RESEARCH DESIGN AND METHODOLOGY**

**Research Design**

The task of understanding the adolescent learners’ innermost, subjective meanings and experiences – seemed achievable only through the use of a qualitative research approach (Terre Blanche, Durrheim & Painter, 2006). A qualitative collective, with in-site case study design (Yin, 2009) was employed to present a multi-perspectival analysis of the multiple voices and perspectives of all the relevant groups of participants as well as the interactions between them (Feagin, Orum & Sjoberg, 1991). This methodological choice allowed us to preserve the integrity of our narrative data, by employing words, observations, and interpretations, to provide a detailed and rich in-depth discussion of the phenomenon in question (Terre Blanche et al., 2006).

**Sample and Setting**

We chose a secondary school in Gauteng (South Africa) as the site of the study on account of the extreme levels to which the adolescent learners are exposed to violence in their communities (South African Police Service, 2012). We focused on grade 9 learners in cognisance of research in the South African context which indicates that adolescents in particular suffer as a consequence of the violence on a daily basis (Ward et al., 2001).

Purposive sampling (Patton, 1990) was used to draw the sample, because we had a clear purpose and a distinctive set of characteristics of students who would fit in with our goals. The process of purposive sampling involved the task of narrowing our focus to participants who had a close match to a specific set
of defining elements. We specifically looked for students who showed a combined match to specific scores on a baseline survey on exposure to violence in the community and an academic achievement score of at least 70% in each of their school subjects over a period of one year prior to this research study.

We adapted a Harvard Trauma Questionnaire (Ward et al., 2004) to include specific items such as witnessing a violent incident, knowing someone who had been a victim of violence and being a victim of violence personally. Further questions about types of violence such as stabbings, beatings and shootings, which are most likely to occur in South Africa, were included (Ward et al., 2001). The adapted questionnaire was administered to all grade 9 learners in the school. This was conducted with much discretion during Life-Orientation lessons, given that the focus was on a highly sensitive issue. We narrowed this baseline group down further by analysing learners’ school reports to get a match of at least 70% in each of their school subjects over a period of one year prior to this research study. The final sample, which was drawn from the baseline survey, consisted of eight adolescents (two male, six female) from Grade 9. These learners were selected as a bounded case, within this specific site, based on the closeness of their match to our defining characteristics of academic achievement and exposure to community violence.

Data Collection

Two complementary sources of data were employed to obtain an optimal understanding of the participants’ perceptions on the role of social support in their academic achievement, despite their exposure to violence (Yin, 2009). The one source, which is more traditional, involved the use of individual, semi-structured face-to-face interviews. Apart from their effectiveness in providing a deeper understanding of the social phenomena in question, face-to-face interviews were particularly suitable to explore the sensitive topic of violence in participants’ lives – a topic adolescents may not have felt comfortable talking about in a group environment (Silverman, 2000).

As a complementary data source, collaging was adopted to ‘flesh out different facets’ and to get a ‘nuanced understanding’ of how adolescents who are exposed to violence, perceive the role of social support in facilitating their academic achievement (Butler-Kisber & Poldma, 2010: 4). Collage has recently gained stature in qualitative research because of its potential to fragment space and repurpose objects to contextualise multiple realities (Gerstenblatt, 2013). As described by Davis (2008: 250), cited in Gerstenblatt (2013), ‘Collage, created from a synthesis of shattered fragments, realized in an emergent, often randomized composition, arrives at meaning in a very different way–accidentally, capriciously, provocatively, tangentially’. In the light of these compelling arguments, collaging was seen as an optimum platform for participants to voice their stories particularly because sensitive issues (such as community violence) and vulnerable populations (adolescents) were involved (Wiles, Pain & Crow, 2010). Collaging served as a complementary technique to ‘support and enliven the analysis of otherwise dry and detached interview data, thus producing new knowledge and interpretation’ (Gerstenblatt, 2013: 12).

The collaging process involved various steps. Participants were first supplied with old magazines with found images. They were then required to glue together fragments taken from the found images to visually portray a response to the phenomena in question. We narrowed down the questions we used in the interviews, to facilitate an interpretation that participants could visually convey in three separate collages. We then examined each participant’s’ set of three collages collectively using aspects such as ‘content, color, shape, size, content, space, directionality’ as a basis (Butler-Kisber & Poldma, 2010). Our aim was to find possible commonalities across the collages. When identified, we used the common aspects to push the analysis further and provide a deeper interpretation of how adolescents who are exposed to violence, perceive the role of social support in facilitating their academic achievement.
Data Analysis

Data were analysed using the six-stage model described by Braun and Clarke (2006), because it worked to reflect participants’ realities, as well as to ‘unpick or unravel the surface of actual reality’ (Braun & Clarke, 2006: 81). The individual interviews, which were audiorecorded, were transcribed and then thematically coded. Themes and subthemes were subsequently identified and clustered accordingly. Comparisons were made across the themes to identify connections between the themes, after which the themes were named and defined. The final analysis involved the task of the researchers telling the complicated story of the data in a way which convinces the reader of the merit and validity of the analysis (Braun & Clarke, 2006).

Ethical Considerations

Participants were given detailed and clear information on the purpose of the study prior to data collection. A process of obtaining consent from the principal and the parents preceded this, and the learners were required to give written assent themselves. We were cognisant of ensuring trustworthiness when undertaking a qualitative inquiry (Shenton, 2004). To obtain higher levels of credibility, the following measures were incorporated: a) thorough member checking and self-reflection were conducted (Creswell, 2007); b) thick descriptions of the research process and findings are provided by presenting direct quotations from the transcribed data; c) extensive descriptions of the research context, procedures and methodology are presented to enhance dependability. Lastly, crystallisation (Ellingson, 2009) was used instead of triangulation to ensure confirmability. Using the strategy of crystallisation we suspended our examination of the data for a temporary period so that we could reflect on our analysis and discover patterns or themes we had noticed during our immersion process (Niewenhuis, 2007). Crystallisation as a step in qualitative research urged us to attend to ‘voices that differ from your own’ in order to gain insight into ‘multiple constructed realities’ (Hodder, cited in Lincoln & Guba, 1985: 144).

DISCUSSION

The study found that support from the participants’ most immediate layer of the nested system, the components of supportive significant others (parents), supportive teachers and supportive peers (representing both process and contextual factors), contributed significantly to adolescents’ academic achievement, despite prolonged exposure to violence.

Supportive significant others

One of the strongest forms of social support that emerged in the study was the encouragement to achieve. The idea of being encouraged by significant others to stay positive and focus on academic achievement despite their challenges, was strongly reflected in participants’ responses in both the interviews and the collages. For example, the participant, who is quoted below, specifically emphasised the encouraging manner in which his family members responded to his academic challenges:

My family is like full of encouragement. They always encourage me even if I am not good at something, they encourage me by saying I can do better. They won’t just say… oh… this is not your subject, or you can’t, they just encourage me to try my best. They talk to me and help me to stay positive.

Many of the collages depicted a similar sentiment: reflecting images of family members who played a key role in participants’ academic achievement.

There was a common perception amongst participants that the support of family members played a major role in encouraging them to deal with problems related to their academic performance. This point is illustrated in the references the following participants made to their ‘studies’, ‘schooling’ and ‘solving a problem':
After my uncle died and the guys got caught I wanted revenge. My dad took me, and he said I had to come live with him so that I can realize in the big world it does not work like that...and my studies are everything (P6).

It sometimes breaks me when people say negative things about me, but my mother always tells me......she tells me to forget about them, know that you are loved by me......there are some who will motivate you and who want to see you succeed in your schooling (P1).

My dad paid for me to go to the gym......he told me that if I have problems I should not drink or take drugs, because I cannot solve a problem with a drug in my mind (P7).

Another participant stated the following in an interview:

My mom helps me to do well in school. She didn’t do well because she dropped out of school; she had a kid in matric. She is trying to show me now it is very difficult to get a job without education or matric. I understand her situation now, and I feel so bad (P4).

These narratives suggest that, against the background of violence, strong parent-adolescent relationships can provide a safe, stable and structured environment which promotes academic achievement. This finding is consistent with the literature. Several other studies similarly found that parental practices such as encouraging adolescents to master objectives, promotes the development of competencies within the adolescent, which, in turn, supports academic success (Boon, 2007; Marjoribanks, 2005; Gonzalez, Doan Holbein & Quilter, 2002; Turner & Johnson, 2003). This finding adds weight to Covington’s (2000) theory that motivational factors (e.g. academic objectives and future goals) are predictors of academic performance in adolescence.

It was apparent that social support was linked to academic achievement through relationships with family members based on trust. The following responses are suggestive of the links participants established between trusting family relationships and academic success:

My father helps me to make sense of life. He helps me to make sense about life, what I am going to find when I grow older and the challenges that I am going to face if I don’t focus on my schoolwork and do well (P4).

My mother supports me emotionally because she tells me about life, how to talk to people, how to respect any person, how to study and become someone (P6).

It was apparent that the unconditional trust and acceptance participants received from their families assisted them to resist peer pressure and negative influences.

Participants particularly emphasised the value of trusting parental relationships as valuable support systems. This finding showed concurrence with studies conducted in the 1990s. Chang, McBride-Chang, Steward and Au (1993) found that both the general self-concept and the academic self-concept of children are linked to parental trust and support. Lau and Pun’s findings (1999) showed that parental evaluations had the greatest impact on children’s academic self-concept, whilst research done by Liu (1994) concluded that a significant relationship exists between adolescents’ perceived home environment, the social school climate and students’ academic self-concept. Mirroring these findings, this study argues that trusting relationships with significant others are enabling in terms of the academic achievement of adolescents who have been exposed to violence in their communities.
Supportive teachers
The study found strong evidence of encouragement to achieve academically through the optimism of certain teachers. Most respondent’s collages and interview responses showed that they valued their teachers’ positivity about their academic prospects. One respondent re-called his teachers voice saying,

I know you will do well… have faith in yourself… you can make the future better for yourself.

Some respondents indicated that they ‘pushed’ themselves further because their teachers challenged them to chase their goals and dreams. As a respondent commented,

…my teacher always made me feel that I could do it.

Participants commonly perceived that a good adolescent-teacher relationship facilitated academic achievement, especially during difficult times. When asked for advice on how relationships with significant people could support adolescent learners to develop a strong sense of self, participants stressed the value of good adolescent-teacher relationships. Some of the ideas articulated were: ‘teachers should try to listen’, ‘understand what is going wrong at home’ and ‘try to help like when the mother is not there…’. Participants also identified teachers as significant others that encouraged them to actively deal with their problems. When asked about advice on how significant people in their lives could facilitate spaces to assist them to deal with problems in a pro-active manner, participants indicated that teachers especially could show an interest in adolescents by being aware of their individual needs.

The strong message conveyed was that teachers’ encouragement in the form of guidance and motivation helped shape and sustain learners’ academic performance. Numerous research studies have similarly found a strong relationship between positive statements made by significant others (such as teachers) and positive self-perceptions (Blake & Slate, 1993; Campbell, 1989; Elgin, 1980; Goodman & Ritini, 1991; Joubert, 1991; Burnett, 1999; Rivkin, Hanusheck & Kain, 2005). This study echoes the sentiments in the literature that teachers play an important supportive role in the academic development of adolescents from violent backgrounds.

Supportive peers
The study found compelling evidence that participants thrived from supportive and encouraging engagements with their friends and this translated into academic success. As one respondent stated

Without my friends, I wouldn’t be able to do well… If I’m stuck…my friends always help me.

Another responded commented that

I get down with things that happen in my life…and then I don’t want to study…but my friends always tell me to …get back in the game…but because I have the mind…

Participants generally indicated that they sought trusting and reliable relationships with their peers. The following response bears testimony to this:

I can trust my best friend who is doing the same things as me, but I cannot trust friends who are doing the opposite. The ones that I trust are the ones who are willing to achieve more.

Care from friends was clearly seen as invaluable to the participants. This care ranged from immediate issues such as keeping one another updated on schoolwork and providing assistance when they fell behind to long-term aspects such as staying focused on the future.
Reflection

Although none of the findings suggest easy solutions to the dilemmas that face adolescents in their academic development, they do help to articulate the association social support has with sustainable academic achievement. Much evidence was presented in the study to suggest that those adolescents who successfully mastered certain challenges gained valuable skills to assist them in continuing to achieve academically. This is consistent with arguments in the literature. For example, Scales and Leffert (2004) argue that the internal assets for development, as identified for positive youth development include commitment to learning, positive values for making good choices, social competencies to engage in familiar and new situations, and positive self-concept. The literature additionally reflects a rich argument in support of the role that student motivation and engagement play in learning and academic achievement (Duckworth & Seligman, 2006; Scales & Leffert, 2004). The findings in this study support the above argument that, despite their exposure to violence, social support plays a significant role in facilitating adolescents’ academic achievements.

The two components adopted from Bronfenbrenner and Morris’s (1998) Bio-ecological model and the dynamic, interactive relationships among them, had significance for this study. We found that the components of personal characteristics, supportive teachers, supportive peers and family members (representing both process and contextual factors) significantly contributed to adolescents’ academic achievement, despite prolonged exposure to violence. Our study also indicated that supportive Microsystems (such as proximal relationships with significant others) could serve as a protective factor, especially if this system supports the adolescent’s feelings of belonging, love and encouragement. The proximal processes of the adolescents in this study contributed to actualising the academic potential of adolescent learners. However, from a Bio-ecological perspective, proximal processes on their own cannot produce effective development and academic achievement; they are guided and fuelled by the personal characteristics of the adolescent (such as self-discipline and coping behaviours) as well as the nested set of structures or context. In the light of these ideas, this study supports the ideas of writers such as Morrison, Robertson, Laurie and Kelly (2002) and Calvete and Connor-Smith (2006) who argue for a combination of all these sources and promote the idea of support networks, as invaluable in the achievement of positive academic engagement.

CONCLUSION

Our study provides strong evidence of the constructive effect of social support, which can be explicitly linked to a host of positive outcomes in an adolescent’s academic development. Our study therefore concludes that positive social support can buffer the negative effects that exposure to violence has on the academic achievement of adolescent learners. Bronfenbrenner and Morris’s (1998) Bio-ecological model provides researchers and practitioners with a conceptual model that can help them to understand how to enhance social support so as to positively build the academic aspects of the lives of adolescents from violent backgrounds. The continuous dynamic interaction and interplay between the multiple influences on the adolescent’s life implies that when an adolescent experiences difficulties, the entire system needs to be seen as a whole, synergised system and not a single cause.

While the evidence is strong that social support serves a buffering role for the academic development of adolescents from violent backgrounds, this paper suggests that different types of social support interrelate with social contexts differently. It suggests that all social support is not equal; and similarly it suggests that deliberate strategies that build social support as part of adolescent development programmes need to be cognisant that social support enhancement may work differently for different individuals, different groups and different settings. In addition, there is more work to be done to examine how social support across the different contexts of adolescents’ lives is operationalised in different cultural settings. We acknowledge that our study is limited by its single setting context, and might not necessarily represent the majority of
school contexts in Southern Africa. We recommend that future research focus on larger and more diverse samples.

REFERENCES


Shavers, C.A. (2000) ‘The interrelationships of exposure to community violence and trauma to the
behavioural patterns and academic performance among urban elementary school-aged children’ D.N.Sc.
Dissertation, The Catholic University of America, Washington, D.C., US.


for Information 22(2) pp.63-75.

predicts poor educational outcomes in young children in South Africa and Malawi’ International Health


health in youth’ School Psychology Review 37(1) pp.52-68.


Educational Psychology 95(3) pp.495-505. doi: 10.1037/0022-0663.95.3.495

complex trauma histories’ Psychiatric Annals 35(5) pp.401-408.

relationship to psychopathology in adolescents’ Injury Prevention 7 pp.297-301.

to violence and related PTSD symptoms: reliability of an adaptation of the Harvard Trauma Questionnaire’

and peers’ Journal of Educational Psychology 90(2) pp.202-209.

White, T.N. (2009) The influence of perceived social support from parents, classmates, and teachers on
early adolescents’ mental health. Master’s Thesis. USF, South Florida, US.


Trends in digital scholarship curation in public and private higher education in southern Africa: a socio-technical approach towards sustainability

Name: Dr Brenda van Wyk
Supervisor: Professor A.S.A du Toit
Institution: University of Pretoria, South Africa
Year of Award: 2016
Qualification: PhD

ABSTRACT

Globally, recent research indicates that valuable research output originates from both public and private higher education institutions (HEIs), but the results of scholarship are often not archived and curated sustainably. Universities and HEIs are knowledge-intensive environments. Research and scholarship created are institutional knowledge capital and must be managed as assets to give the institution a competitive edge in research and academic stature. The status and prestige of HEIs depend on the quality, visibility and accessibility of their research. Knowledge capital must therefore be managed in a way that will ensure return on investment (ROI).

Scholarship that is available in an HEI’s dissertations, theses, proceedings and publications forms part of the institutional knowledge capital. Digitised institutional repositories (IRs) are the preferred method of showcasing scholarship on the internet, adding to the HEI’s web visibility. IRs have developed over the past 20 years to become sophisticated networked digital research collections.

Research-intensive universities and institutions reap benefits from showcasing scholarship digitally in well-developed IRs, as well as in peer-reviewed academic journals. HEIs with well-developed and well-maintained IRs rank consistently higher on webometrics ranking sites. All HEI sectors have not benefited equally from IR developments, and many African HEIs still do not perform according to world trends observed on ranking sites such as the Registry of Open Access Repositories and OpenDOAR.

Despite rapid growth and developments in digital scholarship curation, some private and public HEIs are lagging behind. Private HEIs in Southern Africa are still not visible and readily accessible on the web. Southern African private HEIs rank significantly lower than their comparative public HEIs. Poor scholarship curation and lack of research visibility deter HEIs from taking their rightful place in higher education and higher education research communities. Where research collections are not managed sustainably as knowledge capital, full ROI will not be possible.
Recently IR research has changed focus, from an initial information management and information technology approach, when questions on the role of the human element in the process of scholarship curation came to the fore. Knowledge management (KM) principles such as scholarship as knowledge capital, the value of research and scholarship became topics of recent research. Although HEIs are generally slow in implementing KM, the value of KM as an institutional strategy is increasingly being realised by global trendsetting HEIs.

The sustainability of IRs poses challenges in HEIs where the research culture is still not fully developed and the importance of sustainable scholarship collections is not realised. The benefits and value of research for the HEI, the researcher and research knowledge society are not optimised, and may often not be supported by the HEI’s research strategies, policies, planning, archiving and curation procedures.

This study uses both quantitative and qualitative methods, and includes quantitative webometric analysis, qualitative content analysis of IRs registered on the IR directory OpenDOAR, and data collected from the survey questionnaire by asking both qualitative and quantitative questions.

Target groups were identified from Namibia, South Africa, Botswana, Lesotho, Swaziland and Zimbabwe. Trends in the target group were compared with global IR trends to identify possible sustainability risk factors. The study aimed to get answers as to why access to digital scholarship appears to be restricted, the reasons for the lack of IR web visibility, and the low ranking or no ranking of IRs in the target group. Results from empirical research questionnaires were triangulated with webometric analysis to derive solutions and best practices and to ensure sustainable scholarship curation in IRs. A socio-technical model for sustainable scholarship curation is offered, to identify the IR sustainability domain in relation to the relevant institutional levels impacting on research and research curation.

This study offers a comprehensive definition of the sustainability domain for scholarship curation in IRs. It comprises a list of sustainability threats that must be avoided, and that should be seen as risk indicators present on a governance, infrastructural, and institutional cultural level.

**Keywords:** research visibility, digital scholarship curation, open access repositories, sustainability risks

The full thesis can be found at http://hdl.handle.net/2263/63181
RESEARCH TITLE

Discourses of learning, transition and agency amongst students who attended a Cape Town high school under Apartheid

Name: Dr Jasmine Matope
Supervisors: Professor Aslam Fataar
Professor Azeem Badroodien
Institution: Stellenbosch University, South Africa
Year of Award: 2016
Qualification: PhD

ABSTRACT

This dissertation explores how a group of students who attended a Cape Town high school between 1968 and 1990 navigated their schooling space and acquired various skills, knowledge and understandings to engage with the social world during and after leaving school. The learning experiences nurtured the students’ critical thinking, agency, assertiveness, self-worth, self-esteem, respect, autonomy, and desire to exercise social justice, dignity, responsibility and citizenry.

I employ the works of Pierre Bourdieu to show how the students were not simply defined by their structures and contexts, but that they invariably acted back on the worlds they inhabited by employing a variety of understandings and meanings to navigate their schooling and other pathways into adulthood (Bourdieu, 1984). I also engage with the work of Paulo Freire to examine how the schools opened the eyes and minds of students to become more fully human by reflecting and acting upon the world in ways that transform it (Freire, 1978: 26). I also use Nancy Fraser’s theory of social justice to analyse how the school enables the students to overcome the social and racial barriers that inhibit them from participating on par with others and as full partners in their schooling and social interactions (Fraser, 2007).

Methodologically, the study is based on the qualitative paradigm. I did extensive interviews with 14 students. I utilised the life history and life course techniques to locate the students as individuals in time and space, and to interpret their memories and perceptions in ways that bring fresh perspectives on how they internalise learning over their lifetimes. I also interviewed four teachers to get a broader understanding of how the school’s ethos and pedagogical practices involve the students and promote their rationality and particular skills and world views. In particular the students observe that they are encouraged to participate and take responsibility positions in various activities such as debates, drama, films and sports that make them feel part of the learning process and make learning more meaningful, useful and transferrable.
The dissertation thus argues that when students are agents in their own learning, they are able to develop the ability to think critically, flexibly and strategically. It argues that connecting learning to students’ contexts; dispositions and understandings enable them to develop transposable capital to confidently acclimatise to their schooling, social circumstances, and challenges.

**Keywords:** transposable capital, reflexivity, engagement, deliberation, dispositions, social justice, critical thinking

The full thesis can be found at http://scholar.sun.ac.za/handle.10019.1/100051
RESEARCH TITLE

Women leading in disadvantaged school communities: A case study of the Historical Schools Restoration Project

Name: Dr Graeme Edwards
Supervisor: Professor Juliet Perumal
Institution: University of Johannesburg, South Africa
Year of Award: 2017
Qualification: PhD

ABSTRACT

Whilst the education profession is dominated by women, they remain underrepresented in leadership positions. For South African women, the situation is aggravated by the metaphorical hangover of Apartheid and patriarchy. Disturbing traditional perceptions of leadership and drawing on critical feminist theory, this study explored the educational leadership practices of women in disadvantaged rural communities. The aim of the study was to analyse the lived experiences of female education leaders in rural disadvantaged communities through a critical feminist lens. The research sites were selected from schools in the first phase of the Historical Schools Restoration Project (HSRP). Moreover, the research sites hold both geographic and historical-political significance. Geographically, the sites are located in rural, disadvantaged communities. The historical-political significance of the research sites lies in the fact that these historic schools played host to many of the leaders of South Africa’s liberation struggle. Indeed, Nelson Mandela is an alumnus of one of the schools in this study. This qualitative study adopted a case studies research design. Critiquing main stream educational leadership discourses and aligning with critical feminist research methodologies, motifs of social justice, difference, inequality and power imbalances were explored. In addition, this study drew on historical research methodology in order to describe past events and understand present day educational leadership contexts. Through purposive sampling, five historic schools and 13 female participants were included in this study. In-depth interviews, focus groups, dyads, observations and archival document analysis were used as the main instruments for data collection. Data were analysed by qualitative data analysis, critical discourse analysis and feminist critical discourse analysis techniques.

The findings of this study were derived from an analysis of female educational leadership through a critical feminist lens. These findings are presented in three parts. Part One presented an analysis of three historical eras experienced by the historic schools, namely, missionary education, Bantu education and post-Apartheid education. The findings highlight issues of power, gender inequality, patriarchy and ideological influences on educational leadership practices. It was found that the colonial ideologies of
missionary education and the racist ideologies of Bantu education were misaligned with the tenets of critical feminist leadership. Despite the rhetoric of the decolonisation of education in the post-Apartheid era, the study found that the schools have not necessarily transitioned to institutional and leadership maturity. An analysis of the HSRP found that notable progress had been made in the areas of infrastructure development, curriculum management and the establishment of partnerships. However, the social, political and educational emancipation of the African Child in disadvantaged rural communities is yet to be realised.

Part Two presented an analysis of educational leadership styles. It was found that there was no preferred leadership style among the female participants. Instead, an investigation into the complex influences of South Africa’s colonial and Apartheid past unearthed complex contradictions, tensions and power binaries. The educational toil of three eras contributed to the current conceptualisation of educational leadership in rural disadvantaged communities. This analysis highlighted the positioning of power in leadership relationships and social justice leadership in the historic schools.

In Part Three, four educational leadership themes were identified. The analysis of relational leadership, servant leadership, spiritual leadership and instructional leadership highlighted power imbalances and hierarchical power structures, leadership for social justice, patriarchal and socio-economic issues, as well as alternative interpretations of innovative instructional leadership. This study concluded that critical feminist approaches are indeed significant enablers towards the ultimate decolonisation of education.

**Keywords:** disadvantaged rural school communities, critical feminist educational leadership, critical feminist research methodologies, critical feminist pedagogy, Historical School Restoration Project (HSRP), qualitative case study methodology

The full thesis can be found at https://allalla.academia.edu/GraemeEdwards
RESEARCH TITLE

A strategic management model for transforming selected Swaziland’s teacher training colleges into learning organisations

Name: Dr Amos M Mahlalela
Supervisor: Professor R.J. (Nico) Botha
Institution: University of South Africa, South Africa
Year of Award: 2017
Qualification: DEd

ABSTRACT

Teacher training is a significant and integral component of a sound education system. The need for quality programmes and relevantly qualified personnel cannot be overemphasised. Effective learning organisations result from good governance and strategic management.

The purpose of this study was to determine how teacher training colleges (TTCs) in Swaziland could be transformed into effective Learning Organisations (LOs). The following research questions guided the study. These were formulated as follows: What were the characteristics of effective learning organisations?; which factors had the potential for developing TTCs as learning organisations?; which factors restricted the TTCs in Swaziland from functioning as effective learning organisations? And how were TTCs in Swaziland governed and strategically managed?

The study emanated from concerns raised for a number of years on the quality and relevancy of TTCs in Swaziland. Such concerns were noted by both the print and electronic media as well as members of the general public. The training programmes in TTCs have been widely criticized, particularly with regard to standards, quality and relevance of the training process in relation to meeting the nation’s and global requirements. The study was qualitative and was underpinned by the interpretism research paradigm employing an ethnographic approach. The study was conducted in three selected teacher training colleges in Swaziland namely; the Nazarene College of Education and the William Pitcher Teacher Training College both based in the Manzini Region, and Ngwane Teachers’ College based in the Shiselweni Region. This study employed the purposive sampling procedure. Thematic Content Analysis (TCA) was used for the data analysis process.

The findings of the study revealed that participants felt that characteristics of effective LOs included the availability of both well-qualified academic and specialized non-academic staff, adequate and relevant infrastructure, dynamic, innovative and responsive curriculum, quality assurance checks and balances
mechanisms, good libraries and IT facilities, sufficient funding and innovative leadership. Regarding the factors that have the potential for developing TTCs to LOs, participants felt that institutional support from TTC leaders, adherence to professional and institutional values, using of mistakes as learning curve rather than criticism, and serious engagement in learning by all members were of paramount significance.

On the factors that restricted TTCs in Swaziland from functioning as effective LOs, the study revealed that these included cumbersome bureaucracy, lack of rewards and incentives for staff members, poor mobility structures, poor promotion formula as well as lack of recognition for professional development or academic achievements. Regarding the manner in which TTCs are governed and strategically managed, the study revealed that this was characterized by a centralized, top down, weak unresponsive governance system seriously lacking autonomy, long and confusing bureaucracy, unresponsive and cumbersome procurement procedures.

The conclusion was that the Government needs to restructure the governance and management systems of TTCs. The country should consider granting autonomy especially in the procurement processes. The promotion of staff in TTCs must be based on academic achievements and the government needs to recognize the significance of giving rewards and incentive to their employees. For transformation to occur in TTCs there is need for college lecturers to adapt to change and for leaders to disseminate vital information to staff members all the time.

The study concluded by developing a strategic management model to guide the development governance, management and operations of TTCs in Swaziland and their subsequent transformation to effective LOs.

**Keywords:** teacher training, teacher training colleges, learning organisation, strategic management, governance, transformation

The full thesis can be found at http://hdl.handle.net/10500/23119
An exploration of leadership practices in enacting a curriculum policy platform in working class secondary school

Name: Dr René Terhoven  
Supervisor: Professor Aslam Fataar  
Institution: University of Stellenbosch, South Africa  
Year of Award: 2016  
Qualification: PhD

ABSTRACT

It can be argued that South African schools, particularly those in working-class contexts, are struggling to contend with the challenges of curriculum reform. These curriculum reforms, which were introduced in an attempt to alleviate past injustices, are arguably not providing equal educational opportunities for all. Based primarily on their students’ poor results on tests and examinations, schools in working-class contexts are labelled as underperforming or dysfunctional schools by the Department of Education (DoE). Consequently, this negative positioning of many working class schools places huge pressure on the principals and School Management Teams (SMTs) of these schools.

Based on qualitative research in three selected working class schools, the thesis explores how curriculum policy plays out in working-class secondary schools by focusing on the leadership practices enacted by their School Management Teams. The research concentrates on how these SMTs develop and implement a range of leadership practices within their schools in order to enact a curriculum policy platform for optimal teaching and learning. Employing Stephen Ball’s theory of policy enactment, the study is an illustration of how the contexts of working class schools impact on the type of leadership practices that are enacted, which, in turn, impact the type of curriculum policy platform that is constructed. A key conceptual assumption of the study is the view that policy enactment is regarded as a process of ‘becoming’ and not as something fixed or with predetermined outcomes within a school. This thesis elucidates how curriculum policy is received by the formal leadership structure of the school, and shaped and implemented in the ‘messy’ reality of selected working class schools in the process of enacting a curriculum policy platform. The thesis focuses on the processes, mediations and meanings of curriculum policy in selected working-class secondary schools. I present the argument that the enactment of leadership practices by the selected schools’ SMTs are fundamentally impacted and determined by the schools’ ‘materiality’ and discursive constructions. Their leadership practices, based on narrow and one-dimensional enactment of the
curriculum policy, have negative and uneven consequences for these schools’ curriculum and teaching and learning offerings.

**Keywords:** policy enactment, curriculum policy, leadership practices, curriculum policy platform, working-class context, materiality, school management team

The full thesis can be found at http://hdl.handle.net/10019.1/100072
The editors wish to express their gratitude to the following experts who offered their knowledge and insights in the double-blind peer review process, thus ensuring all authors received valuable feedback:

- Dr. A. Akakandelwa, University of Zambia, Zambia
- Professor B.D. Bantwini, Northwest University, South Africa
- Professor T. Bush, University of Nottingham, United Kingdom
- J. Donald, Bahrain Polytechnic, Kingdom of Bahrain
- Professor E.C. du Plessis, University of South Africa, South Africa
- Dr. F. du Plooy-Cilliers, Independent Institute of Education, South Africa
- S. Friederichs Van Harmelen, IIE Varsity College, South Africa
- Dr. S. Heleta, Nelson Mandela University, South Africa
- Dr. A. Hlengwa, Rhodes University, South Africa
- G. Ismail, South African Research Council, South Africa
- Professor L. Kajee, University of Johannesburg, South Africa
- Dr. G. Kotzé, Education Consultant, South Africa
- Professor D.B. Lortan, Durban University of Technology, South Africa
- Dr. T. Moodley, University of the Western Cape, South Africa
- Dr. G. Mooney, The Independent Institute of Education, South Africa
- Dr. R. Mudaly, University of KwaZulu-Natal, South Africa
• Professor T.S. Mwamwenda, Africa Institute of South Africa, South Africa
• Dr T. Nkambule, University of the Witwatersrand, South Africa
• Dr R. Nussey, Education Consultant, South Africa
• Dr E. Ojo, University of the Witwatersrand, South Africa
• R. Singh, IIE Varsity College, South Africa
• T. Takane, The Independent Institute of Education, South Africa
• Dr V. Tshazibana, Nelson Mandela University, South Africa
• Dr A. van den Hoek, Education Consultant, South Africa
• Dr C. van Greunen, The Independent Institute of Education, South Africa
• Professor M.A. Samuel, University of Kwa-Zulu Natal, South Africa
• Dr D. van Tonder, North-West University, South Africa
• Dr P. Vande Wiele, Bahrain Polytechnic, Kingdom of Bahrain
• Professor E. Venter, University of South Africa, South Africa
Notes for contributors

Manuscripts should be submitted online at https://ijtl.iie.ac.za. They should be typed in one and a half spacing Times New Roman font size 12, in A4 format, in MS Word and should generally not exceed 6000 words in length, excluding tables, figures and references. The overall style for abstract, title, headings, figures and references should be in line with the American Psychological Association (APA 2004, 5th ed. Style Manual). Tables and Figures should be numbered by Arabic numerals. Each manuscript should be accompanied by all the requirements on the checklist that appear on the journal website. Click on the publish with IJTL Tab on https://ijtl.iie.ac.za. Manuscripts that do not include these requirements will not be considered for publication.

Proofs will be sent to authors if there is sufficient time to do so. They should be corrected and returned within 48 hours of receipt. The editor reserves the right to publish without proofs having been signed-off by the author.

The journal will be published open access online at the following URL https://ijtl.iie.ac.za
The Independent Institute of Education (Pty) Ltd

The Independent Institute of Education is a private higher education institution operating across 21 sites offering more than 90 registered and accredited higher education programmes from Higher Certificate to Masters level on its Varsity College, Vega, and Rosebank College sites. The IIE also offers a range of Short Learning Programmes. The IIE is accredited by the British Accreditation Council as an Independent Higher Education Institution.

The IIE has multiple associations and endorsements with leading organisations and professional bodies and works collaboratively with several other public and private higher education institutions.

The IIE brands have sites across the country; qualifications which are offered on the sites are directly linked to their mission and target student market. This means that students on each site will be able to study with other students with similar interests and ambitions. The IIE also offers qualifications in the distance mode of delivery. The flagship programme is a Postgraduate Diploma in Higher Education.

The IIE has a strong central national academic and quality assurance team based in Sandton that provides academic leadership for the sites and qualifications across the country. The team is also responsible for the registration, curriculum, quality of delivery, and assessment and certification (graduation) of all the qualifications, meaning that students on a site in one city receive an educational experience that is guaranteed to match that which is offered in any other city; this experience includes the same access to key academic resources and facilities. Each site adds to this academic base with its own specific group of well-qualified lecturers who are subject-matter and discipline experts, and collectively have a wealth of knowledge and industry-based experience in the areas in which they teach, as well as the individualised student support that the sites give. An IIE student is, therefore, rounded both academically and socially, thus maximising student success.

The IIE is a founding member of SA Private Higher Education (SAPHE). This is an association of SA’s leading private providers of higher education which has three objectives. Firstly, to promote the understanding of the general public about the role that private higher education plays in offering choices to students; secondly to promote the quality of provision and thirdly to play an advocacy role with the regulators. The Independent Journal of Teaching and Learning, as a peer-reviewed journal that appears on the DHET’s approved list of South African accredited journals, is one of the many ways in which The IIE is ensuring academic leadership within the higher education landscape of South Africa and, in particular, in private higher education.

For more information about The IIE, its academic opportunities, qualifications offered and sites of delivery, or SAPHE, please go to www.iie.ac.za or email info@iie.ac.za