

HOW ARE WE REALLY TEACHING OUR STUDENTS? A PARADOX IN PEDAGOGY

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ABSTRACT

This interpretive study is situated within a qualitative paradigm. The sample included four education faculties in South Africa. Data collection instruments comprised of focus-group and semi-structured interviews. Data was collected from final-year BEd students and their lecturers. An interpretation drawn from the results of this article is that most lecturers still subscribe to outmoded, authoritarian ways of teaching. Affiliation to this retrograde pedagogy limits the development of a dialogic relation between the lecturer and the student; feeding the notion of passive learning. Teacher educators should possess a knowledge of various teaching and learning theories; a large repertoire of teaching strategies. It is recommended that monitoring tools be introduced to ensure that all teacher educators have, or are in the process of, using a broader selection of methodologies to empower, inspire and sustain development of teachers.

Keywords: pedagogy, authoritarian, interactive, teaching strategies, teacher educators, pre-service teachers

INTRODUCTION

According to the Organisation for Economic Co-operation and Development (OECD) (2018) it is generally accepted that the value of an educational system lies in the quality of the teachers in that system. The professional development of the teacher, therefore, becomes the “core of teacher preparation” (Ball and Forzani 2009, 497). “If we want schools to produce more powerful learning on the part of students, we have to offer more powerful learning opportunities to teachers” (Feiman-Nemser 2001, 1014). Darling-Hammond (2006) stresses that in contemporary society there is a need for powerful teaching, that is, higher-quality teaching, since standards for learning and demands on teachers are higher now than ever before: greater knowledge and skill are required in the workplace for survival and success. This imperative is

reiterated by the Partnership for 21st Century Skills (2003, 10) that states:

The world within which we live is increasingly sophisticated, multi-faceted and nuanced. People need high level learning skills to act, respond, learn and adjust to ever-changing circumstances. As the world grows increasingly complex, success and prosperity will be linked to people's ability to think, act, adapt and communicate creatively.

Achieving more powerful teaching requires the need for a "pedagogical renewal". For too long schooling has been characterised as using a transmission model where teaching is telling and learning is absorption. "We need to acknowledge that there has been a major shift in thinking about the concept of knowledge and the processes of teaching and learning and that training is not just based on chalk and talk but that it is based in part, on the issues that arise from lived experiences of practicing students" (Lynd 2005, 12). The primary focus of "teachers of teachers" is to model best practice so that students are equipped adequately and will emulate those models provided.

LITERATURE REVIEW

Teaching variables which impact quality and effective teaching places professional knowledge as an important "teacher background knowledge" which consists of content knowledge, pedagogical knowledge and insight into student learning (Scheerens 2010, 29). These forms of knowledge refer to: pedagogical knowledge – how teaching occurs; content knowledge – what is taught; and professional knowledge – understanding the needs of students and having insight into student learning. These forms of knowledge are further discussed below.

Professional knowledge

Initial teacher training constitutes preparation for professional practice: pre-service learning with particular reference to underlying theories and professional learning (Ur 1997, 3). Dickson (2007, 1) believes that "professional knowledge" is assumed by many teacher educators to be obvious; yet many researchers hold competing ideologies about how to interpret "professional knowledge". The concept of "professional knowledge" held by Dickson (2007, 7), is dynamic as well as knowledge-in-action; often expressed as "know about, know how to, and demonstrate". Morrow (2007, 78) sums up professional knowledge as:

Professional knowledge is practical knowledge harnessed to an ethical ideal. It is a qualitatively distinct kind of knowledge, different from academic and technical knowledge, although it draws on both.

One definition of professional knowledge refers to "particular skills, superior performance as a

practitioner, achievement of teaching objectives, bringing about learning and understanding the principles of practice” (Ur 1997). Further definitions include “know about, know how to and demonstrate” (Dickson 2007, 1), as well as “practical knowledge and knowledge-in-practice” (Morrow 2007). All these definitions are dependent on various contexts. Professional knowledge is defined by McCluskey (2007, 2) as “a product of a particular social context and as a dynamic process of constant evolution and enrichment by means of reflection on practice, thus the teacher is more than just a transmitter of knowledge”. In order to fully understand these practices, the knowledge of pedagogy of teaching and learning becomes integral.

Understanding pedagogy in teacher education

In Australia, America, United Kingdom, Canada and New Zealand, the term “pedagogy” is regarded as “a synonym for teaching ... pedagogy is seen as a catch-all term for such things as teaching procedures, teaching practice, instruction” (Loughran 2006, 2). OECD (2018) states that there is a strong need for teachers to reflect upon the pedagogies applied in classrooms as students prepare to meet the educational challenges of the 21st century. These contemporary challenges require teachers to continuously update their repertoire of practices. “Innovation at the level of practice must be seen as a normal response to addressing the daily challenges of a constantly changing classroom” (OECD 2018, 2).

Loughran (2006, 4) claims that pedagogy concerns teaching or the transmission of information as well as the “relationship between teaching and learning and how together, they lead to growth in knowledge and understanding through meaningful practice”. Gray (2009, 5) agrees but senses that pedagogy is about both the “central relationship between the teacher and the learner” and the importance of other stakeholders, which include educational authorities, policy makers, researchers, teacher educators as well as parents. He adds that pedagogy is influenced by “political, social and cultural values and principles and is underpinned by a strong theoretical and practical base” (Gray 2009, 5). The two main foci in pedagogy in teacher education, according to Loughran (2006, 4), are “learning about teaching” and “teaching about teaching”.

Learning about teaching

The student who is learning about teaching should be learning what is required to be taught, as well as the how it is to be taught. For many students of teaching this is a difficult and complex process to comprehend at first and undertake later; considering that for most of their lives they have only had to focus on what was being taught, even at university level. “Student teachers’ expectations of their pre-service programs are strongly influenced by their prior experiences as

learners, together with popular stereotypes about teachers' work" (Berry 2004, 1301–1302). Students often enter the teacher education realm with the view that teaching is "simple and transmissive" and generally believe that teaching merely involves the "uncomplicated act of telling students what to learn" (Berry 2004, 1301–1302).

Students of teaching need to develop a learning agenda that focuses on the learning of "specific content, learning about learning and learning about teaching" (Loughran 2006, 4). In the process of acquiring these skills while learning the content, careful attention should be paid to: "(i) questioning; (ii) examining and learning about the way in which it is actually being taught; (iii) asking questions about the nature of the teaching; (iv) the influence of the practice on subsequent learning (or lack thereof); (v) the manner in which the teaching has been constructed and is being portrayed; and (vi) how the teaching-learning environment has been created" (Loughran 2006, 4).

Teaching about teaching

Pre-service teachers "need to be able to see and hear the pedagogical reasoning that underpins the teaching that they are experiencing" (Loughran 2006, 9). Teacher educators, in turn, who undertake to teach such pre-service teachers need to be conscious of *what* they are teaching and *how* the teaching is conducted is vital. There needs to be continuous assessment of "teaching being experienced so that a serious examination of teaching is always a central element of practice" (Loughran 2006, 9).

Critical pedagogy and its impact upon quality education

Critical pedagogy and its influence on quality education are dependent on the re-conceptualisation of teachers' work. Teachers need to be encouraged constantly to "critically question their understandings of society, schooling and pedagogy" (Smyth 2011, 16). Giroux (1988) and McLaren (2007) agree that the dominant view of teachers is to "implement rather than conceptualise pedagogical practice". Smyth (2011) concurs and believes that the re-conceptualisation of "teachers' work" should be transformed from the view that they are mere "species of implementation" to one in which they are regarded as pedagogues who seek to empower learners and who routinely interrogate the philosophies of pedagogy. Crandall's (2000, 35) view remains that teachers should be active participants in knowledge construction: but teacher education in many faculties emphasises a traditional view that leaves teacher trainees as passive recipients of transmitted knowledge. This emphasis perpetuates a pernicious learning cycle of textbook dependence and, at the same time, underscores a paradox in pedagogy.

Teachers need to “reclaim knowledge about teaching and learning so that it acknowledges and questions its socially construed nature” (Smyth 2011, 19). Smyth (2011) believes that, in order to break these habitual pedagogical practices that have been so entrenched and shaped by our past social, cultural and political experiences, we need to, as a teaching fraternity, question ourselves further: “Where do our ideas of teaching and learning come from historically? How did we come to appropriate these ideas? What social and cultural conditions cause us to continue to endorse the ideas we hold to be true about teaching and learning? Whose interests do our ideas really serve? What power relations between us and our students are expressed in our teaching practices? And in view of this litany of questions, are there grounds for radically changing the way we teach?” (Smyth 2011, 19). Learning to interrogate the assumptions behind educational practices may allow educators to shed outdated classroom practices and re-imagine spaces of learning both actual and virtual.

The professional teacher needs to realise the potential of new technologies and the advantages of including such new ways of exploring the landscape of learning in the fourth industrial age. According to Zhao (2010, 422), education should be future-orientated, with teacher education embracing the forces that shape future societies. Since dramatic changes have occurred as a result of globalisation, new opportunities are presented to teacher education. Darling-Hammond (2006) opines, however, that teacher education preparation in many faculties remain obdurately teacher-centred and largely behaviourist in philosophical orientation.

Professional knowledge delivery from a pedagogical perspective

Teaching is a process that is “complex and multi-dimensional”; requiring “deep knowledge and understanding in a wide range of areas and the ability to synthesise, integrate and apply this knowledge in different situations and under varying conditions” (Hollins 2011, 395).

A fundamental shift is required to steer away from the traditional top-down approach which is product-based and where teachers are taught certain strategies and are expected to “match” the right one. A modern approach favours interactive, process-based learning and depends upon greater reflection on experience. This reflection upon experience provides future teachers with opportunities to “develop more informed practice, making tacit beliefs and practical knowledge explicit, articulating what teachers know and leading to new ways of knowing and teaching” (Crandall 2000, 40). Teacher enquiry and reflection are key to developing teaching theory in teacher education.

Shor and Pari (1999, 141) explain that the traditional approach is more focused on teachers’ transfer of accepted information that is to be remembered and then reproduced later.

Freire (1993, 76) calls it the “notion of banking education” and explains:

“The banking notion of consciousness is that the educator’s role is to regulate the way the world ‘enters into’ students. His task is to organise a process which already occurs spontaneously, to ‘fill’ the students by making deposits of information which he considers to constitute true knowledge-deposits which are detached from reality, disconnected from the totality that engenders them and could give them significance.”

Barr and Tagg’s (1995, 13) work on the shift in instructional practices in some respects is pertinent to this study. Barr and Tagg express the top-down, traditional, dominant way of teaching as the “Instruction Paradigm” and state that the teaching in teacher-training programmes consists mainly of the delivery of “50-minute lectures”. This “fairly passive lecture-discussion format, where faculty talk and most students listen, is contrary to almost every principle of optimal settings for student learning and results in ineffective teaching” (Barr and Tagg 1995). Ineffective teaching results from learning practices which negatively impact student learning. Special reference is made by Edwards (2000, 4–5) who highlights “teacher-talk-dominated classroom experiences” as the sea of blah:

“The teacher stands at the front of the room and blahs all over the place – blah, blah, blah The sea of blah fills the room and the students bob up and down like corks in a sea. Every now and then they go under and take a gulp of air”

Edwards (2000) goes on to explain how frustrating this unilateral tuition is for listeners. He claims that teacher-talk is still the most commonly used approach for instruction in schools and tertiary institutions, even though, paradoxically, we are aware that it is far from ideal.

“Children are organically predisposed to be critical thinkers Sadly, children’s passion for thinking often ends when they encounter a world that seeks to educate them ... they stop enjoying the process of thinking ...” (Hooks 2010, 8). For too long, according to Hooks (2010), the acquisition of knowledge has been a process that is “private, individualistic and competitive”: learning is only important until the process of receiving knowledge, memorising it, regurgitating it and then meeting the demands of the course is achieved and then it becomes redundant. For authentic learning to transpire, a more participatory relation between teacher, learner and material needs to be developed; resulting in engaged pedagogy.

Enabling learners to progress through the curriculum, to access their full potential while dealing with the challenges of a diverse class means that teachers are successful and valuable educators; as opposed to obstructive pedagogues. Being able to work through these challenges successfully obliges teachers, according to Menon (2007), to assimilate and accommodate more effective strategies. With success in the classroom and the development of new experiential insights, the professional knowledge base of the teacher is extended. When teachers’

experiences are negative, preventing them from sharing and constructing new knowledge structures with learners, teachers often question themselves, their pedagogic ability and, therefore, their effectiveness as teachers. Such self-doubt can erode a teacher's ability. Training interventions that they receive as students and implement as teachers become a key factor in securing initial success in the classroom and preventing any slippage into self-doubt and insecurity (Menon 2007).

Table 1 indicates the modification from the behaviourist, authoritarian paradigm to a learning paradigm referred to by Menon (2007) as a learning design that encompasses four quality indicators: "(i) design of learning, (ii) reflective practice, (iii) learner-centredness, and (iv) dialogue in instruction": these four indicators comprise the "critical factors influencing the quality of a professional education programme".

Table 1: Instruction versus learning paradigm

Instruction vs Learning Paradigms	
Instruction paradigm	Learning paradigm
Mission	
Transfer knowledge	Empower learners to discover and construct knowledge
Provide efficient delivery of instruction	Facilitate/cause effective learning
Education as quantitative knowledge acquisition	Education as qualitative transformation
Values	
One-size-fits-all	Respect for individual needs/strengths
Competition	Co-operation
Reactive	Proactive
Institution/discipline-centred: isolationist	Responsive to stakeholders/"clients" "strategic alliances"
Learning theory	
Body of knowledge exists for transfer/storage	Knowledge is individually constructed and dynamic
Culture of unquestioned acceptance of received wisdom	Culture of enquiry and evidence-based learning
Teacher responsibility	Learner responsibility
Extrinsic motivation	Intrinsic motivation
Learning is linear and sequentially "chunkable"	Learning is non-linear and "hyperlinked"
Teaching/learning assumptions	
Instructor-led/dependent/micro-managed	Learner-led
Didactic, monologic	Active/interactive, dialogic
Curriculum driven	Geared to learner's experience/needs; contextual
Coverage dominated	Mastery, distributed cognition
Classroom bound; synchronous	Anywhere, anytime learning
Single loop learning	Continuous learning
Certification is key	Competency is yardstick
Measurement in terms of time on task	Learner-paced; achievement-based measurement
Individualistic and competitive learning	Cooperative, collaborative learning
Teacher as expert	Teacher as guide/facilitator
Education is the responsibility of teachers	Whole organisation involvement in optimising learning environment

Adapted from Barr and Tagg (1995, 17–19)

In an authoritarian paradigm knowledge is transferred or delivered to students. But the purpose of a learning paradigm is “to create environments and experiences that bring students to discover and construct knowledge for themselves, to make students members of communities of learners that make discoveries and solve problems” (Barr and Tagg 1995, 15). Teacher educators, according to Pryor, Akyeampong, Westbrook and Lussier (2012), still resort to the use of formal lectures, basic question and answer techniques, and general group work rather than practice more co-operative pedagogical approaches promoted in schools. There is a need for teacher educators to renew, grow and expand their pedagogy used for teacher preparation and to implement more cooperative strategies. Teacher education is reported “as both a facilitator and a barrier to achieving the implementation of promoted pedagogies” (Pryor et al. 2012).

METHODOLOGY

This study aims to reveal that although there is an understanding that the value of using interactive teaching strategies to train pre-service teachers is vital since a model of best practice is provided, teacher educators continue to use teacher centred approaches in their own teaching. This subtle, yet persistent paradox in pedagogy weakens and confuses professional knowledge delivery in the teacher-training programmes offered at South African universities and many faculties elsewhere in the world.

In an attempt to fully comprehend the nature of this paradox, and examine the experiences of both student teachers and their teacher educators within the context of their training, a qualitative approach was adopted and adapted for the purposes of this research. This approach provided opportunity to draw in-depth, comprehensive descriptions of the reality and quality of teacher experiences during their training at their respective institutions.

Since this research study endeavours to view the initial teacher-training programmes through the lens of pre-service teachers, teacher educators and in-service teachers, a phenomenological approach was embraced. Phenomenology permits the researcher “to understand how one or more individuals experience a phenomenon ... from the person’s own perspective” (Johnson and Christensen 2004, 46).

Four nationally approved faculties of education were used as the research sites. These were sampled purposively in order to ensure the heterogeneity of the institutions. Two of the sampled sites are the largest providers of initial teacher education in the country.

The sample used was essentially homogenous, all participants were final year teacher education students. Purposive sampling provided opportunity to solicit a “more closely defined

group for whom the research question would be significant” (Smith and Osborne 2008, 56). The selection of participants depended greatly on their ability to provide vital information which would auger well in the achievement of the objectives in this study (Kumar 1999, 162). The information required was obtained through investigating the following element:

- How students and lecturers felt about the acquisition of professional knowledge throughout their training.

The information required was obtained from the following participants: 26 lecturers, 3 in-service teachers and 9 focus groups (F/G) involving 61 students from four universities. This purposive sample met with specific inclusion criteria, since their “life worlds” comprised of the daily task of teaching and training pre-service teachers.

Interviews, which allowed for the acquisition of information regarding the participants’ experiences, views, reasoning and motivations, were used as data collection instruments. The use of semi-structured interviews allowed for collection of rich data since they are not standardised. Probing questions, questions for clarification and additional questions provided opportunities for possible diversions which were not anticipated but which could assist in the achievement of the research objectives (Gray 2009, 373).

To elicit the views and insights regarding the pre-service training recieved, final-year Bed students were exposed to focus-group interviews. These interviews assisted students to “identify, define and contextualize issues” they felt were significant in their training. Participants were able to “describe, discuss, debate, disagree and defend their views” on how they experienced the training programme (Hennink 2010, 208).

For data analysis, an idiographic strategy was deployed; starting with the analysis of a particular example and working towards a more general categorisation. This process entailed detecting themes which emerged in the initial case; connecting the themes; producing a coherently ordered table of themes; analysing other cases; and defining over-arching themes to label clusters.

This study was supported by Maxwell’s (2005) theory of understanding and validity in qualitative research. The focus was on three types of validity: descriptive validity – concern for the “factual accuracy of the account”; interpretive validity – “concern for the participants’ perspective” and generalisibility: “the extent to which one can extend the particular account to other accounts” (Maxwell 1992, 285). In addition, data triangulation as well as communication validity were juxtaposed to render the results of the study valid.

Ethical considerations that applied to participants in the study comprised of: informed

consent, confidentiality, debriefing, right to withdraw and no deception (Willig 2001). Approval was granted by all four institutions and ethical clearance was acquired timeously.

FINDINGS AND DISCUSSION

Introduction

In order to reveal and account for the paradox of pedagogy extant in many educational faculties, it was essential first to interrogate: (i) the quality of professional knowledge acquisition and its delivery; (ii) the modes of delivery used to teach students; and (iii) whether the modes used were satisfying student needs

Acquisition of knowledge

Pre-service teachers often spend most of their time in lecture halls with the aim of equipping themselves with the necessary knowledge needed to become educators of future societies. What transpires in these lecture halls greatly impacts this aspect of teacher training which influences the quality of educators produced. Student teachers and lecturers were asked to give their perceptions/responses regarding the following aspects:

Modes of lecture delivery used and how these meet student needs

Each of the following concepts is discussed; relying upon evidence from the interviews with lecturers and students from the four teacher education institutions (TEI 1, TEI 2, TEI 3 and TEI 4), in more detail.

Modes of lecture delivery

From the analysis of the interviews, it was found that the modes of delivery used were generally influenced by lecturers' personal styles as well as the learning areas covered. These include both the top-down approach and the interactive approach.

The approach, according to the students, consisted mainly of lecturers being the dominant figures in the transmission of knowledge. Seventy-three per cent of 23 respondents, felt that lectures were delivered mainly in the top-down approach (see Figure 1). Although the use of transparencies, overhead projectors, slide presentations and chalk-and-talk methods were present, they merely presented information which could have or had already been read from the texts received.

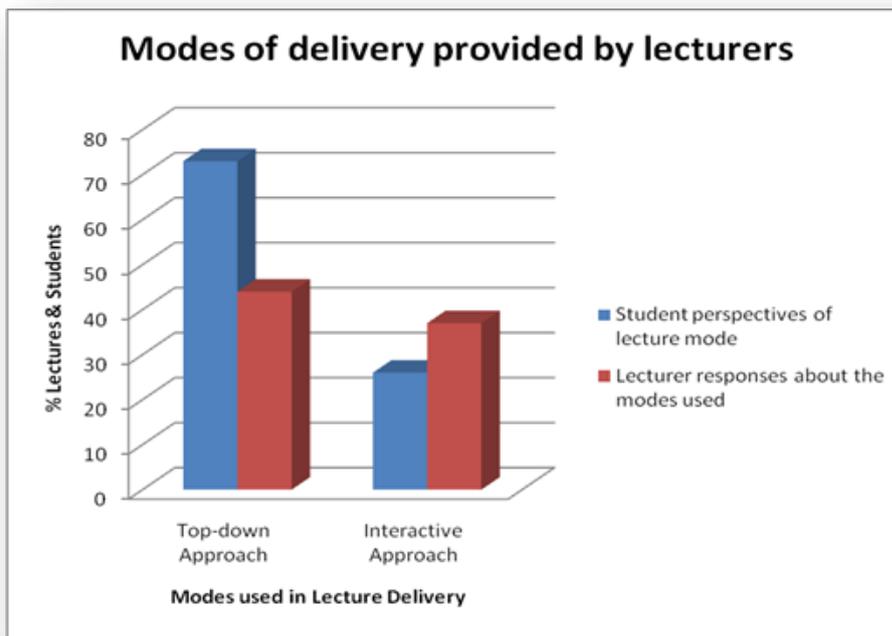


Figure 1: Modes of lecture delivery

Most of the students indicated that this was the scenario they experienced daily. There is a marked discrepancy with regard to student perception and lecturer perception of the method used. It is noted that only 23 per cent of the lecturers indicated that they used mainly the lecture approach (see Figure 1). One of the lecturers indicated that:

“... a lecture by definition is a one-way process. It is really a one-way communication between a lecturer who lectures and the assumption being that you know a little bit more in the subject area than your students.” (Lecturer C:TEI 1)

Students participating in the focus group interviews (F/G) felt that information was not summarised and not enough discussion was used to assist with the interpretation of texts. As a result of this, lectures were quite “boring and monotonous” because notes were given and students sat there while the notes were being read through (F/G 5: TEI 1). They felt that they could have done that on their own. Another student (F/G6: TEI 1) indicated that she certainly did not enjoy the lectures because she felt as if she had “learnt nothing”. A third respondent (F/G 8: TEI 2) shared a similar sentiment and mentioned that she had learnt a great deal more through doing her own research.

Lecturers were well aware of the students’ feelings regarding this mode of lecture delivery as Lecturer M (TEI 2) indicated:

“... I do find that students are not enjoying this, it is far too abstract. Students, therefore, in their evaluation of lecturers, will question the relevance of the course.”

There does, however, seem to be a substantial variation in the percentages of responses between the students in the Foundation Phase, and those in the Intermediate Phase. Generally, in the Foundation Phase, students were exposed to a much more interactive approach and only 50 per cent of them indicated that lectures were delivered in a top-down approach. This more enlightened and stimulating method of gaining and owning knowledge generally occurred in certain subjects only; where Intermediate specialists lectured to them.

The findings clearly indicate that most of the students considered that the lecture approach, as instituted by the lecturers within the various faculties, was not particularly beneficial to them.

At some institutions, as noted by Lecturer P (TEI 2), classes ranged from between 300 to 400 students. Even though these groups were further broken up; classes still comprised 100 or more students per lecture which resulted in the lecturer doing most of the talking. Only 21 per cent of the lecturers agreed that the large classes limited a more interactive approach and that there was a need to rely on the lecturing mode; using PowerPoint presentations, discussion and the occasional group work models.

Large classes impacted upon the students' learning; which was evident in the contrasting views expressed by most of the Foundation Phase students. In their opinion, most of their lectures were delivered using a more interactive approach: they believed this was so because they had classes of around 40 as opposed to the other phases where the classes were as large as 400 students.

Model good teaching

According to 71 per cent of the students, most of the lecturers did not fulfil their expectations in terms of modelling good teaching: "Lecturers teach us not to use talk and chalk but they set the example of how not to do it. They do not use their teaching time to model good teaching to us."

Of the lecturers interviewed, 37 per cent (see Figure 1) indicated that since they were in the process of training teachers, exposing students to the right kind of teaching strategies was important. These lecturers revealed that although there was a need for the lecture method from time to time, most lectures were interactive and covered a large variety of teaching strategies. Lecturer N (TEI 3) fervently indicated that it was important to:

"... model good teaching. So if I expect my students eventually to go out and to do group work and to develop debates and to use small discussion and focus groups and things like that, I need to model that to them in order for them to be able to go and apply it in the school environment. I ... use a variety of pedagogical strategies in order to demonstrate to them what kind of tools are available"

A student felt that lecturers were not “practising what they preached”. Students were expected to teach using interactive approaches, yet what was expected of teachers in the classroom was far removed from what was being modelled in the lecture hall.

One respondent (F/G 6: TEI 1) held that when you are exposed to teaching for the first time, you “emulate your lecturers because that is all that you see, but when you try to emulate them during practice teaching you get bogged down [*sic*] for it, and I am thinking you did the same thing that I did today”.

The Foundation Phase students complained that when they had combined lectures with other phases they were exposed to learning in large classes which were mainly lecturer dominated, and they felt as if they had “learnt nothing”.

“... if you are dealing with an inclusive classroom with a variety of different races and gender with particularly different learning styles and then you should educate at the university in exactly the same manner Not everyone can learn the same way, not everybody can understand by chalk and talk so you should try and implement a learning strategy that works for everybody not just one particular group.” (F/G3: TEI 4)

Lecturers become the “model teachers” for pre-service teachers and often emulate the very approaches that they have been exposed to. It is necessary for the “teachers of teachers” to present their content through more interactive approaches; since this is the way that they expect their students to present lessons within a classroom. Various strategies should be implemented in teaching; for teachers to develop into critically aware educators. If student teachers are exposed to a limited number of teaching strategies or approaches they will, invariably, use these approaches in their classrooms.

There were lecturers who worked very hard, and students indicated that those were the lecturers from whom they benefitted. One student (F/G 5: TEI 1) spoke about a specific lecturer and stated that she made sure that “we learnt the theory in class and straight away got to the practical in the classroom and experienced how they come together”.

Only 34 per cent of the lecturers believed that modelling good teaching was important in the initial teacher-training programme and that students needed to see in lecturers what an “ideal teacher” should be. Another significant point that emerged is that lecturers, teaching students, should “emulate, though at different levels, best practice, i.e. how we expect teachers to conduct themselves with their learners in a classroom”.

DISCUSSION

Pedagogical approaches employed by lecturers

It emerged from this component that most lecturers subscribe to traditional, authoritarian ways

of teaching. This adherence limits the development of a dialogic relation between lecturer and student; feeding the notion of passive learning (Freire 1993). This limitation is evident in lecturer comments such as “a lecture is by definition a one-way process” and “you know a little more than students”, as well as student comments which include, “it’s a one-way communication” and “it’s very one-sided”. This habit is referred to by Freire (1993) as the “notion of banking education”. The theory and practice of banking education, according to Freire (1993), serves to undermine the active partnership which should be developing between teacher and student; raising a consciousness which allows students to have a voice. If students are not given an opportunity to be active players in their learning, they will not be able to “use the already acquired knowledge” in the process towards unveiling new knowledge and, therefore, “they will never be able to participate rigorously in a dialogue as a process of learning and knowing” (Freire 1993, 19).

It seems that the general opinion of lecturers is that the student is a receptacle into which knowledge is poured by the lecturer. There is the suggestion, based on lecturer responses, that rote learning has a place. This outdated sentiment contributes to the thought that students should be passive; inadvertently teaching them acceptance of the status quo in society. Lecturing in this case remains lecturer dominated and allows no or little room for a balance between lecturer and student input.

Consistent with the critical paradigm, it is understood that lecture halls should not become a place where knowledge is dispensed by lecturers and consumed by students. It should be a place where new knowledge is built up jointly and grounded in practice. To ensure quality instruction, all role players need to undertake a “pedagogical renewal”, which refers to “planned qualitative change towards desirable teaching practices, practices which ensure hoped-for learning” (Lynd 2005, 67). It has been agreed by researchers that practices which are undesirable, much like the practices which have emerged from this data, include “chalk and talk, teacher-centred/dominated, lecture-driven pedagogy”, in which students are relegated to a passive role (Lynd 2005, 67) .

The data did, however, reflect a tension that exists between the students and lecturers regarding delivery modes that were used. While 73 per cent of the students felt that lectures were delivered mainly by the top-down approach, only 23 per cent of the lecturers acknowledged that they used that mode as their main approach of lecture delivery. From the bifurcation in these responses, it can be deduced that there may be varying interpretations of the lecture approach; from either side of the rostrum.

The data revealed that lecturers were aware that their approach was unilateral and certainly not ideal but they justified the extensive use of this approach in respect of particular challenges

that presented themselves on a daily basis. This logistical defence is evident from the following statements made by lecturers: “students do not prepare for lectures”, “students do not do adequate reading for lectures”, and “classes are too large – from 300 to 400 students”.

The added dimension of large classes, according to the data, limited the variation of teaching approaches to just the lecture approach: which is substantiated by student responses that indicated that only 26 per cent of the lecturers attempted to vary their teaching strategies and approaches significantly.

Jaffer, Ng’ambi and Czerniewicz (2007) agree that employing an interactive approach in large classes is difficult and that, generally, large classes “posed problems for all students, but students who were under-prepared were particularly affected”. Costa and Rangachari (2009, 75) provide contrary evidence that a “highly interactive approach” employed to teach in large auditoriums has had positive effects in institutions such as Harvard University. More evidence from the study suggests that the smaller the classes, the greater the possibility of more interactive approaches being attempted. The findings reveal that the Foundation Phase classes were limited to about 40 students per class. Their experience in their training was generally characterised by more participatory approaches, which promoted both co-operative learning and enquiry.

The implication was that in the smaller classes they were able to interact and learning occurred, whereas in the very large classes they were exposed to a very lecturer-dominated approach and felt as though they “had learnt nothing”. This is consistent with Freire’s (1993, 73) ideology that “dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue there is no communication and without communication there is no education.”

Student needs

Based on the data, especially student responses, the implication is that student needs with regard to knowledge delivery were not satisfied in their entirety. Morrison (2012) suggests that lecturers need to plan and consider student needs and have to adapt to satisfy those needs where necessary. A more critical approach is needed, where teacher educators become more aware of, be able to identify the problem, conceptualise it through research with a focus on trying to solve it, and then to finally take action in changing how they approach the issue (Wink 2005). A spirit of critical enquiry has to be sustained within our teaching environments: this alone will educate lecturers; informing staff about whether student needs are being satisfied or not.

RECOMMENDATIONS

Institutional change to mirror the true realities of teaching and learning

Current teacher education policies do not auger well for preparing globally competent students and teachers entering the fourth industrial age. The importance of global education is paramount and should result in policy change at all levels. In order to “improve the quality of education for all students, teacher-training institutions need to be redefined and restructured to reflect the real world of teaching and learning” (Futrell 2010, 436), since “the quality of an education system cannot exceed the quality of its teachers” (Barber and Mourshed 2007).

To enhance the teaching quality the country requires institutional initiatives focused on instructional improvement. South Africa needs to develop an organisational framework within which all the components in the preparation of teachers are explored; leading to a core of instructional practices that foster the necessary kinds of student engagement. Windschitl, Thompson, Braaten, Stroupe, Chew and Wright (2010, 2) suggest “high leverage practices” which aim to produce a beginner’s repertoire grounded in: “important learning goals for all learners; literature on how students learn; and emerging longitudinal researchers about how novices learn to teach” (Windschitl et al. 2010, 2).

This programme needs to be part of a larger agenda through which educators continuously aim at moving towards equitable and effective practices by developing “an evidence-informed system of learning opportunities, tools and formative assessments tailored to the needs of teaching novices”. Futrell (2010) supports this imperative and contends that unless the educational community is willing to make the necessary changes in teacher-education programmes, it cannot prepare graduates to become change agents within schools, districts and ultimately, the nation. Institutional initiatives should comprise, among others, enhancing or including the following practices in order to prepare students for teaching in the fourth industrial era:

Adapting delivery approach

Education can (i) transform our nation into a socially accountable entity sensitive to equity, justice and priorities of social cohesion and (ii) make it competitive and flourish in the new waves of industrial change breaking on the economy. The first step towards a more responsive and competitive nation is to inculcate a culture of independent and critical thought: to move away from the traditional transmission model of instruction and programme structure. Educators need to abandon a model that physically and pedagogically separates the learning of “what” from the learning of “how”. Conjoining these elements will, indeed, create

environments that encourage further collaboration, develop stronger communication and enhance co-ordination, and inspire all students to fully appreciate their role and become the change agents in the transformation of the current education system.

Teacher educator practices

High quality teacher-preparation programmes depend on high-quality teacher educators. Teacher educators play a central role in continually seeking to encourage the formation of a teacher identity through the facilitation of activities that empower them to build on and challenge their existing experiences and beliefs. If students are encouraged to challenge their own personal philosophies and existing practices, they cease to perpetuate unthinkingly the behaviour and beliefs of authoritarian teacher educators they may have been exposed to. This study recommends that processes be established:

- (i) to undertake that teacher educators create supportive learning environments in which student teachers can develop, grow and build on existing knowledge and
- (ii) to develop an individual teacher educator plan (ITEP) for each teacher educator that focuses on maintenance and further professional development.

The ITEP should consist of the teacher educator profile, indicating qualifications, experience and strengths, as well as areas that need development. It should consist of specific criteria set out to endorse higher quality education. The ITEP should be seen as a developmental tool and should serve to monitor progress and ensure the progress and growth of each individual. The following aspect can be monitored via the ITEP:

- **Qualifications:** Teacher educators should be more qualified than the students they teach and be adequately equipped in terms of professional, pedagogical and content knowledge.
- **Developing and monitoring repertoire of interactive teaching strategies used:** Teacher educators should have acquired a large repertoire of teaching strategies which should be used for the purpose of: teaching their students and modelling best practice to students. Monitoring tools should be set up to assure that all teacher educators are in the process of developing this aspect. For the educators who are not equipped, a means of equipping themselves should be sought; for example, through workshops, conferences, etc.

CONCLUSION

Professional knowledge and pedagogy are the cornerstones of sound teacher education. Delivering this knowledge using effective pedagogical principles is, therefore, of the utmost

importance. This study concludes from the data collected that students believed they were disadvantaged with regard to professional knowledge acquisition; most teacher educators had not made the shift from traditional modes of teaching to more co-operative and participatory modes. This reluctance to change resulted in their feeling that teacher educators had not met their expectations and failed to meet their needs. The data revealed that many lecturers were aware that students were not entirely benefitting: as is evidenced from the following statement: “I do find that students are not enjoying this, it is far too abstract”. There is a need for lecturers to evaluate and reflect on their work more often; with the hope of being more effective in their role as teachers of teachers. Teacher educators need to use a “wide selection of strategies which will empower, stimulate and support” the development of teachers (Morrison 2012, 11). Morrison adds that lecturers, in their capacity as professional knowledge deliverers, should be required to:

- “create and maintain an interactive, supportive and safe learning environment that promotes learning;
- communicate effectively and develop an ethos of mutual respect with learners, fellow curriculum team members and other professional and external agencies to promote learning and positive behaviour;
- implement effectively a broad range of strategies to promote active and independent learning at various levels by using different modes of delivery and technology;
- implement a range of strategies to evaluate the quality and impact of teaching on the learning experience and reflect on the implications for future practice.” (Morrison 2012, 11).

The above ideals reflect what are expected of “teachers of teachers” currently: an indication of what might be needed for lecturers to “address the challenges of 2020 and beyond” (Morrison 2012).

REFERENCES

- Ball, D. L. and F. M. Forzani. 2009. The work of teaching and the challenge for teacher education. *Journal of Teacher Education* 60(5): 497–511.
- Barber, M. and M. Mourshed. 2007. *How the world's best-performing school systems came out on top. (The McKinsey Report)*. New York: McKinsey & Company. http://www.mckinsey.com/client-service/socialsector/resources/pdf/Worlds_School_Systems_Final.pdf (Accessed 9 June 2009).
- Barr, J. and R. B. Tagg. 1995. From teaching to learning: A new paradigm for undergraduate education. *Change* 27(6): 13–25, November/December.
- Berry, A. 2004. Self-study in teaching about teaching. In *International handbook of self-study of teaching and teacher education practices*, ed. J. J. Loughran, M. L. Hamilton, V. K. LaBoskey and T. Russell, 1295–1332. Dordrecht: Kluwer Academic.
- Costa, M. J. and P. K. Rangachari. 2009. The power of interactive teaching. *Biochemistry and Molecular Biology Education* 37(2): 74–76, March/April.

- Crandall, J. 2000. Language teacher education. *Annual Review of Applied Linguistics* 20: 34–55.
- Darling-Hammond, L. 2006. Constructing 21st century teacher education. *Journal of Teacher Education* 57(3): 300–314, May/June.
- Dickson, B. 2007. Defining and interpreting professional knowledge in an age of performativity: A Scottish case-study. *Australian Journal of Teacher Education* 32(4): 1–15.
- Edwards, J. 2000. The research and realities of teaching and learning in the middle years of schooling. Keynote address presented at the Middle Years of Schooling Conference, Melbourne, Australia, 14–16 August 2000.
- Feiman-Nemser, S. 2001. From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record* 103(6): 1013–1055, December.
- Freire, P. 1993. *Pedagogy of the oppressed*. New rev. 20th Anniversary edition. New York: Continuum.
- Futrell, M. 2010. Transforming teacher education to reform America's P-20 education system. *Journal of Teacher Education* 61(5): 432–440, November/December.
- Giroux, H. A. 1988. *Teachers as intellectuals: Toward a critical pedagogy of practical learning*. Granby, MA: Bergin & Garvey.
- Gray, D. E. 2009. *Doing research in the real world*. 2nd Edition. London: Sage.
- Hennink, M. M. 2010. Emergent issues in international focus group discussions. In *Handbook of emergent methods*, ed. S. N. Hesse-Biber and P. Leavy, 207–220. New York: Guilford Press.
- Hollins, E. R. 2011. Teacher preparation for quality teaching. *Journal of Teacher Education* 62(4): 395–407, September.
- Hooks, B. 2010. *Teaching critical thinking: Practical wisdom*. New York: Routledge.
- Jaffer, S., D. Ng'ambi and L. Czerniewicz. 2007. The role of ICT in higher education in South Africa: One strategy for addressing teaching and learning challenges. *International Journal of Education and Development Using Information and Communication Technology* 3(4): 131–142. <http://www.ijedict.dec.uwi.edu/viewarticle.php?id=421> (Accessed 18 December 2012).
- Johnson, B. and L. B. Christensen. 2004. *Educational research: Quantitative, qualitative, and mixed approaches*. 2nd Edition. Boston, MA: Allyn & Bacon.
- Kumar, R. 1999. *Research methodology: A step-by-step guide for beginners*. London: Sage.
- Loughran, J. J. 2006. *Developing a pedagogy of teacher education: Understanding teaching and learning about teaching*. London: Routledge.
- Lynd, M. 2005. Fast-track teacher training: Models for consideration for southern Sudan. http://people.umass.edu/educ870/teacher_education/Documents/Lynd%20-%20Fast-track%20Southern%20Sudan.pdf (Accessed 13 April 2010).
- McLaren, P. 2007. *Life in schools: An introduction to critical pedagogy in the foundations of education*. 5th Edition. Boston, MA: Pearson/Allyn & Bacon.
- Maxwell, J. A. 1992. *Understanding and validity in qualitative research*. Harvard Educational Review, 62(3) 279–300, Fall.
- Maxwell, J. A. 2005. *Qualitative research design: an interactive approach*. 2nd Edition. Thousand Oaks, CA: Sage.
- McCluskey, R. 2007. Professional knowledge in initial teacher education (ITE): A preliminary review of Hispanic literature. *Australian Journal of Teacher Education* 32(3): 1–15, August.
- Menon, M. 2007. Quality indicators for professional education. Workshop on Performance Indicators for Quality Assurance in Distance Higher Education, Colombo, Sri Lanka, 14–16 August 2007.
- Morrison, A. J. 2012. *Professional standards for lecturers in Scotland's colleges: Initial teacher training/education standards for lecturers in Scotland's colleges*. Edinburgh: Scottish Government.
- Morrow, W. 2007. *Learning to teach in South Africa*. Cape Town: HSRC Press.

OECD *see* Organisation for Economic Co-operation and Development

Organisation for Economic Co-operation and Development. 2018. What does innovation in pedagogy look like? *Teaching in Focus* 21. OECD Publishing: Paris.

Partnership for 21st Century Skills. 2003. *Learning for the 21st century*. Washington, DC: Partnership for 21st Century Skills. http://www.p21.org/downloads/P21_Report.pdf (Accessed 23 August 2012).

Pryor, J., K. Akyeampong, J. Westbrook and K. Lussier. 2012. Rethinking teacher preparation and professional development in Africa: An analysis of the curriculum of teacher education in the teaching of early reading and mathematics. *Curriculum Journal* 23(4): 409–502.

Scheerens, J. (Ed). 2010. *Teachers' professional development: Europe in international comparison: An analysis of teachers' professional development based on the OECD's teaching and learning international survey (TALIS)*. Luxembourg: European Office for Official Publications of the European Union.

Shor, I. and C. Pari. (Ed.). 1999. *Critical literacy in action: Writing words, changing worlds / A tribute to the teachings of Paulo Freire*. Portsmouth, NH: Boynton/Cook Publishers.

Smith, J. A. and M. Osborn. 2008. Interpretative phenomenological analysis. In *Qualitative psychology: A practical guide to research methods*, ed. J. A. Smith, 53–80. 2nd Edition. London: Sage.

Smyth, J. 2011. *Critical pedagogy for social justice*. London: Continuum.

Ur, P. 1997. *Teacher training and teacher development: A useful dichotomy?* <http://www.jalt-publications.org/tlt/files/97/oct/ur.html> (Accessed 23 August 2012).

Willig, C. 2001. *Introducing qualitative research in psychology: Adventures in theory and method*. Buckingham, PA: Open University Press.

Windschitl, M., J. Thompson, M. Braaten, D. Stroupe, C. Chew and B. Wright. 2010. The beginner's repertoire: A core of instructional practices for teacher preparation. Paper presented at the 91st Annual Meeting of the American Educational Research Association. Denver, CO, 30 April – 4 May 2010.

Wink, J. 2005. *Critical pedagogy: Notes from the real world*. Boston: Pearson/Allyn & Bacon.

Zhao, Y. 2010. Preparing globally competent teachers: A new imperative for teacher education. *Journal of Teacher Education* 61(5): 422–431, November/December.