Scholarship in teacher education in South Africa, 1995-2006

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This article reports on findings pertaining to scholarship in teacher education drawn from a wider study on all education research in South Africa from 1995 to 2006. The study, which defined education research as broadly pertaining to teaching and/or learning, obtained extensive data from a wide range of sources: universities, non-government organisations (NGOs), education and training authorities and electronic databases. The levels, scale, educational sectors and disciplinary areas of each entry in the resulting 10 315-strong database were identified, and on the basis of a random sample of 600 texts seven primary research themes in teacher education were identified and are detailed here: the re-conceptualisation of teachers as facilitators, the problems and possibilities of cooperative learning or group work, the use of educational support materials and resources, the idea of 'teaching for learning', the importance of context, the nature of continuous assessment, and debates on teacher evaluation.

Keywords: education research, teacher education, South Africa

Introduction

During 2008 the Centre for Education Policy Development (CEPD), commissioned by the National Research Foundation (NRF), constructed and analysed a database of education research in South Africa from 1995 to 2006, inclusive, with the aim of determining the gaps, strengths and general research trends over that twelve-year period (Deacon, Osman & Buchler, 2009a). After briefly outlining the main aspects of this wider study of education research, the article focuses mainly on issues pertinent to research in teacher education. In particular, it summarises seven primary research themes being addressed under the rubric of teacher education, including the re-conceptualisation of teachers as facilitators, the problems and possibilities of cooperative learning or group work, the use of educational support materials and resources, the idea of 'teaching for learning', the importance of context, the nature of continuous assessment, and debates over teacher evaluation.

Methodology

The CEPD/NRF study (Deacon, Osman & Buchler, 2009a) defined education research very broadly, as pertaining to teaching and/or learning, in order to capture the widest possible range of research endeavours and education (and training) contexts and sub-sectors. Research and publications data was obtained from a wide range of overlapping sources, including all 23 South African universities, the national Department of Education, 15 other government departments, public institutions and councils, 15 education NGOs and research units, 27 Sector Education and Training Authorities, 8 museums, 18 publishers of education books, 24 donor agencies, 7 education sector trade unions and an education labour service NGO, 7 sets of annual education conference proceedings, 10 South Africa-based education journals and the Education Resources Information Center (ERIC), Nexus, African Higher Education Research Online (AHERO), Blackwell,

InformaWorld, Ingenta, Sage and Taylor and Francis electronic databases. This data was categorised in terms of a multi-dimensional matrix (identifying the *level/s*, *scale*, *educational sector/s* and *disciplinary area/s* of each database entry), of which only the scale categories (large scale, case study and small scale) are exclusive and do not overlap; all other categories (level, educational sector and disciplinary area) are not mutually exclusive and many texts can and do fall under more than one area, level or sector.

Categorisation was facilitated by obtaining, and extracting the aims and findings from, a total of 2100 texts (20% of the database, which for ease of access, were primarily journal articles). The vast majority of texts listed in the database were drawn from peer-reviewed sources, and even those texts that could be classed as 'grey' literature (i.e., unpublished or undisseminated research) had nevertheless been subjected to some degree of review or oversight. The bulk of the database was categorised on the basis of bibliographical references rather than on the perusal of the actual texts. While the final database contains a near-comprehensive list of education research in South Africa from 1995 to 2006, it is not yet complete in that a small number of institutions were unable to provide complete data; more importantly, most masters and doctoral thesis data is accumulated separately and has not yet been incorporated.

Primary research themes were identified on the basis of a close textual and comparative analysis of 600 randomly sampled texts. While numerous themes are addressed in the literature, only those which were most frequently iterated in these texts were deemed to constitute major and sustained foci, and are discussed here. Hence, neither these texts nor their themes can be said to be representative of the final database as a whole; in comparison to the final database, sampled books, chapters in books and journal articles were over-represented, while reports, conference papers and proceedings were under-represented, to the order of 5%. Nevertheless, when silhouetted against the background of the 20% of the database that is replete with aims and findings, they offer a glimpse of some of the more important issues that have been addressed by education scholars in South Africa since 1995.

Findings: Education research in South Africa

The wider study revealed that education scholarship is energetic and growing, producing an average of about 900 research outputs of all types per annum and by 2006 having almost doubled the total output of 1995. However, in the main this scholarship is diffuse, individualized and on a small scale, with a dearth of large scale research projects that could consolidate knowledge about issues of national and global importance. Of the 10 315 texts in the database, 45% are journal articles, 25% are conference papers and proceedings, 14% are reports, 7% are chapters in books, 6% are theses, and 3% are books. More than one person authors some 35% of all research. Of the journal articles, approximately 49% were published in one of ten South Africa-based journals of education, 24% in other South Africa-based journals and 27% in non-South Africa-based journals.

While it is significant that over a quarter of South African education research, published in the form of journal articles, is directly reaching a global readership, this is not in itself an indication of quality. Many non-South Africa-based journals are *not* Thomson Scientific indexed, while some South Africa-based journals *are*. Nevertheless, most local education journals cater primarily for a local audience and have little international visibility, with even those South Africa-based education journals with Thomson Scientific accreditation (all of them accredited within the past five years, and including the *South African Journal of Education, Perspectives in Education*, and *Education as Change*), being poorly cited internationally (see Tijssen, Mouton, Van Leeuwen & Boshoff, 2006:170, 172; Academy of Science of South Africa (ASSAf) 2006:54-58; and, for a fuller analysis, Deacon, Osman & Buchler, 2010:96).

In terms of the database as a whole, 48% of education research in South Africa focuses on the classroom level, 38% on the systemic (i.e., regional, provincial, national or international) level, and 11% on the institutional level (with a tiny remainder (3%) concerned with out-of-school situations, including adult education and training, vocational training and home schooling, but not including formal higher education). The formal schooling sector is, at 48% of the database, by far the greatest single focus of education research, followed by the higher education sector at 32%.

A mammoth 94% of all education research is small scale and often qualitative, ranging from experiential micro-studies through textual exegesis to small scale surveys. Only 5% of research consists of (clearly bounded and focused) case studies, and barely 1% could be classified as large-scale research (defined as research involving 450 or more subjects, 40 or more schools, one or more educational sectors in their entirety, a province, the country or several countries). The overwhelmingly small scale nature of education research in the country can be attributed to a number of factors: foreign donor funding for existing community-oriented broad-based research dried up after the 1994 democratic election or was redirected through government channels; the relatively substantial amount of macro-policy research of the mid- to late-1990s was nevertheless often quickly absorbed into official White Papers; increasing 'publish or perish' pressures on academics and researchers can be satisfied more easily, more quickly and more cheaply by small scale research than by sustained, long-term and in-depth research projects; many progressive researchers have continued to associate empirical research with positivism, capitalism and apartheid, and consequently remain ideologically suspicious of the more quantitative and empirical methods often present in large scale research; and small scale studies are encouraged under the current intellectual hegemony of constructivism in education research (see Mouton, 2006; Taylor, Muller & Vinjevold, 2003; Diphofa, Vinjevold and Taylor, 1999; Muller, 1996; and, for a fuller analysis, Deacon, Osman & Buchler, 2010).

Research in teacher education (including all research, practice, policy and programmes, formal and informal, involved in teaching, training and/or developing teachers at all levels of the education system, except, specifically, teaching in higher education), constitutes the fifth largest disciplinary area in education research from 1995 to 2006, accounting for 5% of the entire database (or 1006 texts). 33% of all education research from 1995 to 2006 inclusive is concentrated in four disciplinary areas: educational theory (or sociology and philosophy of education) (12% of the database); education management (including governance, leadership and discipline as well as whole school development and school efficiency) (9%); education policy (including education planning, policy development and policy implementation) (6%); and higher education studies (referring to all aspects of teaching, learning, curriculum development, institutional change and management at the tertiary level, both public and private) (6%). The areas of language studies (including linguistics and literature), educational psychology (including guidance, counselling, career education and life orientation) and academic development (treated as distinct from higher education studies, albeit pertaining largely to this sector, and including academic support, academic literacy, tutoring, mentoring, supervision, school-university transitions, and issues of access and admissions) are equivalent in quantity to teacher education in that each of them makes up 5% of the database.

The comparatively large amount of research in the area of teacher education reflects the significance ascribed to the development of new policies and practices, such as outcomes-based education and continuous assessment, as well as to a context in which South African teachers are currently held in low esteem, not least because their learners fare poorly in international comparative achievement rankings. Teacher education research consists overwhelmingly of small-scale studies, and most of it (69%) is located at the classroom level.

Findings: Primary themes in teacher education research

This section focuses on the primary research themes identified in the disciplinary area of teacher education only. However, to place these themes in the context of education research in South Africa as a whole, brief mention can be made of the primary themes identified in the seven other largest disciplinary areas. Primary themes in *educational theory* include the critical application and assessment of constructivism, the relationships between disciplinary and applied knowledge and between theory and practice, and reflections on power relations, key educational concepts and 'asset' models of education. In *education management*, primary themes include the effects of educational decentralisation and devolution of power, the changing nature of leadership, discipline, and institutional and organisational cultures. Much *education policy* research tracks what is seen as overly idealistic policy-making in South Africa, exacerbated by implementation difficulties, and also undertakes a large amount of sector- and discipline-specific studies,

such as higher education policy and language in education policy (see also Deacon, Osman & Buchler, 2010). Research under the rubric of *higher education studies* explores the political and institutional implications of higher education transformation, the dual focus on both equity and excellence, the emphasis on performance and productivity, assessment, accountability and autonomy (see also (Deacon, Osman & Buchler, 2009b). Among the primary themes in *educational psychology* are the precise roles and functions of critical thinking and meta-cognition, the impact of stress on teaching and learning in changing educational environments, and the nature of individual identity formation. Poor language proficiency, especially in English, and the close connections between language, cognition and academic achievement are the primary concerns of *language studies*, along with debates over the use in education of indigenous languages, or mother tongue. Finally, *academic development* focuses mainly on the transition from school to university, the 'under-preparedness' of incoming students and/or accepting institutions, the recognition of prior learning, and the acquisition of academic literacies.

The seven primary themes that emerged from an examination of relevant texts in the area of teacher education included:

- the re-conceptualisation of teachers as facilitators;
- the problems and possibilities of cooperative learning or group work;
- the use of educational support materials and resources;
- the idea of 'teaching for learning';
- the importance ascribed to context;
- the nature of continuous assessment; and
- debates on teacher evaluation.

Teachers as facilitators

To a distant observer, it might have appeared over the last decade that "the words 'teacher' and 'teaching' were virtually banned" in South African education policy discourse, because of their supposedly authoritarian connotations (Nykiel-Herbert, 2004:254). Indeed, education research in general abounds in the use of the alternative terms "educator", "facilitator" or "mediator". The primary factor behind this phenomenon is the constructivist (and, before that, Freirean) idea that knowledge and meaning can, and should be, actively and reflexively constructed through the practical, collective and cooperative participation of those who are learning, with the teacher facilitating but not determining this process, and continuously and formatively assessing the extent to which new meanings are arrived at. Hence, "[i]nstead of a teacher standing in front of learners transferring content to passive listeners, there is a facilitator organising groups of learners who are actively involved in the learning process" (Messerschmidt, 2003:107) or, put differently, "[t]he teacher must move away from the blackboard and from a role as dispenser of wisdom to one of organising the learners' discussions and managing group work and feedback" (Johnson, Scholtz, Botha & Hodges, 2003:87).

Despite this prevailing view, many researchers do not accept, and resist, this apparent demotion of the teacher, and do not consider it sufficient that teachers nevertheless remain important as "experts", "observers" and "creators of learning situations" (Macdonald, 2002:123). Some issues of particular concern to these critics of constructivism include the teacher's potential loss of authority, the practical difficulties of continuous assessment, and the extent to which mastering the vast accumulated corpus of global knowledge may no longer be pertinent to a school curriculum (Berkhout, 2006:921-922; Van der Walt, 1997:11; Van Renen, 2005:114; Enslin, Pendlebury, & Tjiattas, 2001:124; Young, 2004:10; Higgs, 2002:174; Shalem, 1999:54).

Cooperative learning or group work

Cooperative learning, or group work in common outcomes-based education parlance, is extolled by many as the ideal vehicle for bringing about the transformation of South African education. Strongly associated with constructivism, it involves learning through the medium of small groups, whose individuals share

skills, assist each other in constructing knowledge and collaborate in order to solve problems; it has been applied in educational settings from primary school to university, and across a range of learning areas (Messerschmidt, 2003; De Villiers & Grobler, 1995; Bitzer, Kapp & Engelbrecht, 1999; Bornman, 1997; Henning, Mamiane & Pheme, 2001; De Jager & Ferreira, 2003).

South African teachers, bombarded with but insufficiently trained in new policies and curricula, have tended to equate the simple practice of dividing learners into groups with transformative education (Brodie, Lelliott & Davis, 2002; Harley & Wedekind, 2004; see also Department of Education, 2000). Supporters of cooperative learning point out, however, that merely "using small discussion groups in teaching" is insufficient; only "effective groups" — planned, guided, supported and accountable — promote learning (Bitzer, 2004:41-43, 47-48). Cooperative learning exponents draw on Vygotsky to argue that learning potential is "realised during interaction with *more knowledgeable others*" (Bitzer, 2004:47, emphasis in the original; Bertram, 2003:224) — who need not be formal teachers, but could as well be fellow pupils — to lead the way towards "deep learning" or the development of high levels of "reflexive competence" or "epistemic knowledge" (Luckett, 2001:33).

It follows, moreover, that a teacher is still required to structure group activities, motivate pupils, appoint or organise the appointment of a group leader, intervene in appropriate ways and manage feedback (Bitzer, 2004:51-54; Park, 1995:42-43; Steyn & Killen, 2001:66), and this fact will encourage those who feel that the teacher still has a central role to play. Lacking an expert other, learners, especially those with limited English language proficiency and a didactic academic background, often display a surface rather than a deep approach to learning, and such superficial cooperative "learning", marred by "group think" ("that the majority view will prevail ... even if ... wrong"), may not be learning at all, even "hindering students from becoming independent and self reliant learners": "in a worst case scenario, students are simply sharing their ignorance" (Bertram, 2003:220-224).

There are other aspects to the debates associated with cooperative learning. As is the case with any approach to teaching and learning, a sense of safety, and also of familiarity, both within groups and in their immediate environment, can make it possible for pupils to excel (Bodenstein, 1998:286; Luckett, 2001:33; Roux, 2003:131). It thus pays to remember that "skills of autonomous learning do not come automatically" (Schulze, 2003:7), but require a supportive milieu, and that group participation techniques in themselves may need to be explicitly taught and fostered. Whereas one study of grade 4 pupils found that, despite unfavourable classroom circumstances, "learners coped with co-operative learning" (Messerschmidt, 2003:111), this stands in sharp contrast to a similar exercise in a well-resourced university context, which showed that ineffective groups were those that either did not prepare, or did not exploit expert resources, or simply chatted too much (De Villiers & Grobler, 1995:131). A common critical finding in the literature is that outcomes-based education has become almost synonymous with group work, with the large majority of teachers taking up the form and not the substance of group work (Brodie et al., 2002:541; see also De Jager & Ferreira, 2003:195). Far too often, group work may in fact involve little interaction, and may even be dominated by a few learners. Others point out that, in some instances, the traditional lecture format can achieve what some supporters of cooperative learning claim as their own: "it is [also] possible for learners to construct meaning in a lecture situation if the learner is actively engaged and if the teacher frames and scaffolds the knowledge appropriately in the lecture" (Brodie, Lelliott and Davis, 2002:100-101).

Educational support materials and resources

In an educational context, emphasising that learners should construct knowledge for themselves, traditional resources like the textbook and the chalkboard have fallen somewhat out of favour. Nevertheless, it has been found that textbooks remain an important structuring resource, especially for mathematics and science teachers, while the chalkboard, too, can be a useful and productive learning device, albeit that teachers' ingenuity in this regard has tended to be "uneven, partial and contextual" (Adler, Reed, Lelliott and Setati, in Adler and Reed, 2002:62-4; Strauss, 2000). Disadvantaged schools are often found to have other experiential, contextual and practical resources (Jita, 1998:21); nevertheless, these and existing teaching resources tend to be under-utilised (Engelbrecht *et al.*, 2006:124). The current obsession with

additional and alternative teaching materials, to the virtual exclusion of useful material at hand, may merely impose more demands on teachers without being more helpful: "Resources that are brought into the classroom do not necessarily have educational meanings built into them" (Adler, Reed, Lelliott & Setati, in Adler & Reed, 2002:69).

'Teaching for learning'

Many teacher education programmes, particularly but not only in mathematics and science education, are said to involve little unpacking or decompression, and much compression and abbreviation of ideas (Adler & Davis, 2006:270-271). Among the reasons are the poor quality of existing teachers, who simply "do not know enough mathematics [or science]" and thus need opportunities to practice and rehearse their basic disciplinary knowledge; the perceived academic inferiority of decompressed reasoning (the know-how) vis-à-vis the 'pure' disciplines of mathematics or science (the know-what) (Adler & Davis, 2006:290-292); and the provision of insufficient epistemological and pragmatic space in which knowledge can be critically engaged and applied (Waghid, 2000:259). In being taught how to teach their particular disciplines better, teachers must also learn how learners learn, in order to teach accordingly. Hence the idea of "teaching for learning": we must "*teach so that learners will learn*" (Craig, 1996:48, emphasis in the original).

Teaching for learning is said to require "consolidation work" (Craig, 1996:49), or unpacking, modelling or making explicit the relationship between disciplinary content and the manner in which it should be learned, along with the rules and operations associated with learning it (Pearce, 2000:n.p.; Craig, 1996:53; Adler, 1997:n.p.). While researchers continue to debate the relative value, and alternative modes of transmission, of disciplinary or expert knowledge *vis-à-vis* practical, applied or user-oriented knowledge (Scott, in Cloete, Muller, Makgoba & Ekong, 1997:34-37), the curricular and pedagogical consolidation of knowledge implicit in teaching for learning may assist in widening epistemic access for all. This will be rendered more likely if the path to higher or meta-cognitive knowledge, practical or applied knowledge and experiential or intuitive knowledge (Luckett, 2001:31; Lillejord & Mkabela, 2004:259; Brijlall, Maharaj, Jojo & Mybert, 2006: 38; Fakudze, 2004:271).

The importance of context

Do teachers who know more teach better (Adler, in Adler & Reed, 2002:1)? Researchers are divided on the matter, but the sampled research suggests that both knowing more and teaching better depend on several types of knowledge: disciplinary *content* knowledge, *pedagogic* knowledge (or teaching for learning, as described above), and also and in particular, upon *contextual* knowledge, or being able to locate both content and pedagogic knowledge within a wider spectrum of knowledge drawn from, for example, the sociology, philosophy, psychology and history of education (Adler, in Adler & Reed, 2002:2-3; see also Enslin *et al.*, 2001:129). Context is understood here as being simultaneously cognitive, epistemological, spatial, temporal and relational, such that learning and problem solving are seen not as processes taking place solely 'inside an individual's head' (Alant, 2004:32; Adler, 1997 n.p.), but within a definable context or environment which, moreover, needs to be understood holistically if the conditions for sustainable development are to be realised (Kirsten & Viljoen, 2001:219).

Debates continue between advocates of "objective knowledge", on the one hand, and those who argue that knowledge is "constructed", on the other, and while some prefer to bracket out the contextual or "situated" nature of knowledge (Horsthemke, 2006:16; Macdonald, 2002:120), others argue that the intricate connection between knowledge, particular perspectives and political positions need not detract from its truth or utility (Young, 2004:18). In these terms, there is a definite push within the literature towards establishing a clearer and firmer disciplinary basis for teacher education, in which "pedagogic knowledge" is much more than "teaching methods" and includes "the theoretical basis for various approaches to teaching" (Welch, in Adler & Reed, 2002:28; see also Adler, Slonimsky & Reed, in Adler & Reed, 2002:136, and Brodie, 2004:65).

Continuous assessment

The integral connection between continuous assessment and outcomes-based education looms large in the literature (Le Grange & Reddy, 1998). Researchers point to its constructivist features, and particularly to the fact that "learners are not compared with others, rather they are assessed in terms of their prior accomplishments and how they have developed as active 'meaning makers'" (Archer & Rossouw, 1999:104). Some add that assessment is not only about tracking learners' abilities to engage with tasks (Craig, 1996:48), for it is equally important to assess whether the teaching itself was appropriate, i.e., whether it did actually "teach for learning" (Craig, 1996:54). Assessment is generally expected to be motivational and more formative than summative, and it should also be criterion- rather than norm-referenced (Bitzer, 2004:60-63) and "accommodate nuance, insight, growth and other things that signal the quality of learning" (Van Renen, 2005:116). The difficulties involved in achieving such nuanced forms of assessment remain, however, with some researchers pointing out that it still appears to be necessary to translate criterion-referenced assessments into percentages (Thomen & Barnes, 2005:960).

In the context of numerous possible forms of assessment — observation, questioning, group assessment, peer assessment, self-assessment, portfolio assessment, dynamic assessment, project assessment and gathering information from parents and others (Archer & Rossouw 1999; Bitzer 2004; Du Plessis & Koen 2005; Van der Westhuizen & Smith 2000; Wilmot 1999), the actual process of assessing tends to be negatively characterised as the keeping of a set of "stiplyste [checklists]" (Van der Walt, 1997:11; Thomen and Barnes, 2005:960). A major problem is the time-consuming nature of recording these multiple and continuous assessments — a problem also associated with processes intended to recognise prior learning (Castle, 2001:28) — coupled with the fact that Curriculum 2005 failed to suggest any record-keeping frameworks. Teachers are advised to try to avoid "too much mind-numbing record-keeping" by developing their own "simple, succinct modes of recording", "their own 'short-hand" (Archer & Rossouw, 1999:122-3).

Teacher evaluation

Debates over teacher evaluation exhibit strong political nuances, with teachers resisting anything that hints at even the slightest dilution of their professional autonomy. For some, resistance to evaluation is only resistance to a particular kind of evaluation, one that is hierarchical, non-enabling, non-self-reflective, nondialogical and non-developmental (Jantjies, 1996:50; Quinn & McKellar, 2002:74; Pretorius, 2003:133; Enslin et al., 2003:76). For others, however, who have found that teachers are suspicious even of clearly developmental styles of evaluation, teachers resist evaluation per se, because it is invariably statedriven surveillance (Jansen, 2004). The politically discredited apartheid-era system of school inspections (Young, 2004:12) has tarred all subsequent efforts, from standards-based accountability measures (Taylor, 2006:524) to whole school evaluations, as anti-autonomy, "nothing more than the inspection system in another guise" (Jansen, 2004:57). Holding individuals or institutions accountable, for all its democratic connotations when viewed from below, can just as easily be seen as control (Barasa & Mattson, 1998:59-61; Coetzee, 2006:10). Given that the assessment of learners' achievements is also an assessment of teachers' accountability (Archer & Rossouw, 1999:101), it might appear that the most effective instrument available to the state for regulating teachers is "direct pressure via matriculation results" (Jansen, 2004:62) — if only the quality and generalisability of matriculation results were less open to question. The bulk of research in this area thus concurs with the need for a "teacher-friendly appraisal system" (Jantjies, 1996:52-3; see also Mashile, 1998:88-90, and Jansen, 2004:64), and not only must teachers' competence be deliberately fostered by education managers (Bisschoff & Grobler, 1998), but learners, too, must take the responsibility to "critically reflect on their own performance and ... make a contribution to their own learning" (Herselman, Hay & Fourie 2001:11).

Conclusion

The disciplinary area of teacher education is vital to and overlaps substantially with almost all other areas of the field of education. In an educational context beset with poverty, the legacy of apartheid and the

impact of HIV/AIDS, and where the quality of teaching is universally described as poor, research in the area of teacher education is of paramount importance.

In terms of the seven themes deriving from post-apartheid scholarship in teacher education as described above, teachers are expected to act as facilitators, overseeing the mutual construction of knowledge via carefully structured small groups, but in this new guise they must nevertheless maintain their authority, impart the curriculum, teach participation skills and make better use of existing educational support materials and resources. Above all, they must teach for learning and widen epistemic access, and in order to do this they need to be better trained, so as to become better versed in disciplinary, pedagogic and contextual knowledge, particularly if they are to be able to assess learners formatively and on their own terms, rather than in comparison with others – and manage the resulting increased paperwork. In the process teachers must also be held accountable, albeit in cooperative, enabling and developmental ways.

The seven primary themes identified here with regard to research in teacher education in South Africa are for the most part aligned with trends apparent in recent international work. International handbooks on research in the field, emanating largely from the United States of America (USA) and the United Kingdom, chart a shift, beginning in the 1980s, from "structural determinants of norms and expectations to the agency of individual actors in constructing their destinies" (LeCompte, 2009:41). Within this shift, issues of social justice, diversity, dialogue and context loom large, with traditional subject and content analysis being both back-grounded and supplemented with new areas like physical education, arts education and second language studies. Above all, qualitative studies – broadly understood to range from case studies and life histories to ethnographies and textual analyses – are clearly the methodological mainstream the world over, to such an extent that some in the USA consider them to constitute a "glut", giving other forms of research a bad name (LeCompte, 2009:42-3; see also Borko, Whitcomb, & Byrnes, 2008:1024-1029, and Craig, 2009:64). On the other hand, a recent debate in British circles warns of a counter-trend, in the form of a new attempt to impose methodological orthodoxy on educational research, one that is empiricist in character and privileges quantitative methods (Hodkinson, 2004).

Nevertheless, this shift away from functionalism and behaviourism and in the direction of interpretivism, critical theory and ultimately constructivism, suggests that, internationally as in South Africa, the "post-modern turn" is still very much in evidence in teacher education research (Craig, 2009:63). In addition, South African research in certain ways may be at the forefront of the growing international trend to look "beyond the classroom and schoolyard" (LeCompte, 2009:47) to understand why schools still fail learners, with the international literature finding some answers in broader socio-economic inequalities, funding limitations, the way more costs are being passed on to parents and individual learners, and in the de-professionalisation of teachers (LeCompte, 2009:47-48). The international literature, however, also offers indications of embryonic and potential future themes, some but not all of which are already being addressed in South Africa. Those themes which are being addressed include a focus on rendering classroom learning more effective, ensuring that educational development is sustainable, and examining new kinds of literacies, including those induced by new information and communication technologies (ICTs); those which do not yet stand out prominently in South Africa include an emphasis on new kinds of incentives for teachers and on more "high stakes" testing of learners (LeCompte, 2009:45).

The overlaps and interconnections among the seven themes in teacher education research in South Africa are a lesson in themselves. Teacher education research is the fifth largest disciplinary area in the field, but consists mostly of small scale, classroom-based studies. If these diverse, yet related studies could be brought into closer and more critical interconnection, ideally under the auspices of more large scale, simultaneously qualitative and quantitative, projects, the impact of teacher education research on education policy and practice would be immeasurably magnified.

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