

TEACHERS MATTER

INTERNATIONAL EVIDENCE



INTRODUCTION

Classic reviews of education in developing countries show that teachers are critical to the quality of teaching and learning. Boissiere (2004:34) indicated that for students to benefit from textbooks, teachers had to be trained to use them appropriately. Verspoor found that empowering school communities and acknowledging the central role of teachers as agents of change was the highest priority, as ‘...quality improvement will not succeed when teachers do not have the means or skills to apply successful instructional methods’ (Verspoor 2005:349).

Until recently there has been limited evidence about how to empower school communities or enable teachers to become agents of change. Approaches to teacher development have been based largely upon beliefs rather than evidence (Wilson and Berne, 1999; Lawless and Pellegrino, 2007). There have been few large-scale or system-wide studies and often little light is shed on the processes or contexts whereby change can be achieved (Tatto, 2013:3).

Drawing primarily upon recent reviews of evidence from low-to-middle income countries (Westbrook et al., 2013; Power et al., 2014), identified common themes emerging that resonate with evidence found in wider international reviews (Avaolos, 2011; Cordingley, 2013). These are framed around the key findings of the DFID review on Pedagogy, Curriculum, Teaching Practices and Teacher Education in Developing Countries (Westbrook et al., 2013) which presents an evaluation of evidence arising from 2,000 studies, of which 500 were selected for further evaluation and around 80 were analysed in depth.

"How can teacher education (curriculum and practicum) and the school curriculum and guidance materials best support effective pedagogy? The review identified four key findings in relation to the third question: (i) teacher peer support; (ii) professional development aligned with teachers' needs, applied in context with follow-up support; (iii) support from head teachers; and (iv) alignment of forms of assessment with the curriculum." (Westbrook et al., 2013, p.3)

i. TEACHER PEER SUPPORT

The support of other teachers (peer support) is identified by the Westbrook (2013:61-62) review as a primary mechanism to help teachers to develop effective pedagogy, providing a continuation to more formal ‘follow-up support’. Peer support provides social engagement in learning and allows teachers to situate their thinking about the subject, pedagogy and practice, in the authentic context of their classrooms and schools and the relationships in that setting.

a) Peer Support includes formal and non-formal mechanisms, in and beyond school

The studies reviewed by Westbrook identify peer support operating in schools both through informal groups and more formal mechanisms such as pairs of teachers working together on a programme, in a particular school. There are also examples of peer support beyond the school, such as through formal cluster meetings. A review of evidence over ten years in Teacher Education similarly concludes: ‘The power of teacher co-learning emerges very strongly from the studies reviewed... In whatever way, the lesson learned is that teachers naturally talk to each other, and that such a talk can take on an educational purpose’ (Avaolos, 2011:17-18).

b) Peer support focusses on practice in context

Peer support often emerged from interventions where there was specific training that introduced new pedagogic practices (Westbrook 2013:62). Cordingley (2013:5) identifies peer-support as... “omnipresent in the studies... it is recognised as making an important contribution to embedding new practices... in day-to-day practice and providing practical and emotional support through shared risk-taking”. Avaolos (2011:18) notes the importance of teachers moving from co-learning through talk, to co-learning through observation and feedback, as illustrated by Japanese lesson study. In this way, peer-support may provide further opportunity for ‘lesson modelling’ and ‘learning by looking’, (identified as important modes of professional learning by Westbrook and Cordingley, respectively), as well as for constructive feedback. Several of the studies reviewed by Avaolos (2011:12-13) emphasise the importance of such workplace learning - professional development that takes place formally or informally in schools, not directly assisted by outside facilitators.

c) Peer support allows for sharing of resources and practices and co-construction of ‘practical theories’.

Westbrook (2013:62) identifies several studies where peer teachers share teaching and learning resources, lesson plans and assessment practices together, and some where teachers shared and solved problems together. Cordingley (2013:5) notes that benefits for students are only realised when teachers’ conversations move from analysing current practices to ‘the process of determining with a partner how to tackle a new approach and coming together regularly to offer... moral support... focussing on why things do and don’t work in different contexts, to develop an underpinning rationale or practical theory alongside practice’.



ii. PROFESSIONAL DEVELOPMENT ALIGNED WITH TEACHERS' NEEDS, APPLIED IN CONTEXT WITH FOLLOW-UP SUPPORT

a) Professional Development provides support over a period of time

'Follow-up support' covers both observations of practice in schools and regular teacher meetings facilitated by a mentor, to support discussion of practice; such follow-up typically occurs at monthly or six-weekly intervals and is cited in several studies as the 'central tool' for altering teacher practice (Westbrook et al., 2013:60-61). The need for on-going support over a period of time is also identified as a key finding in the BERA (British Education Research Association) review, highlighting the need for "sustained collaboration with professional colleagues, including... specialist expertise and structured peer support" (Cordingley, 2013, p. 1) and is echoed in the concluding reflections of Avasolos (2011:17): "...it was clear from the successful experiences narrated, that prolonged interventions are more effective than shorter ones..."

b) Professional Development emphasises practice, applied in the context of classrooms and schools

Several studies show that Initial Teacher Education (ITE) curricula are often over-loaded, outdated, behaviourist in approach and focussed upon higher level content knowledge, with little attention to pedagogic practices relevant for the classroom realities teachers face in schools. It is unsurprising that the graduates of such programmes '...taught in transmission orientated ways, having neither seen nor experienced other ways of teaching' (Westbrook 2013:61). Therefore teachers need to be equipped with appropriate pedagogic content knowledge and skills, most appropriately developed in the context of their classrooms and schools. Avasolos (2011:12-13) identifies several studies that explicitly situate teacher professional learning in the context of their school and classroom practices, through workplace learning and reflective practice. Cordingley (2013:5) identifies studies where enquiry based learning, acts as a mechanism for teachers to identify what works, for whom and in which contexts.

c) Professional Development models lessons and learning

Teachers and teacher educators alike have often never experienced active and participatory approaches to teaching and learning. Teachers need to be able to see how such teaching and learning works in practice.

"If teachers have not seen or experienced a different way of teaching, they cannot be expected to implement it themselves, alone, in their classroom" (Westbrook et al., 2013:60). Therefore, teachers need professional development programmes to model active, participatory, social learning episodes - both through enabling teachers to experience such episodes directly as professional learners in the programme, and through showing teachers what such

teaching and learning looks like, in the contexts of their classrooms and schools.

Westbrook (2013:53-55) identifies several studies where teacher educators visited schools and modelled promoted practices directly in the classrooms. Cordingley (2013:6) identifies 'Learning from Looking' as one of the common characteristics of effective CPD (Continuous Professional Development), with reviews pointing towards the importance of opportunities to observe and consider teaching and learning exchanges in order to visualise what new approaches will look like in practice, often citing Bandura (1977): "a general principle of behaviour change theory is that acquisition of complex competencies depends on opportunities for observational learning". Teacher manuals, scripted lesson plans and case studies may also provide an alternative mode of modelling teaching and learning, with several studies citing these as supporting the translation of theoretical knowledge into classroom practice (Westbrook et al:60).

Cordingley (2013:2-8) draws attention to the importance of one further aspect of modelling from the reviews: leaders of professional development (e.g. teacher educators) modelling learning for teachers, and teachers modelling learning for students.

d) Professional Development reframes traditional teacher and teacher-educator roles and relationships

Teacher educators can make a considerable difference to the quality and outcome of professional development programmes, teaching and modelling promoted strategies, or with limited experience or understanding, falling back on familiar didactic practices. Several studies reported "...teacher educators, themselves strangers to more interactive practices, used expository methods with basic group work and advocated a prescriptive teaching sequence with little emphasis on critical and independent thinking" (Westbrook et al, 2013:61). Teacher educators may often need to be retrained and re-orientated, to understand, model and teach the promoted practices. One study showed teacher educators morale falling, as they felt their skills were undermined by the emphasis on school-based teacher education in Malawi.

Indeed, notions of sustained collaboration between teachers, peers and specialists (Cordingley, 2013) may not resonate with the prior experiences and expectations of teacher educators in low-to-middle income countries. Similarly, modelling learning may require a willingness to recognise gaps in one's knowledge and identify positive strategies for addressing these, such as learning from others. This may not sit comfortably with traditional notions of 'Master Trainers' in hierarchical settings. Yet in reviewing the last decade's research in Teacher Education, Avasolos (2011:17-18) reflects that what most '...vividly stands out is the extent to which, at least in these



publications, we have moved away from the traditional in-service teacher training (INSET) model... the power of teacher co-learning emerges very strongly... the traditional “master” role of teacher educators... is revised...”

iii. SUPPORT FROM HEAD TEACHERS

Good support from the school, head teacher and community for new methods of teaching was cited as facilitating implementation in several studies, whilst several others cited lack of support from head teachers and the school community as barriers to implementation. If parents, school management committee members and the wider community do not understand or support changes that teachers are attempting to introduce, at best, teachers may miss out on a potential source of support and encouragement; at worst, teachers may encounter active resistance and discouragement (Westbrook et al, 2013:62).

Whilst not explicitly referring to the role of head teachers, Avaolos (2011:12-16) deals exhaustively with issues of school-culture and how these can impact upon workplace learning for teacher development, noting that ‘traditions, administrative arrangements and strength of purpose or mission of a school can affect how teachers perceive their work and how they interact professionally amongst themselves...’ concluding that ‘...the most productive conditions for informal workplace learning is a teacher culture that encourages and values collaborative learning’. Clearly, head teachers, school management committees and the school community can have a significant influence in promoting or inhibiting such conditions.

iv. ALIGNMENT OF FORMS OF ASSESSMENT WITH THE CURRICULUM

Westbrook et al (2013:62-63) found few studies explicitly referred to curriculum and assessment practices. Where there was alignment between curriculum and continuous assessment, this was seen to improve learning outcomes in Ghana, whereas in other settings, high-stakes examinations often compelled teachers to cover the curriculum and so use more teacher directed methods to do so, even when the policy intent of the curriculum was to promote learner-centred pedagogies. Where CPD programmes neglected curriculum demands, teachers were less likely to use the promoted pedagogies. Ideally therefore, national student assessment practices should align with the policy intent of the curriculum, and teacher development programmes should meet teachers needs to teach and assess effectively in relation to both.

v. INNOVATIVE USE OF MOBILE LEARNING AND DIGITAL RESOURCES

Although not one of the four key findings, the Westbrook review reports several studies showing that the innovative use of ICTs, in particular mobile technologies and digital media resources, can be a significant contributor to professional development and classroom practice:

“The shift towards school-based teacher development sees innovative uses of ICT as particularly appropriate for rural areas, exemplified by the use of open educational resources, for example, from Teacher Education in Sub-Saharan Africa (TESSA), where teachers access self-study units adapted to the local context at school level, or in the Bridge IT projects in Latin America, where teachers use smartphones with wireless internet connectivity and data projectors to download and screen educational videos to support student learning or where mobile phones and MP3s are used as curriculum delivery platforms” (Westbrook et al, 2013:30).

“Leach’s 2004 intervention study in Egypt and South Africa developed the use of handheld computers and pocket cameras... Specially devised professional development programmes enabled teachers to integrate a range of ICT-enhanced activities into their teaching of literacy, numeracy and science, supported by school visits and a range of multimedia resources. A total of 74% of teachers reported that their use of ICT facilitated collaborative ways of working, 54% that they had better ways to present materials and 31% that ICT enabled independent learning.” (Westbrook et al, 2013:46).

Similarly, several articles reviewed by Avaolos (2011:11) reported innovative uses of technology to support professional development, including online forums, the use of video case studies of classroom practice in online discussions and the use of classroom video materials for teaching and learning. In the conclusion, Avaolos (2011:17) reflects ‘...that combinations of tools [digital technologies] for learning and reflective experiences serve the purpose [of teacher professional development] in a better way’.

The DFID topic guide on Educational Technology (Power et al, 2014) reviewed almost 80 recent studies from low-to-middle income countries, identifying several examples with evidence of positive impacts on classroom practice or learning outcomes. However, positive outcomes were always in the context of programmes led by a curriculum and pedagogic (rather than ICT) imperative (for example, phonics based early literacy, communicative English language teaching) and supported by Teacher Development programmes, usually at least partially aligned with the key findings discussed previously. Most positive impacts were associated with Interactive Radio Instruction, Mobile Devices used by teachers, or eReaders / Tablets used by students; all positive impacts were associated with appropriate digital materials for classroom use and supporting teacher professional development resources.

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"it was clear from the successful experiences narrated, that prolonged interventions are more effective than shorter ones, and that combinations of tools for learning and reflective experiences serve the purpose in a better way." (Avaolos, 2011, p. 17)
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- (Cordingley, 2013, p. 5)
"in short, the combination of interactive contributions to effective cpdl highlighted by the reviews involves teachers in:... * giving and receiving structured peer support using collaboration, especially reciprocal risk-taking and professional dialogue, as core learning strategies;* sustained, enquiry-oriented learning over (usually) two terms or more supported by use of tools and protocols... * learning to learn from looking through exploration of evidence about pupil outcomes and from observing teaching and learning exchanges especially those involving experiments with new approaches;* focusing on why things do and don't work in different contexts to develop an underpinning rationale or practical theory alongside practice;" (Cordingley, 2013, p. 5)
"peer support is also omnipresent in the studies included within the research analysed here. it is recognised as making an important contribution to embedding new practices (including practices from research) introduced by others in day-to-day practice and providing practical and emotional support through shared risk-taking." (Cordingley, 2013, p. 5)
- (Cordingley, 2013, p. 1)
"sustained collaboration with professional colleagues, including both making use of specialist expertise and structured peer support for embedding specialist contributions;" (Cordingley, 2013, p. 1)
- Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J. and Salvi, F. (2013), *Pedagogy, curriculum, teaching practices and teacher education in developing countries: final report*., available at: <https://eppi.ioe.ac.uk/cms/LinkClick.aspx?fileticket=E93CRI7ONwA%3D&tabid=3433>.
- (Westbrook et al., 2013, p. 3)
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- (Westbrook et al., 2013, p. 60)
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- (Westbrook et al., 2013, p. 61)
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Citations. Quotes & Annotations

- Avaolos, B. (2011), 'Teacher Professional Development in Teaching and Teacher Education over ten years', No. 27, p. 10.
- (Avaolos, 2011, pp. 17 – 18)
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