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A vision of successful schooling: Ghanaian teachers' understandings of learning, teaching and assessment

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This article reports on an empirical study exploring Ghanaian teachers' understandings of teaching, learning and assessment. It argues that received views of poorly trained teachers with untheorized and badly reasoned professional practices may mask a more complex situation. In defining learning, teachers in the study reproduced models consistent with transmission or behaviouristic theories. However, when asked to describe their most successful experiences, teachers' understandings were more in accord with social constructivism. Also, their aspiration towards interactive models of classroom assessment was circumscribed by the normal context of assessment discourse and by bureaucratic requirements. The article concludes that, given the right circumstances, teachers can reflect on their experiences and produce a more sophisticated account of teaching and learning. It suggests ways in which in-service work might make use of these insights, recommending further attention to the discursive frames of teachers' professional reflections within dialogue and active engagement through school-based coaching.

Introduction

Discourse analysis of classroom teaching and learning in sub-Saharan Africa generally shows the African teacher as an authoritarian classroom figurehead who expects students to listen and memorize correct answers or procedures rather than construct knowledge themselves. For example, in an analysis of classroom interaction in Kenya Pontefract and Hardman (2005) showed how primary teachers are strongly wedded to a transmission model, where pupils learn by rote and repeat answers provided by the teacher or other pupils. Kanu (1996) studied classroom practices of social studies teachers in Sierra Leone and reached a similar conclusion. Teachers in this context

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engaged in a monologue, explaining factual information from the prescribed textbook and tested students to ensure they could recall information contained in the reading text. Tabulawa (1997) tells the story of primary teachers in Botswana who were basically concerned with imparting knowledge to students who themselves perceived learning as acquiring and assimilating knowledge. Such accounts of classroom discourse have come to typify the African primary classroom.

Research exploring African teachers' classroom roles and competencies in practice has also suggested that such prescriptive instructional behaviour is so deeply embedded in the professional culture that progressive teaching methods, usually defined in terms of 'child-centred' approaches, even if they are initially embraced, disappear with time and are replaced by traditional prescriptive instructional behaviour. Nevertheless, every year vast amounts of resources are expended in school improvement initiatives to make African classrooms more interactive and democratic.

What most research on African primary teachers' classroom practice seems to show, but which receives little commentary, is a form of whole-class teaching apparently based on the belief that *every* child in the classroom can achieve at the same level and that whole-group lessons led by the teacher are the way to achieve this outcome. This is often perceived in the western literature as unproductive, yet many Asian countries such as Japan and China practise a form of whole-class teaching which studies show is very effective in improving student learning and achievement (Stigler & Stevenson, 1993; Stevenson, 1995). However, unlike the African context, in the typical whole-class teaching in these Asian contexts 'lessons are oriented towards problem-solving rather than rote mastery of facts and procedures...and the role assumed by the teacher is that of knowledgeable guide, rather than that of prime dispenser of information and arbiter of what is correct' (Stigler & Stevenson, 1993, p. 383). What we might be seeing in many African primary classrooms is therefore a perverse form of whole-class teaching exacerbated by the lack of instructional resources, restrictive examination practices, overloaded curricula and a system of teacher training lacking in opportunities for continuous professional development in which experienced and novice teachers engage in critical dialogue and reflection on their practice. One important thing, though, in all of this is: how school improvement initiatives conceptualize 'student-centred' approaches often relates to how they interpret and judge the significance of classroom practice in the African setting. As usually happens, where emphasis is placed almost exclusively on developing problem-solving skills in the context of small group and project work contexts, and individualized instruction is prized over whole-class instruction, then we may be restricting the possibilities of creating productive learning environments in African classrooms.

Hopkins (2002) presents two perspectives on student-centred approaches which, in our opinion, offer hope for conceptualizing a vision of successful schooling in African contexts similar to the whole-class teaching identified in some Asian classrooms. The first is the view of progressive instruction as seeking to promote a caring learning environment where learners feel accepted and secure. The second more technical view sees the teacher as creating contexts of learning which encourage the whole class to engage in the 'active construction of meaning' (Hopkins, 2002, p. 35).

To achieve any of these, we must start with the premise that whole-class teaching is a positive structure for promoting meaningful learning, especially within the African context, and explore how these teachers articulate a pedagogy of successful teaching, learning and assessment reflecting their professional and classroom realities, and how their conceptions of 'effective teaching and learning outcomes' are broadly defined and endowed with significance through critical reflections on practice. This also resonates with Croft's (2001) study of early years classrooms in Malawi.

Thus, this article is an attempt to interrogate and give voice to how some primary teachers in Ghanaian schools conceptualize and attribute their successes in promoting meaningful contexts of learning. Also, we believe that the methodology adopted for investigating this issue, workshop settings in which novice and more experienced teachers engage in critical dialogue, answers Pontefract and Hardman's (2005) call for teacher development strategies that can help 'teachers to explore their own beliefs and ... reflect on their classroom practices' (p. 103). We would add, though, from this study's experience, that this has to be through a collective process of negotiation, meaning making and consensus building using images of successful classroom actions as the focus for reflective activity. Furthermore, our approach has enabled us to subject to critical scrutiny notions of educational theory and practice that mainly reflect rich-world perspectives, thus avoiding uncritical transfer of inappropriate models (Rodwell, 1998).

Study context

On gaining independence in 1957 Ghana was seen as possessing a viable educational system and in the years immediately following Independence, successive governments sought to use education as a vehicle to implement their development policies. Schools and colleges were almost entirely in the public sector, although many retained the names of the religious foundations that had established them. The resultant educational system was widely considered as the best in Africa (World Bank, 1993; UNESCO, 1997).

This changed in the late 1970s, when poor governance coinciding with unfavourable trading conditions led to a near collapse of the Ghanaian economy. The proportion of gross domestic product devoted to education declined from 6.4% in 1976 to about 1.0% in 1983 and 1.7% in 1985 (World Bank, 1996). Textbooks and stationery became scarce, the state of buildings, furniture and equipment declined and the data or statistics needed for planning were no longer collected (Yeboah, 1990). Worse still, thousands of qualified teachers fled the poor conditions at home, mostly to Nigeria, leaving untrained teachers filling teaching posts. Meanwhile, population growth led first to a rise in class sizes and then to a steady fall in gross enrolment ratios—from 80 in 1980 to 70 in 1987 (Colclough with Lewin, 1993). These factors all contributed to a general demoralization within the education system.

In 1987 when political stability returned, the reform and restructuring of the school system became part of a national economic recovery plan. This process was validated and accelerated by the global agenda of 'Education for All' following the Jomtien

Conference in 1990. From 1986–2002, the World Bank provided credit totalling \$260 million to the Ghanaian government to support its reform of the basic education sector. Credits were allocated to improving pedagogic efficiency, budgetary procedures and restructuring of the school system (World Bank, 2004).

The new education structure provided for six years of primary, three years of junior secondary, three years of senior secondary and four+ years of tertiary education. In 1995, a further educational reform programme was initiated called fCUBE—derived from its aim of Free Compulsory and Universal Basic Education by the year 2005. Nine years of basic education were to be free and compulsory for every Ghanaian child, though this aspiration still remains far from being attained. New curricula were introduced at each level incorporating a reduction in the number of subjects studied and, more recently, an increase in the length of the school day from four to five hours. Later, School Management Committees were established and Parent–Teacher Associations given new impetus, both developments intended to enhance communities’ sense of ownership. Also, workshops to update teachers’ teaching skills, head teachers’ managerial skills and the supervisory competence of circuit officers were held at regional, district and circuit levels. By 1996, 40 non-governmental organizations were providing services such as school renovation and construction, provision of educational materials, in-service training of teachers and PTA capacity-building in the education sector. Activities were sustained largely through Ghana’s status as a ‘good example’ in the eyes of both bilateral and multilateral donors, following its enthusiastic embrace of Structural Adjustment. Between 1983 and 1998, reforms in Ghana were executed by Implementation Committees of individuals drawn from organizations in a personal capacity. However, interplay between policy decision making and implementation was low during this crucial period and most decisions were therefore donor-driven.

The jury is still out on what kind of impact this massive investment in the education sector has made. Studies conducted in the late 1990s suggest that progress towards achieving the goals has been slow, if not wholly unsatisfactory (e.g. Fobih *et al.*, 1999; Ministry of Education/Primary Education Programme, 1999). Criticisms of Ghanaian education have not been confined to official reports and academic studies. The press, and indeed the public at large, have joined in, and a ‘discourse of derision’ (Ball, 1990) has grown up, targeted above all at the most conspicuous members of the school system, the teachers. Nevertheless, an impact evaluation of World Bank support to basic education reform in Ghana conducted by its Operations Evaluation Department suggested that significant improvements had been achieved (World Bank, 2004). The study concluded that, contrary to popular belief, there had been notable improvements compared to the situation 15 years ago. Significant improvements in textbook supply had contributed positively to learning outcomes. Primary schools with at least one English textbook per pupil had risen from 21% in 1988 to 72%, and in junior secondary school, one maths textbook per pupil from 13% to 71%. The analysis claimed that improvements in attainment and achievement levels could be attributed to material, physical and school-level inputs. The report, however, noted other areas where little had changed. For example, decentralized

education policy, meant to increase community participation in school management, had not produced improvements in educational outcomes across the whole country; but had created disparities in resource availability, favouring urban and relatively richer communities and disadvantaging poorer communities. Three questions testing teachers' familiarity with improved teaching methods, defined in terms of student-centred learning and the extent to which teachers are able to illustrate applications in simulated situations, found that most knew about the approach, but few could provide concrete descriptions illustrating its application (World Bank, 2004).

A disadvantage of such a large-scale survey of teachers' understanding of practice is the limited information it provides about how they actually reconstructed their classroom practices, taking into account the internal and external conditions. Teachers may be contributing positively to educational improvements, but in ways not usually recognized as 'good practice'. Others may be adopting unsatisfactory approaches that could be attributed to weaknesses in professional support (e.g. lack of continuous professional development opportunities). Unless we can interrogate teachers' understanding of instructional practices from instances within their own context, and gain their viewpoint as to how these accomplish desirable learning, we may only draw superficial conclusions about their competence and understand little about how to improve the less effective teachers. Gaining a deeper understanding of teachers' pedagogical conceptions and how these are shaped requires analysis based on reflections of specific encounters with pupils in teaching and learning scenarios.

Conceptual framework

The importance of context in competent social and professional practice has been increasingly recognized in recent years (see, for example, Dreyfus & Dreyfus, 1986; Lave & Wenger, 1991; Eraut, 1994; Flyvbjerg, 2001). Our premise is that teaching is an intense and complex activity (Danielson, 1996; Harris, 1998; Darling-Hammond *et al.*, 1999), where teachers attempt to achieve desirable outcomes within specific contexts. Thus, abstraction and generalization of teacher thinking are unhelpful, especially if the abstraction is based on western notions of professional practice and intended to be applied to southern contexts. Since Shavelson and Dempsey-Atwood's (1976) review concluded that, in educational contexts, 'generalizability may be extremely limited' (p. 610), 30 years of school effectiveness research have failed to provide a persuasive counter-argument. Indeed, Darling-Hammond *et al.* (1999) suggest that what constitutes effective teaching may vary due to differences in students' socio-economic and psychological characteristics, grade levels and subject areas. Thus, generalizing any particular teacher practice overshadows the importance of contextual variability in teaching (Feiman-Nemser & Remillard, 1996).

Shulman (1987) claims that teachers who achieve their instructional goals intelligently adapt their subject knowledge 'to the variations and ability and background presented by the students' (p. 15). An understanding of the thinking that informs the strategies teachers adopt would therefore require researching teachers' pedagogical reasoning. According to Shulman (1987), this is linked to the practical aspects of

teaching through teachers' comprehension of purposes and subject matter structures and their ability to transform these through preparation, representation, selection and adaptation. Unlike novices, whose actions tend to be rule-based, expert practitioners respond more to contextual features and are able to adopt strategies that promote student learning (Dreyfus & Dreyfus, 1986). We might thus distinguish between a novice's conception of teaching representing the application of theory-based teaching knowledge, and a more complex notion of teaching exhibited by more experienced teachers relating to their actions and (often tacit) reasoning in specific situations. How well teachers deal with external and internal contextual factors, like student characteristics, mediates the effect of their actions (see Cheng & Tsui, 1998). This view assumes that teachers, irrespective of their level of experience and competence, make what may seem to them rational choices and decisions that reflect their attempt to promote student learning, with some more successful than others in achieving their desired pedagogical goals because of how they understand and operationalize teaching. Thus, it is in the domain of conceptual understanding, professional reasoning and problem solving that the *process* of teaching is crucially engaged.

The 'dynamic quality' of teachers is then a product of how teachers might conceptualize teaching, learning and assessment in real educational contexts. This appears more promising than generalized, static descriptions of teacher quality captured usually through standardized surveys, where the situated context that gives rise to teaching attributes is relegated to the background. Teaching cultures are contextually bounded and complex, so understanding and producing insight into this culture require approaches that explore, in depth, teachers' *reasoning* about teaching, learning and assessment based on specific educational contexts and accounts of experience within them.

This article reports an attempt to study how a group of teachers, experiencing and coping with a school improvement initiative, 'Whole School Development' (WSD), responded to the changes. WSD, a large-scale programme designed and managed by the Ghana Ministry of Education and funded by the UK Department for International Development (DFID), sought to counter the paralysis characterizing local decision making by devolving control of education to districts, schools and communities, through a variety of interventions. Our analysis of attitudes towards the practices of learning, teaching and assessment is consonant with previous accounts, yet we suggest that such accounts often oversimplify a more complex situation. The findings of this study, we believe, raise the need for research in other developing countries to explore how novice and experienced teachers engage in reflective dialogues about their classroom practice.

Methods

We wanted to understand better how some Ghanaian teachers felt and thought about their respective classroom roles and their pedagogical thinking with respect to policies intended to improve education practice. The research approach used in this study was to investigate how they understood teaching, learning and assessment issues from

specific classroom incidents that they identified as illustrating good practice. What these teachers said may not necessarily be consistent or correspond with their everyday classroom practice. That would require very lengthy and detailed research based on extensive classroom observations and exploration with teachers of reasons behind their actions. Nevertheless, our intention was not necessarily to use interviews and critical dialogue to gather information about classroom events. Our epistemological stance is similar to that espoused by Atkinson *et al.* (2003), who argue that ‘memory and experience are social actions in themselves [and] are both enacted. What is “memorable” is a function of the cultural categories that shape what is thinkable and what is not, what is counted as appropriate, what is valued, what is noteworthy and so on’ (p. 107). In effect, *how* our teachers tried to make sense of memorable classroom events was for us a window to understanding how they might try to enact successful classroom practice. Whether they actually did what they said was of secondary interest.

The data derive from a small-scale research and development project conducted by researchers from Ghana and the UK¹ aiming to investigate approaches to primary school management and to work collaboratively with school staff to produce models of good practice.

About 50 teachers and head teachers from eight public (state-run) primary schools in the Cape Coast district took part in the study. This was not a representative sample of Ghanaian schools as a whole and the intention was not to hold up findings beyond the specific research subjects, but to offer rich insights into aspects of professional culture that might be resistant to or influenced by the education policy context.

Substantive data were produced during a two-day workshop in which teachers engaged in a number of activities to explore, reflect on and discuss their attitudes and understandings of teaching, learning and assessment. However, discussion, reflection and analysis of the data were also informed by other insights and understandings gained from our work in schools in Ghana. For example, the kind of questions that were asked and the way in which these were framed were influenced by insider perspective of Ghanaian teachers’ professional culture.

Three roughly equal groups, chosen on the basis of the current class they taught,² were each facilitated by one of the researchers. The data-set consisted of teachers’ responses to individual tasks, posters produced by smaller subgroups of three or four in which they largely worked, researchers’ field notes and tape recordings of conversations with individual teachers and of group discussions. Additional interviews and observations were conducted in schools not represented at the workshop to inform planning. Elements of the data-set were collated and analysed by individual researchers before cross-checking and further collaborative analysis by the team as a whole.

Data presentation and discussion

Teachers’ understanding of learning. A persistent criticism of curricula and pedagogy in sub-Saharan Africa is that they are frequently predicated on the ‘banking’ notion of education, a very crude and mechanistic version of behaviourism. Ghana is no

exception and descriptions of ‘unattractive modes of teaching such as rote learning’ (UNESCO, 1997) are prevalent in the literature (see for example Overseas Development Agency/Ghana Education Service, 1994; United States Agency for International Development, 1996), whereas field descriptions of more interactive methods taking into account pupils’ interests, experience and current understanding are rare. This position is sustained by initial teacher training premised on simplistic behaviourist assumptions of stimulus–response and compounded by factors such as the large number of unqualified teachers, accounting for some 31% of the primary teaching force (Akyeampong, 2003). In the absence of other input, models of teaching and learning therefore derive from personal experience as pupils and what they learn from colleagues, who receive little supervision and are very infrequently exposed to new ideas (Stuart, 1999). All this is reinforced by interaction patterns which emphasize extreme respect for authority and thus do not encourage teacher–pupil interaction or pupils’ active engagement in a way that would promote effective learning (Pryor & Akwesi, 1998; Fobih *et al.*, 1999). Taken together with the dismal results of large-sample national testing (Ministry of Education/Primary Education Programme, 1998), it is not difficult to see how the received picture of inadequate teachers in Ghanaian state primary schools is arrived at.

However, our interest was to explore teachers’ conceptualization of learning and educational purposes and whether they might in some way give an indication about how some teachers’ classroom practices might be contributing to improving trends in student performance, as noted by the World Bank study. We therefore asked the teachers to write in their own words what they understood learning to be. They were then asked to visualize in detail a lesson in their own classrooms that they had been most pleased with and when really good learning had taken place. Next, we presented them with a collection of 15 statements which completed the sentence ‘When people learn...’. They then ranked the statements according to those they found most appropriate and accurate. Subsequently, they were asked to join with others in subgroups to produce a consensual ranking. Finally, the whole group came together to discuss the rankings and the issues arising.

The results of the first exercise were unsurprising. Most definitions were informal and spontaneous statements (e.g. ‘learning is the act of acquiring what has been taught and be able to write answers to some questions asked’) though some trained teachers reiterated what they had encountered at college (e.g. ‘learning is permanent change in behaviour’). When analysed, all but one ($n = 43$) fitted the category of behaviourist or banking approaches, emphasizing knowledge acquisition. The exception was the most detailed response, which had elements of a behavioural view and also parts showing an espousal of some constructivist thinking:

Learning is an activity which involve identification of problem, discussing with others about that problem ... learning is the act of discussing and practising ideas and decisions with other people.

However, surprises came when teachers were asked to rank the prepared statements. Results are shown in Table 1.⁴

Table 1. Teachers' ratings of statements about learning

Statement—When people learn...	Individual Rating	Group Rating
They agree or disagree with other people	Low/Medium	Medium/High
They ask questions	High	High
They discuss things with other people	High	High/Medium
They do things more quickly	Low	Low
They find answers to questions	High	High
They get help to do things that they would not be able to do by themselves	High	High
They give their own opinion	High/Medium	Medium
They know more	Low/Medium	Low/Medium
They make decisions about what is important and what is not	High	High
They make sense of the things they do	Medium	Medium
They memorize facts	Medium/Low	Low
They make sense of the things they know	Medium	Medium
They practise until perfect	Low	Medium/Low
They repeat the facts when asked	Low	Low
They try out new ideas	Medium/Low	Medium/Low

The clear pattern emerging from this exercise is most easily seen in Table 2.

In direct contrast to what they had written before, teachers rated statements about learning highly which are consistent with a social constructivist orientation to learning. Indeed, apart from the third statement, considered neutral, these were all

Table 2. Statements given highest and lowest rating

Statements given highest rating	Individual Rating	Group Rating
They ask questions	High	High
They discuss things with other people	High	High/Medium
They find answers to questions	High	High
They get help to do things that they would not be able to do by themselves	High	High
They make decisions about what is important and what is not	High	High
Statements given lowest rating	Individual Rating	Group Rating
They know more	Low/Medium	Low/Medium
They do things more quickly	Low	Low
They practise until perfect	Low	Medium/Low
They repeat the facts when asked	Low	Low
They memorize facts	Medium/Low	Low

originally designed to exemplify that approach. Equally clearly, all the behaviourist statements were selected for a low rating. This analysis conceals a small number of participants who consistently chose less popular options. However, for the majority this simple activity seems to have had an epiphanic effect: they appeared to have completely changed their theoretical position. Appearances are misleading though, for in repeating the first task of writing their own definition of learning, only four of the teachers ($n = 46$) showed any substantial deviation from their original statement!

To account for this, it is necessary to look at the context in which opinions were solicited. One explanation runs as follows. The 'cold' request for a definition elicited an 'official' response. Research in West Africa, as elsewhere, often shows that respondents provide the answer they think the questioner is looking for (Akyeampong, 1997). When presented with statements about learning, more of which were 'constructivist' than otherwise, teachers chose to reflect this orientation. Returning to the original question, however, they recalled the task and their response to it, and reproduced what they had said before. Thus, when added to the evidence about achievement and pedagogy in Ghanaian classrooms, one might surmise that the 'real' opinion of the teachers was the behavioural one and the other was just an interlude, soon to be forgotten.

This interpretation is very plausible but not wholly satisfactory. It presupposes that teachers have no real opinions and re-presents the well-worn deficit model. Moreover, it is subverted by the quality of the argumentation that took place in the workshop, where positions were hotly debated and consensus negotiated. A more convincing explanation accrues from a closer look at the sorting activity. One teacher commented at the time, 'we are here but we are in the classroom'. They were thus working from actual data, their own recollections of what happened in their classrooms under ideal circumstances. In contrast, the written task had no specific connection with their professional life.

Neither account of learning could be held to represent unequivocally these teachers' espoused theory or theory-in-action, but the findings question the simplistic scenario of Ghanaian teachers as minimally competent and wedded only to boring transmission models of teaching. In visualizing real contexts where children actually learned, as opposed to participating in the rituals of schooling, teachers articulated a consistent understanding of how learning is built up through social interaction and the interrogation of ideas. Constructivist learning was therefore recognizable to the teachers; it had just not received any validation. Thus, although such incidents may not be frequent, their existence provides a resource which might be built upon. Recalling the visualized examples they were working from might form the basis for future work.

This correlates well with another part of our data-set. Participants were asked to describe 'a good pupil'. Observation of the initial discussion suggested what might be termed moral qualities were salient. One of four subgroups in the Class 1&2 group excluded academic qualities totally. This subgroup, when asked about the academic, resisted the notion that good behaviour and good performance could be separated. They conceded that some children were 'not capable of getting good marks' but said

Table 3. The good pupil

 Response to the question 'What is an academically good pupil like?'

*Does all class exercises**Attentive**Answers questions**Gets good marks**Assesses their own faults**Learns by him/herself**Helps others with work**Always wants to be a leader**Practises new ideas**Discusses with other pupils*

that without displaying a good character they would be unlikely to succeed. In another subgroup one teacher said 'being well behaved and academic success are linked'. Another suggested that 'the child who is badly behaved but still does well—that's one out of a hundred or two hundred'. Two subgroups condensed what might be deemed academic criteria into just one quality: 'excels [*sic*] in academic work' and 'academically good'. The only subgroup to consider academic issues spontaneously was the group composed entirely of head teachers. Their list was by far the best balanced with the overtly moral or social offset against the academic and some factors that might be deemed to be both (e.g. 'discusses with others').

In another subgroup having problems with academic qualities, we decided to 'scaffold' them by writing 'What is an academically good pupil like?' on a poster and scribing their responses (reproduced in Figure 1). They began once more with fairly similar features to the other groups, but more sophisticated attributes rapidly emerged. Features such as self-evaluation, discussion with peers and making space to practise new skills have been found to correlate well with academic success by a number of researchers (e.g. notions of 'deep learning'—Marton, 1988; Entwistle, 1990).

As in the exercise defining learning, the initial response confirmed the stereotype of the unsophisticated Ghanaian teacher, whereas providing a more specific framework and a chance for greater reflection turned this on its head. The data on conceptualization of learning suggest the reasonableness of the idea that some Ghanaian teachers, like those elsewhere, are more or less eclectic, moving from one form of practice to another. However, until they are asked to reflect on the position, they remain unaware of the contradiction (cf. Pollard *et al.*, 1994; Torrance & Pryor, 1998).

What is a good teacher? More data accrued from a series of discussions in small subgroups where teachers were asked to create a portrait of a 'good teacher' and display their conclusions on a poster. Each researcher analysed one group's lists of

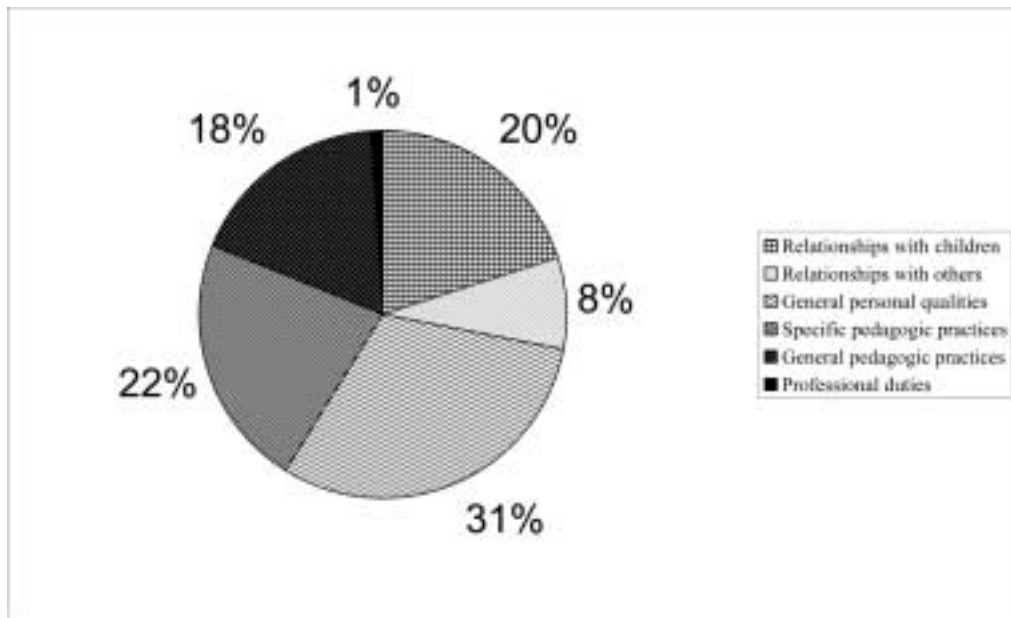


Figure 1. Attributes of a good teacher

qualities and gave them a provisional coding. The data were shared, and codings compared and integrated.

The results of the analysis are shown in the chart (Figure 1). The largest category is 'general personal qualities'. The qualities listed overlapped with those suggested elsewhere in the data as being attributes of good pupils ('is devoted ... resourceful ... creative ... patient ... punctual'). Observation notes suggest that for most of them these attributes were considered innate personality traits: they believed a good teacher is 'born and not made'. Indeed a similar idea was advanced by one young untrained teacher to account for her being, as she thought, more effective than some of her trained and experienced colleagues (cf. Akyeampong & Stephens, 1999). A belief that a limited number of people have the requisite moral qualities to be trainable has many implications for teachers' response to in-service training. Such teachers are unlikely to see it as a means to make fundamental improvements in their capacity to teach, since knowledge of professional practices is only a minor component of competence. At best then, it might consist of tips to make life easier, rather than leading to any substantial improvement in capability, especially for weaker teachers.

Teachers felt this innate trait revealed itself through the way in which colleagues were 'committed' and 'devoted' to children's learning and development. Such teachers took special 'delight' in working with and helping children improve and excel in their learning. Thus, although they might be dissatisfied with other conditions of service such as salary, these had little effect on their commitment and performance. Teaching children was perceived as a character-moulding exercise, which would

eventually lead to good citizenship. A good teacher must, of necessity, be a certain kind of person—a ‘born’ teacher. Only subsequently might other important teacher performance qualities take on meaning and produce the desired effect of developing children’s learning. Good teachers had a ‘calling’ to teach and that, fundamentally, made a difference to how they taught. As one teacher pointed out, ‘even how a teacher presents his lessons or organizes her class will let you know whether she has that commitment and love’—good teachers acted in ways that communicated devotion.

However, this view was not universal. Others perceived that what a good teacher is depended particularly on conditions and support within the school system. All teachers had the potential to be good, provided the support to motivate improvement was there—good teachers evolved through a process of supportive supervision. Such supervision was expected to come from head teachers and circuit supervisors (district school inspectors) and had to be of the right kind—not simply criticism, but encouragement through recognition of their good practices and achievements in improving pupils’ learning. When in one discussion group teachers were pressed to say whether they possessed the attributes they had listed, the response was that the list reflected an idealized teacher. Nevertheless, they believed that they all had the *potential*, with the right conditions and support, to possess all or most of the qualities on their list. One head teacher recollected how she had noticed certain good practices of a teacher and commended her for how it was producing better achievement in her pupils. According to her, recognizing and valuing what teachers were achieving in their classrooms was a catalyst for intrinsic motivation for teachers.

This last point highlights the implications of our findings for management and motivation. If teachers believe their competence derives from innate qualities, berating their incompetence as a means of exhorting them to improve is even more pointless. Such criticism would then amount to a direct attack on their self-worth (cf. Covington, 1984; Dweck, 1989). Instead, encouragement would be the only way to help them to improve. This might be effected by following up in-service work with asking teachers to monitor their teaching and evaluate the difference their changed practices made to pupils’ learning. Tangible examples of success might then help them not only to change their praxis, but also to adopt a more positive orientation towards attributions for success and failure.

The choice of personal qualities and the view of teaching as a moral exercise were particularly apparent in the teachers of younger children, as Figure 1 demonstrates. Indeed, that is not the only difference between this group and the others. They attached much greater importance to establishing and maintaining relationships with children. For example, two subgroups chose to highlight ‘solving children’s personal problems’. By contrast, this was mentioned by none of the 3&4 and 5&6 subgroups. Indeed, apart from repeating the formula ‘friendly, fair and firm’, they were on the whole not specific about relationships with children. This possibly represents the idea of viewing the whole class as a unit for the organization of instruction with the teacher acting as the leader. The corollary that teachers of older children put a much greater emphasis on the qualities and practices that might be concerned with children’s

cognitive development, is evident both in the number of times they mentioned them and in the variety of individual attributes they identified. Most marked was the 3&4 teachers' concern with knowledge, both of subject and of other issues.

To a certain extent, these patterns are what one would expect: when a child starts school the concern of teachers is with socialization as a prerequisite for more academic considerations. However, once children move into higher classes, what they know or do not know becomes particularly important, especially if they have not learned what they are supposed to have done in the earlier classes. This appears to be a very significant issue in Ghana, where in mathematics baseline test average scores show a progressive drop from 43.9% in P1 to 8.7% in P6 (Fobih *et al.*, 1999). However, the discrepancy may be attributed mostly to the terms in which the qualities are framed. Whereas teachers of classes 1&2 spoke in general terms about being creative and innovative, those of older pupils were more specific in talking of making and using teaching materials. Similarly, 'solve pupils' personal problems' in the early years may correspond to 'has knowledge of children's background' later on.

These data suggest that early years teachers' attitudes are different and reveal a complexity which is often absent from most accounts of teacher thinking in less developed countries (cf. Croft, 2002).

Assessment. For the majority of teachers, how one found out about children's learning hinged upon the notion of 'supervision', which seemed to mean different things to different people. For some this meant overseeing children's activities, whether 'exercises' (seatwork) or 'compound duties' (cleaning and maintenance tasks), where supervision was essentially non-interventionist, unless children were off-task; it was thus a question of policing. However, others were more specific about supervision, seeing it as a more interactive process, whereby teachers went round the class, observing pupils' work and intervening as necessary. When they talked about this, it was mostly connected with problem solving. For example, one told of how she had recently noticed that a child was straining to read from the chalkboard. She moved her closer and contacted the parents so the child's eyes could be tested. Another example was about observing children working with number materials in mathematics: a teacher can see whether they need help and can then intervene. By incorporating active observation into their practice, these teachers were obviously coming to grips with formative assessment and were actually engaging in 'child-centred' instructional practice.

Less obviously process-oriented, but within the field of performance assessment, some teachers mentioned music and physical education as areas where written work was inappropriate and therefore they relied on observation.

With such examples [music and PE], it is easy to observe but for some *exercises you need to mark.⁵

The notion of construct validity or 'fitness for purpose' is thus well established in some of the teachers (Nuttall, 1987; Gipps, 1994).

Not all teachers said they were used to working in this way. Indeed, the emphasis on 'giving exercises' in the 'good teacher' activity would suggest that even those who

did were aware of colleagues who did not. Also, the mathematical activity example above shows how observation of process is often dependent on a supply of teaching and learning materials. Number material is easily improvised from stones, twigs or bottle tops, but preparation of many other materials involves hard work from the teacher, demanding three of the personal/professional qualities that teachers rated highly: resourcefulness, creativity and, not least, devotion.

Teachers said they often relied on children's facial expressions to determine how well the lesson was going and followed up by questions to confirm any suspicion of lack of understanding. This kind of informal assessment seemed to determine the way some of them managed or visualized effective classroom learning. Frequently, this was viewed as organization of learning around 'single ability' groups; again raising these teachers' understanding about the importance of small group or individualized instruction.

What seemed to matter was the use made of informal assessment information to appraise pupils' progress and understand learning needs. This has a strong bearing on the extent to which teachers might be involved in more interactive discourse with units smaller than the whole class. One head teacher said she encouraged her staff, particularly in the earlier classes, to make observations on which to base the marks that were entered on the official continuous assessment (CA) sheets that government policy requires to be kept. However, another teacher indicated that she only used marks from written exercises for official CA, which forced her to do more written work than she would otherwise do with her P1 class. When the issue was brought to the whole group there was a strong polarization of views; a minority, but nonetheless a significant number, of teachers were quite shocked at the idea of not using written work for CA. One stated that, much as she would like to, she dared not, as it was not allowed in her school. In this area local interpretation of policy is important and the influence of the head teacher crucial. Moreover, it was the younger teachers who were less sure about non-written performance assessments. This may be due to less confidence in making a 'subjective' judgement, but it may also derive from their training, or the lack of it. Once again, the situation is complex and needs further exploration.

The attitude of the teachers to official CA was not very positive. The current system requires primary teachers to record 198 numerical scores per child per year on a standard sheet (11 CA columns for six subjects in three school terms), which are then totalled and scaled down. There was some dispute amongst our groups as to what the different columns actually meant. More significantly, none had a clear idea of the rationale behind the policy. They saw CA as time-consuming and bureaucratic. Some said the marks derived were no better a reflection of children's abilities than their own knowledge based on informal, impressionistic assessment. When circuit supervisors visit schools, 'they only look at registers, lessons notes, marked work and continuous assessment records'. Thus, the expectations are onerous but merely formal. Any systematic formative assessment during teaching and learning in the classroom is neither monitored nor encouraged, so the official requirements, far from aiding more formative approaches, actually get in the way (cf. Nittko, 1995).

Our research, though based on a small sample of teachers, has uncovered two ways in which some Ghanaian teachers cope with bureaucratic instructional and assessment

practices. The first, a practice known as ‘Computation’, was revealed in interviews prior to the workshop:

all 10 columns must be filled. If the exercises or tests are not enough, you need to look at the performance of the pupils and guess the rest of the marks for each pupil. We call this computing.

This is not quite the same as just making up marks, a practice which has been noted in Ghana (see for example Pryor & Akwesi, 1998), since it is actually based on marks that have been collected in an ostensibly valid manner. Rather, when faced with the thankless task of filling the sheets with figures, ‘computing’ becomes a neat, time-saving device.

The second dubious practice is ‘dubbing’. Teachers are required to teach from lesson notes in which they show detailed plans of what they intend to do. Our teachers considered the notes useful, not so much in themselves, but because preparing them forced them to think about the lesson. However, when time and other constraints made it difficult to prepare lesson notes, some teachers resorted to recycling notes from a previous lesson or a previous year. If they were then inspected, they would be able to produce their lesson notes and avoid criticism.

Both dubbing and computing can be seen as abuses of the system and evidence of incompetence. Certainly, they give a licence for poor teachers and if one expects to find incompetence, these practices confirm the stereotype. However, if instead one works with the premise that teachers are potentially competent, but struggling to cope with difficult circumstances, these practices can be seen in a very different light—as a rational response to a burdensome and counterproductive system. Teachers are asked to conform to the letter of the law and are bureaucratically monitored to ensure that they do so. It is therefore not surprising if they do not respond in the spirit of the law, until eventually they collectively forget what that spirit was. As Pennycuick and Murphy (1988) point out, CA involves extra work for teachers; they will only willingly make the effort if they perceive it to be beneficial to themselves or their pupils.

Here our data raise important issues. Most teachers stated that CA was simply derived from conventional exercises and tests. Their completed sheets were then used to judge how well they were using assessment to promote learning. This seems quite unfair given some teachers’ accounts of their informal assessment practices. The policy as practised represents a very narrow conceptualization of formative continuous assessment and one that does not fit well either with theoretical or empirical accounts (Sadler, 1989; Torrance & Pryor, 1998; Cowie & Bell, 1999). Furthermore, it is likely to undermine teachers’ own capacity for using assessment to promote learning, as the summative drives out the formative function.

Discussion and conclusions

Our findings on teachers’ practices and attitudes towards aspects of learning, teaching and assessment are in some respects in tune with widely held views about the Ghanaian teaching force. Nevertheless, there are important differences and new insights.

The received view of Ghanaian teachers may be simplistic. These schools may not be producing the results they should and our analysis suggests that this may at least in part be due to inadequacies in teachers' conceptualizations of educational purposes. However, rather than seeing this as the fault of the teachers, it is necessary to scrutinize the structures in which they are implicated. Condemnation of bad practice should not involve dismissing teachers' potential. The nature of educational debate, where, for example, posters are produced showing a map of Ghana with the percentage of *failures* in baseline tests, has meant that teachers become demoralized rather than stung into action. Successes seem never to be highlighted.

We elicited data suggesting that, given the right circumstances, teachers can reflect on their experiences and produce a more sophisticated account of teaching and learning and how they might go about actualizing it. Their project evaluation shows they enjoyed learning from each other and reflecting on their schoolwork. Especially highly valued was the very rare opportunity to explore issues together rather than being told the answers. Generally speaking, our teachers reflected the authoritarian attitude prevalent in the Ghana Education Service, as exemplified by the letter from the district office inviting the teachers to our workshop, which curtly demanded that 'the headteachers are hereby officially informed to attend without fail and to be punctual'.

A most important finding is that one should be wary of making inferences based on surface features. The reality is that Ghanaian primary schools have to balance many conflicting pressures. A very apposite example of this was provided by a teacher who, when sorting statements, placed memorizing facts at the top of the list and immediately remarked that 'when you memorize facts, you tend to forget them straightaway'. The obsession with testing which demands the recall of facts and hangs over African education as almost the sole arbiter of educational success, makes such seemingly conflicting views a rational statement of the paradoxical context in which teachers have to work (Dunne & Lewin, 2000).

Although small-scale and exploratory, the implications of our work for further policy development both in Ghana and elsewhere are promising. Continuous assessment in Ghana does not appear to be working. Far from helping teachers focus on children's learning, it acts as a distraction from this aim. Elsewhere CA has been shown to be, or promises to be, a way to promote interactive pedagogies (see, for example, Pryor & Lubisi, 2002). In Ghana, however, it may have become too tainted by the dubious practices that have grown up since its introduction. Teachers should be encouraged to practise informal assessment and use it directly to organize and promote learning. Our data suggest this might be happening for some teachers, but all too infrequently, as it is not validated by the system. This would certainly mean a drastic reduction in the bureaucratic and official requirements of continuous assessment to give teachers time to integrate formal and informal assessment to better effect, and thus reduce the assessment-for-marks syndrome prevalent in Ghanaian schools and colleges (Akyeampong, 1997).

There are also implications from this work for in-service education and training. Much educational research has revealed the importance of people's tacit theories in guiding the way they respond (Brown & McIntyre, 1994; Eraut, 1994). The learning

statements exercise presented teachers with descriptions of teaching and learning that are intellectually sound and asked them to provide examples from their own practice. Discussion and examination of these produced a conceptual shift. However, this activity also reproduced a common phenomenon within in-service education: people in an unfamiliar situation appeared to develop conceptually, but this appeared to be illusory when they returned to a more familiar context. Although new understandings may be created 'off the job', if they are to be consolidated and systematically integrated into praxis, substantial support is needed. Conceptual change must be facilitated by a bridge to make the outcomes of 'reflection on action' accessible for 'reflection in action' and to bring the routine rapid response into line with action guided by more deliberation (Schön, 1983; Eraut, 1994).

Our findings have a particular resonance with the work of Jessop and Penny (1998). They developed a framework for understanding teachers' professional attitudes whereby the instrumental (concern with salary, results, holiday, knowledge, job security, free time and status) is contrasted with the relational (love, caring, influence, encouragement, friendship, sympathy and support). These discourses, particularly the latter, run through our data. However, Jessop and Penny (1998) find the presence of words such as 'love' problematical, suggesting 'that teachers lacked a professional language for talking about pedagogy' (pp. 398–399). This seems to be based on the assumption that there is a universally accepted language for talking about pedagogy and begs the question of whose professional language we are talking about. We agree with Jessop and Penny that these positions may be more complex than they appear and most useful for our work is their location of potentially successful development work in a 'missing frame' containing words such as 'action', 'meaning', 'ownership', 'understanding', 'curriculum', 'reflection', 'learning', 'dialogue'. They warn that too often this is done without reference to teachers' own realities. Our data show that when teachers talked about their experiences, they actually focused on very important professional issues relating to teaching and learning, but sometimes used language that was misleading. However, given opportunities to explain themselves, their language had relevance and meaning to their experiences of the curriculum. This occurred when they were asked to relate their discussion explicitly to what happened in their classrooms and yielded the most encouraging results. Understandings of pedagogy that lie in the relational frame go to the heart of the Ghanaian teachers' (in our study) sense of their own professional agency, and invoke a particular set of theological positions. Rather than attempting to subvert these, we should acknowledge them, extend them and enter into dialogue with them. Thus, by locating discussion of educational issues in teachers' lived experience, ideas such as love, devotion and calling can be explored in terms of the practices that constitute and exemplify them. These ideas could possibly reflect a conception of student-centred approaches in African classrooms that does not usually fit the sense in which it is used in the western context. It seems to us that a culture of learning is recognized which mixes three elements: whole-class teaching organized as a unit of instruction, small groups as another unit and individualized instruction. All three elements need to be validated in

teacher development activities and enter as *equally* important and relevant components into classroom instruction.

Eraut (2000, p. 133) claims that professionals, when questioned about the meaning of a concept in their practice, usually offer a textbook definition. However:

Their knowledge of how to use the concept in practical situations will typically be tacit. They will be aware that it took some time before they found themselves able to use the concept, but have little recollection of how this came about.

Our research suggests that teachers' professional knowledge is much richer than it may appear because it is largely tacit, but that it can be brought forward by narrative methods of in-service education such as visualization. The way forward, we would suggest, is therefore to apply a model of 'coaching' whereby not only are examples from the classroom brought into the workshop (as was the case in the work described), but support is also provided in the classroom. Situations can then be analysed and new practices tried out on the spot (cf. Joyce & Showers, 1982). This approach has been particularly successful in other places with untrained and under-trained teachers as Avalos (1985) and more recently Harvey (1999) and O'Sullivan (1999) have shown. Combined with an orientation stressing the potential rather than the shortcomings of the teachers, it would seem most likely to make the important impact on teaching, learning and assessment that children in African classrooms so desperately need.

Notes

1. The project was funded by DFID as part of the British Council Higher Education Links programme.
2. Classes 1&2; classes 3&4; and classes 5&6.
3. Sample sizes for the different data vary slightly as the numbers of teachers at the workshop fluctuated.
4. Since each form of average has a tendency to obscure some aspect of the data, mean, mode and median values for each statement were compared, and then placed as an order (order of means, order of modes, etc.). All three orders were then considered in allocating a high (1–5), medium (6–10) or low (11–15) rating for each statement. Thus 'Low' denotes that all three averaging methods gave a low rating, 'Medium/Low' that two were medium and one low. This method avoids statistical over-interpretation (Gorard, 2001).
5. * denotes unclear recording with suggested rendition in brackets.

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