ABSTRACT
Education has an enormous role to play in efforts to promote and achieve sustainable development in South Africa. But one challenge facing the education sector and the nation is a shortage of teachers in various phases of the school system. Multigrade teaching is seen as a means to stem the effects of the teacher shortage, and contribute towards achieving Education for All (EFA) and goals of sustainable development. But the nature of the interface between multigrade pedagogy and sustainable development is largely unexplored, and the school factors that constitute potential threats to achieving sustainable development remain unidentified. Using a qualitative approach, this article examines the nature of this interface, and assesses potential threats in the use of multigrade teaching to promote goals of sustainable development in South Africa. Critical challenges to this process are discussed and recommendations are made.

Introduction
Sustainable development (SD) involves a process of human development in which a major objective lies in improving educational opportunities, giving everyone the chance to participate in public life, safeguarding the environment, and ensuring intergenerational equity – which means that the current generations should show fairness in the use of available resources to ensure survival of future generations (Castles 2000; World Bank 1999. Based on this view of SD, social and economic capital is necessary for SD as much as careful management of the natural resources. The social capital includes expanding human capabilities through access to education, which contributes to human resource development. That the human resources affect the other two elements (economic and environmental) of SD is not new, and according to Butz (2007:2) there is a triadic interaction among them. Access to education is thus central to the process of SD (Biersteker and Davies 2008:186). Educated individuals have a better chance of participating in society,
and are often good citizens, who know their rights and how to act responsibly towards the environment (Castles 2000:10). Societies with 'well'-educated labour forces have higher levels of economic and social development (Coleman 1988; World Bank 1999). The pursuit of international agenda such as the achievement of Education for All (EFA) is based on this explicitly acknowledged relationship between education and SD (EFA 2000:1). This article is guided by the notion that education is critical to SD.

Despite the importance of education for the individual, society and SD, levels of education in most developing societies are still very low (Dube 2007:11). For instance, in many developing countries, access to primary school education, or what Chisholm (2004) calls ‘basic education’, remains a challenge (Sen 1999). In South Africa, there is evidence showing an inability of many primary school-going-age children to access school (Bhorat 2004:31). Moreover, access to educational opportunities is very unequal, despite significant efforts by government in terms of policies and financial investment in the education sector (Dube 2007:11). Access is structured largely along racial, class, gender and geographic lines (Dube 2007:12). The incidence of teacher shortage and the reluctance of teachers to work in schools in remote rural areas are contributing to the challenge of providing access to basic education (Brown 2006:8). In the light of concerns over the teacher shortage, multigrade teaching (MGT) is being introduced as a strategy to improve access to education in many of these rural primary schools (Joubert 2007).

In spite of its potential for broad interpretation (Corrigan, Hemmings and Kay 2006), MGT involves the combination of two or more grade levels in a class taught by one teacher (Little 2005:3). This feature makes MGT vital as a strategy for sustainable development. For instance, theoretically, it can allow the same number of teachers to teach twice the number of learners that would be possible, had the classes been singlegrade. Thus, often singled out as the nexus between MGT and SD is the increase in learner enrolment that multigrade allows. Access to education gives individuals a chance to develop their potential (Dube 2007:9).

But education access facilitated by MGT raises other critical questions. For instance, does merely having more learners in a class create sufficient conditions for the development of the human resources and capabilities necessary for sustainable development? Advocates of MGT such as Little (2005) believe the access is important, and argue that when a multigrade pedagogy is chosen by the teachers of a school, in consultation with parents, and if the class size is perceived to be ‘reasonable’, then the quality of the transactions within the multigrade classroom is likely to be effective. According to Little, collaborative decisions about the use of the MGT can lead to quality classroom exchanges, which include improving teaching and learning.

This claim is problematic, as it overlooks related school context variables. In school contexts such as in South Africa, MGT is not a mainstream practice. Many of the teachers
of multigrades are untrained for MGT (Juvane 2005), and are scarcely able to cope with singlegrade – which sometimes is in excess of 60 learners in rural areas (UNICEF 2000) – let alone a multigrade class. This aspect of the teacher work-life is one element, on the flip side of MGT, that is ignored by Little (2005). The question of whether the quality of transactions she anticipates can be realised in such a situation remains an open one. In this article, the argument is developed to explain that while MGT remains an important pedagogical practice in efforts to achieve SD goals, the environment in which it is being applied in South Africa is a critical aspect to consider in the utilisation of MGT to achieve goals linked to EFA and SD.

An understanding of this environment and its inherent threats to the use of MGT to promote goals of SD requires some understanding of the interface between MGT and SD, and of the requirements of effective MGT. The article begins with a brief account of an emerging discourse about interlinks between SD and MGT, and then discusses what are regarded in the multigrade literature as best practices for effective MGT to achieve learning goals as precursors to SD. Elements of best practice in MGT are emphasised because the extent to which MGT can lead to SD, in terms of preparing individuals to participate in civil society and developing their capabilities, demands an awareness of what is required of multigrade teachers and what they actually do.

**Relating multigrade teaching to sustainable development from a learner-centred approach**

Beyond the element of access, however, MGT can contribute to SD goals in other ways. MGT is founded on an evidence-based learner-centred epistemological foundation, for which, in the context of SD, it is invaluable, because it allows us to give attention to the process, and not merely the outcomes, of MGT. The epistemological foundation of learner-centredness is the social constructivist epistemology (Wood 2005). As a philosophy of knowledge, social constructivism holds that knowledge is a product of social processes, and not solely an individual construction (Vygotsky in Wood 2005:37). In other words, it is a product of social interaction. As a philosophy of teaching, social constructivism rejects the pervasive conjecture that one can simply pass on information to a group of learners and expect that understanding will result (Wood 2005). The grounding of MGT in learner-centredness therefore means that learners are viewed as active participants in the learning process.

The notion that learners in a multigrade context are active participants in their learning is significant for two reasons. First, multigrade involves learners of wide age differentials, unlike singlegrade (Little 2005:12). Second, the opportunity for a participatory, democratic, inquiry-based, discovery mode of learning is an expectation in multigrade, because these are the ‘devices’ of learner-centredness (Kyne 2005:14). The interaction of the younger and the older groups of learners in the multigrade learning environment brings
into view Vygotsky’s (Schunk 2004:293) perspective of learning and development. This perspective contends that a child’s interactions with older peers in the zone of proximal development (that is, the difference between what children can do on their own and what they can do with/in collaborative assistance from a more capable person) promote cognitive development or learning (Vygotsky in Schunk 2004:295). By allowing learners to work such that the elder ones work together on tasks that the younger ones could not perform independently, learners are able to experience cognitive change, and at the same time to develop a sense of cooperation and shared responsibility in their learning as citizens (Schunk 2004:298). These outcomes – cognitive growth and a spirit of cooperation – gained in a multigrade situation equip learners to participate in society, because as individuals develop capabilities, they are able to make a positive contribution to it (Biersteker and Davies 2008:186; Mpotokwane 2003:105).

A fascinating article by Bernstein (1990:63) about pedagogic practice highlights the significance of cultural transmission in the process of teaching and learning generally, but holds a fair amount of relevance for learner-centred MGT and SD. Bernstein (1990:64) argues that no pedagogic practice is value-neutral. This is quite true of MGT. MGT is as much a ‘cultural relay’ as it is a ‘device’ for social reproduction (Bernstein in Sadovnik 1991:48) because it transmits culture and has in its inherent value bases social, epistemological, and philosophical connotations (Tabulawa 2003:7). In its learner-centredness, MGT reflects a view about knowledge transmission and the kind of people (society) a nation wants to create through education (Sadovnik 1991:48–50). Tabulawa (2003:13) acknowledges this view, and argues that in its learner-centred hegemony, pedagogic practice such as MGT reflects the norms of liberal Western subculture and carries a hidden agenda aimed at inculcating ‘affective’ and ‘moral’ values about desirable psycho-sociological traits for individuals and for society. Since South Africa has based its national education system and teaching methodology on learner-centred teaching (Slonimsky and Brodie 2006:45), the learner-centred orientation of MGT is itself a transmitter of a form of socialisation that shapes learners to fit into society. In this sense, MGT is a cultural relay whose practice tacitly achieves social reproduction of learners who bear certain social normative characteristics (Bernstein 1990; Tabulawa 2003). This is one of the consequences of pedagogy alluded to by Bernstein, which makes MGT itself a device for SD. Nevertheless, this discussion provides a sense of the link between MGT and SD. The extent that MGT leads to SD, of course, is dependent on how it is utilised by teachers and whether they are able to satisfy its basic requirements in practice.

**What is required for effective multigrade teaching?**

According to Little (2005:12), multigrade differs distinctly from singlegrade teaching in its approach to classroom configuration and teaching. This difference is evident in the range of age and ability and in the diversity among learners in multigrade (Little 2005; Mason and Burns 1997; Ninnes 2006). It is also noticeable in the structure of the curricula, the design of learning resources and assessment requirements (Lingam 2007). Analysts
of MGT (Corrigan, Hemmings and Kay 2003; Brown 2007; Little 2005; and Mathot 1998) conclude that the contextual arrangements as well as resources suited to MGT are different from those of teaching in singlegrade.

Based on these claims, Ninnes (2006) argues that one condition of effective multigrade is that it cannot be delivered in a school context that is premised on singlegrade. In a multigrade situation, learners must learn the curriculum appropriate to their grade level, despite being combined in one class (Kyne 2005; Little 2005). It means therefore that the curriculum premised on a singlegrade structure needs to be adapted to suit the requirements of the multigrade classroom. While various approaches have been proposed for this curriculum adjustment (Ninnes 2006; Suzuki 2004), Little (2005:12) asserts that the adaptation should be undertaken jointly by teachers, guided and supported by curriculum experts working at national level, and that the adapted curriculum must be sanctioned and validated by the highest authority. This is to ensure that it gains wide acceptance.

Lingam (2007:186) draws attention to the quality of the teachers teaching multigrade. Lingam (2007:186) found that teachers trained for monograde classes are unable to cope with MGT, owing to the depth of skills, resource management and assessment expertise required to function effectively in multigrade. Research shows that teachers who do well in multigrade classes are positive in their attitudes towards multigrade as a pedagogical option (Mason and Burns 1997; Russell et al. 1998; Suzuki 2004), and are not merely adequately trained for MGT, but possess a firm grasp of their subject knowledge and a wide range of group facilitation strategies to teach two different grade level curricula in one class (Little 2005:12). At the same time, for children to learn effectively in multigrade environments, multigrade needs teachers who can manage the social differences and diversity inherent in multigrade classes (Kyne 2005; Little 2005; Suzuki 2004). Hargreaves (2001:553), on the other hand, draws attention to assessment and argues that effective teaching in multigrade settings hinges on the manner in which assessment is undertaken. While these skills are crucial for effectiveness in any class context, they are of greater importance in multigrade, given the increased diversity and differences among the learners. Teachers stand a better chance of helping learners realise their educational goals in a sustainable way in multigrade when these MGT requirements are met.

Effective MGT requires adjustments in the curricula, and specialised expertise to teach and manage multigrade classes. These should be seen as part of an integrated strategy to support MGT (Little 2005:13). Because MGT has a set of conditions to meet for its effectiveness, its contribution to achieving goals of SD is contingent on the extent to which these minimum conditions are met and, to a lesser extent, to the conditions that give rise to MGT, because such conditions can influence whether the requirements can be fulfilled (Ninnes 2006).
Conditions giving rise to multigrade teaching in South Africa

Evidence shows that in South Africa MGT is mostly found in rural primary schools. It is a response to a host of necessities, including unpredictable numbers in annual enrolment among new learners in some schools; teacher shortage owing to out-migration and to lower entrants to teacher education programmes; antipathy among teachers to work in remote rural and sparsely populated villages; and a post apartheid surge in demand for education (Brown 2007; DoE 2005b; Mathot 1998). Of these reasons, teacher shortage is perhaps the most influential (Kassiem 2007:1). Education analysts argue that while the number of children seeking access to primary level education has quadrupled since the start of democratic government, the number of teachers to provide this education has shrunk (Brown 2007; Kassiem 2007). For the first time in the history of the country, fewer individuals are seeking careers in education (Kassiem 2007) – a situation which threatens not only the sustainability of the teaching profession, but also the supply of skilled personnel to the labour market (Dube 2007:14). MGT is thus a response of necessity, rather than choice (Little 2005:12), but Little reiterates that these conditions are not dissimilar to conditions that give rise to the use of MGT in contexts outside South Africa.

In general, necessity is a major force that triggers multigrade. In respect of the requirements of MGT and SD, the notion of necessity has limitations. For instance, teachers at a school affected by teacher shortage could resist multigrade by arguing for more teachers rather than take up the task of adapting the singlegrade curriculum to suit multigrade (Suzuki 2004). Given the potential of the conditions that give rise to MGT to influence the requirements of effective MGT, this study was undertaken among primary school teachers in the Eastern Cape Province in South Africa to understand the conditions in which MGT is undertaken, and constraints/threats to its use in promoting goals of sustainable development.

Research problem

The study investigated the following problems:

- What aspects, as perceived by teachers, of MGT promote sustainable development in the school and wider community?
- What aspects of MGT threaten its use to promote sustainable development?

Methodology

Qualitative research design

The study adopted a qualitative research approach. The researcher adopted this strategy because it facilitated entry into participants’ life-world to explore their lived-experiences. Crucially, this strategy contends that knowledge is subjective and ideographic, and truth is context dependent, and can only be obtained after entry into participants’ reality.
The phenomenological design was deemed the most appropriate qualitative strategy as it allows the researcher to probe in the process of data collection.

**Sample and sampling procedures**

Teachers from six government-owned primary schools and four commercial farm schools participated in the study. MGT is common in the province in these types of primary school. The main criterion to participate in the study was that educators had to be multigrade teachers. A total of 25 teachers participated. The teachers were in their late adulthood, that is, between 40 and 65 years. While there was no concern about gender, 18 of the 25 teachers were females. This is consistent, generally, with the gender ratio among teachers in primary schools in the national school system.

The sampling of the participants took place at the schools. Participants were identified conveniently through the school register and principals. The teachers were then contacted by the researcher and asked to participate. Only teachers who volunteered were included in the sample.

**The study area**

The schools where the teachers work are in the Eastern Cape Province. In 1998 Mathot (1998:12) reported that more than one-half of the estimated 6 100 primary schools in the province had classes that were multigrade. The situation has not changed much today and, with recent teacher out-migration (Brown 2006:6), may even have worsened. The province is largely rural, and is considered the poorest of the nine provinces in the country (Everatt 2003). For this reason, and the evidence of a stark contrast between primary schools in urban and rural areas, as well as the relative large number of multigrade schools in the province, it was deemed suitable to conduct this study in the Eastern Cape.

The schools from which teachers were drawn for the study were classified as located in rural areas. These are often called rural schools, that is, schools that are located in settlement areas, away from urban towns or cities. An example is farm schools. To gain access to the study schools, the principal in each school served as ‘gatekeeper’.

**Data collection instrument and procedures**

The study consisted of one qualitative data gathering method: interview. Russell, Rowe and Hill (1998:4) suggest that ‘interview is the best means to collect data in qualitative research’. Data was collected through semi-structured, phenomenological interviews, conducted by one trained researcher assistant. The semi-structured interview strategy was chosen because it ensured consistency in data collection and allowed the researcher to ask probing questions, while ensuring some consistency in the main
questions posted to each participant. This ensured that participants related their lived-experiences freely. The interviews covered the themes of demographics, MGT and sustainable development. The main language of the interview was English.

During the interviews, reference to the semi-structured questions was kept to a minimum. For the collection of rich data, participants were allowed to converse on issues beyond what was specified on the interview guide, and was asked questions from the guide only when the participant seemed to have nothing further to say. In these instances, the guide questions acted as prompts. Each interview took, on average, 60 minutes. The interviews were conducted at the workplace of participants; these were tape-recorded verbatim, with their permission, and later transcribed verbatim. Of the 25 teachers, none was uneasy with the use of the tape-recorder. The interview data was analysed using the constant comparative methods of narrative analysis (Brown and Schulze 2002). This entailed identifying, coding and categorising patterns in the data (Corbin and Strauss 1990; Miles and Huberman 1994). The results of these analyses are presented in the sections below.

Results and discussion

Question 1: Aspects of multigrade teaching that promote sustainable development

Access to education is a fundamental way in which MGT seems to contribute to the notion of sustainable development at the schools. This was the view of all the teachers in the study. No reference was made, for instance, to MGT process benefits associated with shared responsibility or peer collaboration and scaffolding, as Vygotsky theorisation suggests (cf Relating multigrade teaching to SD from a learner-centredness approach).

Question 2: Aspects of multigrade teaching that threaten its use to promote sustainable development

- The monograde structure of the schools

The systemic premise on which the South Africa school system is based is singlegrade. The influence of this ‘graded’ approach is evident on wider school processes: the national curriculum, which is based on grade-based assessment and grade progression of learners; the design of learning materials; and the writing of textbooks (DoE 2005b). Furthermore, at tertiary level, pre-service and in-service teacher training systems prepare teachers to teach in monograded schools (Brown 2007; Mathot 1998). Perhaps by virtue of these systemic characteristics, all the teachers who took part in the study view the singlegrade class as the natural way to organise learners for instruction. But even without considering this perspective, the monograde classroom arrangement has had a profound influence on the school processes.
This study found that the monograde approach dominated the ways in which learning materials are designed and the classroom is organised. This means that MGT took place in school contexts that were structurally monograded. The study found that multigrade teachers who face the biggest teaching challenge were those who worked in schools that are inflexible about changing the monograde school arrangement. This view is reflected in comments shared by teachers:

*When you look at the RNCS [Revised National Curriculum Statement], you see that it wasn’t for this [multigrade] kind of class system; learners are supposed to learn by grades. What I mean is that each grade has its own curriculum to follow. When we start combining the grades, the whole thing becomes complicated. People [other educators] may not say it, but most of us don’t know how to infuse the two [curricula] work.*

*The Department [District Department of Education] doesn’t address such issue; they are more concern with IQMS. When I go to the University, they are not helping us to deal with the many problems in MGT. Multigrade is painful; it is an overload of work on teachers - from the first day of teaching to the end of the year.*

Clear frustration is felt by these teachers. Their reference to other teachers meant that they were not the only ones who experienced such frustration. Frustration can lead teachers to become ‘fed-up’ with their work, which can affect learners’ learning and effective teaching (Schunk 2004:230). But the wider question arising from this example, and which has direct implications for SD, is whether learners in multigrade classes can achieve at the same level as their peers in monograde classes when they are taught by teachers who are frustrated by multigrade issues? One cannot say for sure, because there is no South Africa-based study which make such a comparison, and many of the others that compare learner performance in monograde and multigrade contexts were done outside South Africa, and the attitudes held by the multigrade teachers were not reported (Corrigan, Hemmings and Kay 2006; Kyne 2005; Russell, Rowe and Hill 1998).

**Educator attitudes toward multigrade pedagogy**

Among the study sample, attitudes toward MGT in the schools were negative in general. For these teachers, MGT is the ‘unavoidable nuisance’. A common view was that:

*Even our principals don’t like multigrade. The chief disadvantages to him are the workload for us educators to prepare two curricula, and I think he realises we don’t like it.*

For these teachers, multigrade class is an excess of work. They felt that for MGT to be successful, a lot depends on the quality of the teachers. The negative attitudes among the teachers toward MGT are not dissimilar to those of teachers in other parts of the world (Lingam 2007). Since teacher performance is affected by the attitude he or she
holds (Darling-Hammond 2005:18), in terms of SD, the negative attitudes of multigrade teachers possess a threat to the way learning and teaching is transacted. Effective learning cannot take place in a class context in which the teacher is negative towards his or her teaching (Lingam 2007; Little 2005; Mathot 1998; Russell et al. 1998). This is seen from the teachers’ observation that ‘they sometimes do only what they can’. The disadvantage to learners is that teachers with negative attitudes compromise the knowledge and skills which they are required to transmit to learners by doing less work or simply ignoring aspects of the curriculum (Brown 2006:10). Whether learners learn and the extent to which this occurs is reflected in their capabilities.

The hostility of the school environment and teachers’ perceptions of their performance in a multigrade class

Teachers do not participate in the decision that leads to their classes becoming multigrade. This observation was shared by teachers who also felt that their success as educators, and those of their learners, had been compromised by lack of school readiness for multigrade. In the study, a female foundation-phase teacher in a township school was among the first interviewees to talk about this experience:

When I join the staff, I found people mixing the grades [multigrade]; I was also given mixed grade classes so what was I suppose to do ...? I knew I have no training for it [MGT]. It destroys your love for the profession because it controls you. You are never able to perform to the best of your ability. But I can’t even talk about it. Who listens? Your teaching is never at a level that satisfies you. It’s not that we enjoy having multigrade classes ... we are forced to combine grades.

The hostility of the school environment in which the teacher worked and the lack of choice regarding multigrade are apparent in these commentaries. Others, such as a male in a rural farm school, agreed:

We can’t take up all the grades, as it’s not easy to get educators to work in rural areas. They do not wish to teach in rural schools, as the conditions are difficult. You can see: our classroom space is another problem.

I find that our learners are too playful ... when you give them work to do in groups or independent work on their own, they only chat about things that happened on the streets. It is worst when you leave them to work alone: it is chaos when you do. This is why I am saying teaching multigrade classes is a difficult proposition because it is not easy to teach learners who are like this. I don’t think our learners are the type who can be taught in such arrangements.

This concern draws attention to the way the teacher is coping with the management of the multigrade class. Multigrade teachers must be able to manage the class environment
and the social dimensions in this setting. This is a basic requirement for effective MGT (cf. Requirements of effective MGT). Indiscipline in multigrade classes disrupts the teaching and learning process, and seems to prejudice the amount that the teacher and learners can accomplish in such setting. It is difficult for teachers to facilitate the development of capabilities or for learners to foster shared responsibility when indiscipline prevails in multigrade.

- **Under-qualified teachers teaching multigrade**

The teacher qualification audit by the Department of Education in 2004 suggests that the majority of teachers involved in the teaching of (multigrade) classes are under-qualified (DoE 2005a). According to this report, in 2004 nationwide an estimated 77 per cent of South Africa’s teachers held a three-year Diploma in Education as their highest qualification. Teachers with this qualification are regarded as under-qualified because the National Qualification Framework (NQF) specifies that the minimum qualification requirement for a teacher is a four-year, level 14, professional bachelor of education degree (see figure 1) (DoE 2005a). While the audit reflects data of the teacher qualification situation four years ago, there has been no significant development in the in-service teacher-training sector between 2004 and 2008 to change the teacher qualification situation to date. Many of these teachers teach multigrade.

![Figure 1: Distribution of Educators by REQV level as per October 2004](image)

Source: DoE 2005a

Many of the teachers in the study spoke about the qualifications that they hold. Table 1 shows the 20 township primary school and five farm school multigrade teachers. Three township primary school teachers had BEd qualifications; this satisfies the minimum NQF requirements. The remainder of the township primary school teachers did not have professional qualifications that meet the requirements. None of the five farm school teachers held qualifications that meet the minimum requirement either (DoE 2005a). While qualifications provide only proxy indicators of the quality of a teacher,
and while these cases are not representative of the primary-school teacher qualification situation nationally, they give a sense of the kinds of educator teaching multigrade. Under-qualified teachers cannot perform effectively in class (Darling-Hammond 2005; Miller 1991).

Table 1: Multigrade school-type and educator qualification and years of experience

<table>
<thead>
<tr>
<th>Responses</th>
<th>Schools</th>
<th>Township primary</th>
<th>Farm school (primary)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B.Ed. (Hons.)</td>
<td>NPDE</td>
<td>SPTD</td>
</tr>
<tr>
<td>Frequency</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Percentage</td>
<td>15.0</td>
<td>25.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Key: BEd (Hons): Bachelor of Education; NPDE: National Professional Diploma in Education; SPTD: Senior Primary School Diploma; JPTD: Junior Primary School Diploma; HED: Higher Education Diploma; M+4: Matric plus four years work experience

Adding to the challenge of under-qualified and unqualified teachers, multigrade teachers do not have formal training to teach multigrade. This may be because, unlike some European (for example Finland) and Asian (Nepal, Sri Lanka) countries (Little 2005:14), South Africa’s higher education institutions do not train teachers for multigrade, but for teaching singlegrade classes (Mathot 1998:2). Darling-Hammond (2005:14) reiterates that unprepared teachers are less able to adapt their instruction to promote learner learning and are less likely to see it as their job to do so. They are more likely to blame learners if their teaching is not effective. Evidence from past research suggests that learners taught by highly qualified teachers are more likely to perform better than learners taught by under- or unqualified teachers (Miller 1991). While this study did not investigate learner achievement in multigrade, the high proportion of under-qualified and unqualified teachers teaching multigrade classes in the study schools has implications for how teachers and learners perform in multigrade classes, and who is blamed for failures.

To illustrate, the multigrade teacher (above) commented on the ‘indiscipline’ and ‘lack of interest’ of learners in her multigrade class in working without supervision. The teacher is focused more on attributing blame to learners than on developing strategies to address the situation. Many times, this kind of teacher response reflect their level of ‘know-how’ and ‘skill’ to deal with the challenging situations in the multigrade classes, as Lingam found among multigrade teachers in Fiji (Lingam 2007:186).
So what is the relevance of the multigrade teacher qualification situation for sustainable development? Well, one area concerns teacher influence on learner's cognitive and social development in school – which can affect how learners participate later in society (Biersteker and Davies 2008:186). Teachers are facilitators of learning and to this extent, they influence what and how much learners learn or develop, cognitively and so on. While the number of under-qualified and untrained teachers in this study is unrepresentative of the situation provincially or nationally, untrained and under-qualified teachers seldom:

- Have in-depth and flexible understanding of their subject matter and of how to represent ideas so that they are accessible to two or more groups of grade level learners in one class (Darling-Hammond 2005:8–9)
- Possess in-depth pedagogical content knowledge and skills that take into account not merely how to represent the topic of a lesson, but also how the learners they teach are likely to understand that material and how they learn (Lingam 2007:186)
- Have in-depth understanding of child development, that is, how children think, learn and behave or how they deal with differences and diversity (Darling-Hammond 2005:8–9)
- Have the skills to be able to use a variety of means for assessing learners’ knowledge or evaluating their approaches to learning (Lingam 2007:187)
- Know about curriculum adaptation strategies, curriculum resources and technology (Little 2005:14). Because of these critical skills deficiencies, they are unlikely to be able to provide a context that is conducive to learners’ academic development. Learners are more likely to ‘pass’ through their hands without acquiring the expected rigour of training and formative development that is necessary for later life (Darling-Hammond 2005:9).

In this perspective, the learners’ development – as human capital – would be compromised (Shonkoff and Phillips 2000).

**Conclusions**

Education has an enormous role to play in efforts to promote and achieve sustainable development in South Africa. From its learner-centred epistemology, MGT is a useful strategy to stem the effects of the current teacher shortage situation, and contribute toward achieving the important EFA target of access to basic education for all. From this perspective, MGT can be utilised to promote/support efforts aimed at SD. The widening of access is a real contribution.

But the gains achieved in the widening of access are being eroded by poor systemic and classroom practices. The practice of MGT is taking place in an education environment that is monograde and hostile towards the MGT. While critical process and outcome
variables of MGT offer leverage for its utilisation to support SD, multigrade teacher-related challenges, in terms of lack of training, under-qualified educators, and negative attitudes, make the schools unable to use MGT for this wider purpose of SD. Teacher quality thus is a major overriding factor that is limiting MGT from having a more powerful impact on SD related variables.

This means that while more learners have access to education, the developmental contexts in which they are in are not facilitative to their academic development, which maybe a signal that their later participation in society might be heavily compromised - at least from an education perspective. Untrained or under-qualified teachers are unable to help children develop the capabilities that they need, if they are to make a contribution to society. From a human capital development perspective, this is bad news in two ways: in terms of the individuals as human capital, and secondly, [nationally] for achieving target such as those linked to poverty reduction. One may therefore say that in these schools, the access to education allowed by the use of multigrade is a “false-access” because the learners may not be better off in school, than they would be outside of it.

Using MGT as a strategy will have distinct implications for policy. Greater recognition for multigrade in education policy is needed. Provisions in teacher education and training are needed to train teachers for MGT and to cope with its demands.

Note
1 Dr Brown is with the School of Postgraduate Studies in the Faculty of Education, University of Fort Hare, South Africa. He can be contacted at bbrown@ufh.ac.za.

References


Byron Brown