



Improving the Quality of Education among Rural Learners through the Use of Open and Flexible Approaches in Lesotho's Secondary Schools

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Abstract

Despite gains made in the past two decades in improving access rates, learners in Lesotho continue to suffer from high dropout rates at primary level and poor access rates at secondary level, particularly in the rural areas. This paper draws on the findings from an intervention aimed at identifying and overcoming entrenched patterns of educational inequality and disadvantage among Basotho learners and exploring what can be done about the poor completion rates in particular. The findings show important real and potential benefits arising from the use of open, distance and flexible learning for reversing the interruptions to schooling caused by poverty and HIV/AIDS among marginalized groups of learners in rural areas in Lesotho. Most importantly, the paper demonstrates the sustainability of affordable initiatives in terms of improving the quality of education among rural learners through the creation of circles of support around learners at risk of dropping out of school.

Résumé

Malgré les acquis notés au cours des deux dernières décennies dans l'amélioration des taux d'accès, les apprenants au Lesotho continuent de souffrir des taux élevés d'abandon scolaire au niveau primaire et des faibles taux d'accès au niveau secondaire, en particulier dans les zones rurales. Cet article se fonde sur les résultats d'une intervention visant à identifier et surmonter les modèles établis d'inégalité scolaire et de désavantage chez les apprenants basotho et à explorer les voies et moyens pour améliorer les

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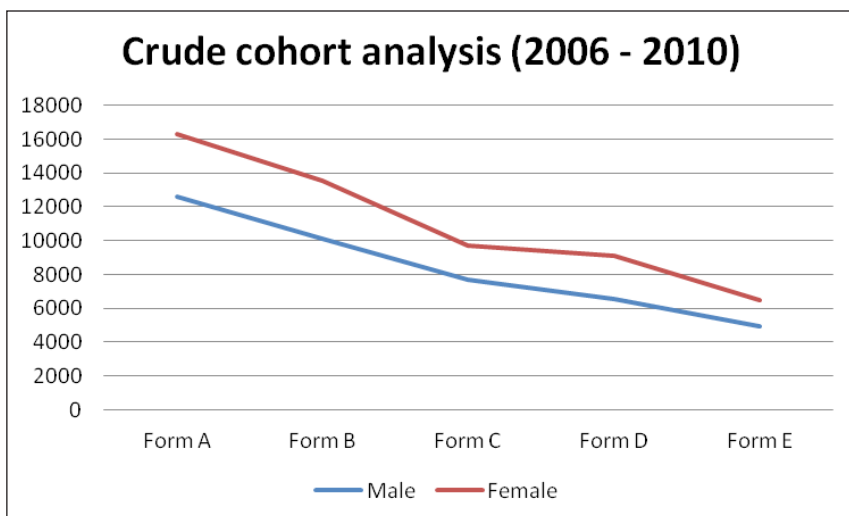
faibles taux d'achèvement en particulier. Les résultats montrent des avantages réels et potentiels importants découlant de l'utilisation d'un système d'apprentissage ouvert, à distance et flexible pour remédier aux abandons scolaires causés par la pauvreté et le VIH / SIDA parmi des groupes marginalisés d'apprenants dans les zones rurales au Lesotho. L'article démontre surtout la viabilité d'initiatives abordables en termes d'amélioration de la qualité de l'éducation chez les apprenants en milieu rural, par la création de cercles de soutien autour des apprenants à risque de décrochage scolaire.

Context and Problem

While Lesotho has experienced commendable progress towards opening up access to primary schooling since the introduction of Free Primary Education (FPE) in 2000, rural learners continue to experience poor access and inequitable provision of education. In general, secondary education remains highly inaccessible in Lesotho, with almost two-thirds (63.5 per cent) of children of secondary school-going age being out of school (Ministry of Education and Training 2012). Lack of space and high school fees have been cited as serious constraints on education provision at secondary level (Lerotholi 2001), and the situation is significantly worse in rural areas. For example, a survey conducted in 2002 reported access rates for children in the rural areas to be as low as 23 per cent, more than 10 per cent lower than their urban-based compatriots (Bureau of Statistics 2002). Also, while initiatives such as the bursary scheme for orphaned secondary school children have partially improved access for orphaned and vulnerable children (Smiley 2011), rural secondary learners have not benefitted from any programme (Nyabanyaba 2009).

In addition to the general situation of HIV/AIDS, Lesotho being one of the worst-affected countries in the world (UNICEF 2007), the survey conducted by the Bureau of Statistics (2002) further confirmed that communities in rural areas experienced significantly harsher poverty and worse service delivery. In these harsh circumstances, practices that disrupt rural children's schooling include one such practice where children are hired out to **more affluent families** and boys in particular are called upon to alternate going to school with other siblings in order to look after animals (Nyabanyaba 2009). In addition, there is a growing practice where girls experience serious disruptions to their schooling as a result of HIV/AIDS, often having to attend to sick members of the family or younger siblings orphaned by AIDS (Kimane and Mturi 2001). These disruptions are all the more pronounced by cultural practices that persist in rural areas, where each member of the family is expected to play his or her part in carrying out family responsibilities.

The impact of the disruptions experienced by secondary learners is illustrated by the cohort analysis presented in Figure 1.

Figure 1: Secondary School Cohort Trends

It might also be noted that although girls start off at a significant advantage to boys upon entry into secondary school, their completion rates are poorer than those of boys, and their enrolments become even more vulnerable in Form C and Form E. Form C and Form E are external examination classes, which means that girls tend to be pulled out or drop out of school in the years when examination fees add to the burden of tuition that has already been shown to be quite high at secondary level (Nyabanyaba 2009). In simple terms, Lesotho has a serious problem with not just attracting learners into secondary schools but also in efficiently guiding them into the final year of study, a situation that evidently grows worse in rural areas.

Theoretical Issues

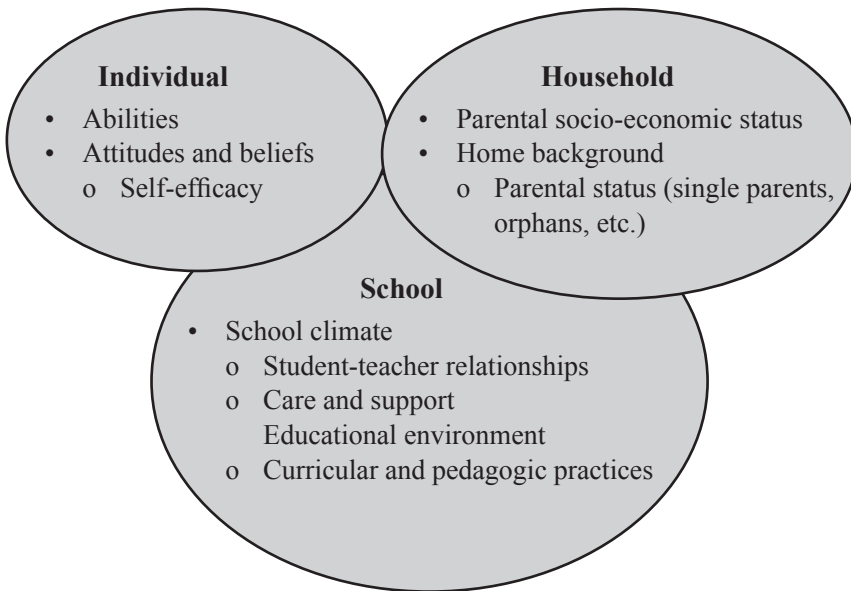
The rural community in Lesotho constitutes over 70 per cent of the entire population and is yet the most marginalized in relation to services. While data on the status of rural communities in Lesotho and many countries is in abundance, 'rurality' as a social construct has only recently received significant attention. Over the past few decades, there has been an emergence of considerations for rural communities as a unique space requiring distinct social interventions and research approaches that highlight the rural educational context rather than merely measuring it (Clark and Zimmerman 2000). Atkin (2003: 507) recommends the use of an anthropological definition of rurality that considers the

identity of rural communities. Such an anthropological consideration would enhance an understanding of the context that shapes the attitudes, behaviour and beliefs of the participants.

Theorizing rural learning ecology was a critical aspect of understanding the context which mediated the intervention. Particularly, framing rurality as not lesser but as critical, and recognizing the urgency based on divergence rather than convergence were seen as central to enabling a deeper understanding of the complex, rather than deficient, nature of rural communities as they interact with education initiatives. It is important to note that theorizing and researching rural education is a growing focus of an initiative driven by the University of the Free State and has resulted in some important empirical studies that highlight the plight of rural education in developing countries such as South Africa (Tsoetsi 2013). Sustainable learning environments promote the creation of learning space within both formal classrooms and community environments (Mahlomaholo 2012: 5). This growing understanding of the potentials and constraints within which rural education is located is critical to a more nuanced understanding of emerging issues within the rural context.

Within this consideration of rurality as a distinct social construct, the ecological systems framework has been drawn upon to comprehend the multiplicity of contextual influences that impact on human development and behaviour such as access and participation in school (Bronfenbrenner and Morris 1998; Conger and Elder 1994; Scaramella and Keyes 2001). These multiple contexts include characteristics inherent to the individual as well as family, peer, school and community settings that influence individual development (Bronfenbrenner 1979). Using the ecological systems approach has been demonstrated to illuminate how individuals perceive various contexts that influence their performance (Bronfenbrenner 1976). This approach is particularly suited to an implementation of initiatives and nuanced study of their impacts in complex rural contexts such as Lesotho's, with their very intricate combination of difficult terrain, growing incidence of poverty and HIV/AIDS, as well as an intricate array of cultural practices.

Demi, Coleman-Jensen and Snyder (2010: 2) have previously drawn on the ecological framework of Bronfenbrenner (1979) that emphasises multiple contextual factors within family, peers, and school and community settings to examine students' enrolments in a rural location. This framework was adopted and modelled in Figure 2.

Figure 2: Ecological Framework Adopted

Family contexts have been shown to play a critical role in the enrolment and participation of children in school. This is not only because family context can provide financial and material support for schooling but also because they have the capacity to provide a positive environment for learning, often by creating high expectations for children's schooling (Davis-Keane 2005; Melby et al. 2008). In particular, Melby et al. (2008) argue that the home factor is not only about families' ability to afford fees, which is a key factor at secondary level in Lesotho, but also that **providing a positive environment and family relationships**, including parents bonding with their children, is essential.

Schools have also been found to play a pivotal role in attracting and retaining enrolments and participation in schools. Key factors that have been found to be central to successful schools include positive student-teacher relationships and high expectations of teachers regarding their students' capacity to succeed. In fact, Demi, Coleman-Jensen and Snyder (2010) found a much weaker association between family factors and enrolments, than between

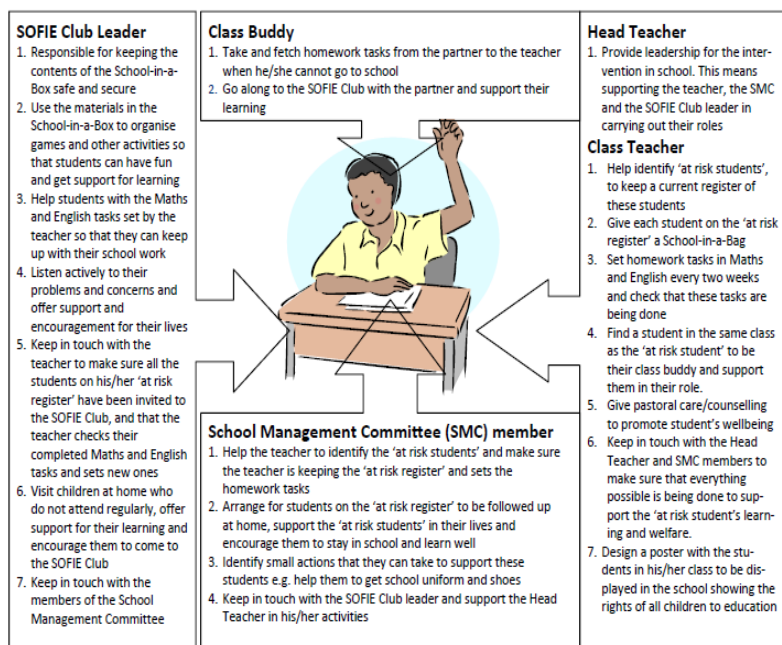
school climate and enrolments, thus highlighting the importance of a positive school climate in rural contexts. Individual characteristics such as self-efficacy have been established as important predictors of achievement and retention and are known to also raise students' aspirations to apply more effort and to study further (Bandura 2001). It is important to note that these factors are not necessarily discrete but are often interrelated in an intricate manner, often with a strong family lead, resulting in strong individual character.

Intervention

A collaborative team of educators from the University of Malawi's Centre for Education Research and Training, the Institute of Education in London, the South African Institute of Distance Education, and the National University of Lesotho's Institute of Education came up with a low-cost initiative to address the problem of poor access and efficiency rates among children in rural areas of Lesotho in a context of poverty and high HIV prevalence rates. The model was driven by research that showed that open, distance and flexible learning (ODFL) has the means of reducing social inequalities and improving inclusiveness in education (Unterhalter, Hoppers and Hoppers 2000; Pridmore and Yates 2006). Another key approach to the initiative was the creation of a 'circle of support' made up of peers, members of the family and the community that has been implemented in primary and secondary schools in Botswana and Namibia (Pridmore and Jere 2011). The concept of a circle of support was drawn upon to create ecologies aimed at sustaining the initiative through typical cultural practices that persist in rural Lesotho where young people come together to support one another, under the supervision of an elder.¹

The children who are referred to as 'at-risk' were identified through a variety of out-of-school factors such as the status of the family, including whether both parents were alive and working, and in-school factors such as attendance and performance record. The model is based on circles of support formed around pupils identified as being at risk of falling behind or dropping out of school (Pridmore 2009).

Figure 3: SOFIE Model



Each at-risk learner received a 'school-in-a-bag' with basic stationery, including a set of mathematical instruments, pens and notebooks. Wrap-around self-study guides for English and Mathematics were developed by a group of volunteer learners at the Institute of Education in London under the training and supervision of project staff, with some input from the Institute of Education at the National University of Lesotho. These guides were designed to encourage independent learning and to support continued access to learning for those vulnerable children whose attendance at school was often erratic. When such children were facing difficulties in getting to class, they could continue their studies using the guides, which were linked to the national curriculum. Mentor learners ('buddies') were recruited to support at-risk learners by acting as a link to the schools. They would provide peer support for learning, follow-up in cases of absence and, if required, carry self-study guides to class teachers for marking.

Clubs were also formed. These clubs were run by club leaders with the support of the club teacher and were monitored by local community leaders. The purpose of the clubs was to provide additional learning opportunities

and support outside of school, in a friendly and informal environment. Clubs were open to both at-risk learners and their buddies. The timing of the clubs was designed to be flexible and was arranged after school hours at an hour and place suitable for the learners. A 'school-in-a-box' containing learning materials, supplementary readers dealing with issues relating to child rights, and an interactive HIV/AIDS board game called 'Choices and Decisions' were provided to each club (Nyabanyaba 2010).

Club teachers and community leaders were trained in psychosocial support and were introduced to the wrap-around guides. They were expected to work hand-in-hand with club leaders and community leaders to support at-risk learners. Teachers were responsible for keeping a register of all learners identified as 'at risk' and regularly monitoring their progress and participation in class activities. Community leaders were responsible for linking schools with communities and for collecting data on regional activities of schools.

Methodology

The empirical study informing this paper was part of a larger educational initiative exploring a low-cost initiative that could improve access and efficiency rates among children in a context of poverty and high HIV prevalence rates. The study employed both qualitative and quantitative approaches in two distinct phases (Creswell 2009), including a randomized control trial (RCT) set up to assess the impact of the SOFIE model on the retention and progression of vulnerable learners in Grade 9 (Form B) in targeted schools. To control the effects of factors external to the intervention on learner outcomes, a Pre-test/Post-test Control Group design was adopted, whereby twelve schools were randomly assigned to either of two groups. Data included school attendance rates, progression rates, repetition rates, dropout and completion rates. These were collected from both groups at the baseline (in November 2008) and following implementation (in November 2009), but only one group received the intervention package. The impact of the intervention was measured through the following key variables:

- a) the proportion of learners in the target grade that did not **drop out during** the school year with learners who had not returned by the end of the year and were considered to be dropouts,
- b) the proportion of learners enrolled in the target grade, who were promoted to the next grade, with promotions based on schools' individual end-of-year assessment practices,

- c) the proportion of learners enrolled in the target grade who did not miss school during the school year as monitored by class teachers through official attendance registers,
- d) the performance of learners in English and Mathematics in the target grade with the tests set by the project team and validated by a teacher through their subjects association.

The sample yield for learners, from whom data was collected in both intervention and control schools, is summarized in Table 1.

Table 1: Learners, by School Status (intervention/control), SOFIE Club Membership and Sex

	Intervention		Control	Total
	Club Member	Non-Club Member		
Female	79	778	861	1,718
Male	56	612	459	1,127
Total	135	1,390	1,320	2,845

As is generally the case in Lesotho, there were more girls than boys participating at the secondary school level. Creswell, there were also some less-than-expected findings uncovered about other features of the status of learners' participation, which are discussed in the following sections.

This quantitative data was **complemented by qualitative data collected using a multiple case study approach**, where one site in each of the three distinct topographical regions within rural settings was selected for in-depth interviews. The three distinct regions regarded as markedly rural in Lesotho and selected for the qualitative aspect were each situated in a foothill region, Senqu-River Valley, and a mountains area, later coded FHS, SRV and MNS respectively. Since case study research involves the study of a particular phenomenon or concern within a real-life setting, it lends itself well to situations where it may not be possible, or desirable, to distinguish the issue under investigation from its context (Yin 2003). This has important advantages for gaining insight into issues of access and participation in education, where a multiplicity of factors are likely to influence any particular child's schooling. The aim was to give

insights into the complex social phenomenon being studied, in context, and as much as possible from the perspectives of those being studied (Merriam 1988). The central focus of the qualitative aspect of the study was considering a phenomenon within a real-life setting and context (Yin 2003). As case study research works within 'bounded systems', it is important to establish the unit of analysis for the research (Yin 2003; Creswell 2009). In this study, the unit of analysis was the secondary school and its surrounding communities and parents. Within this, the sample of learners, teachers, parents and community members that participated in the research can be considered a sub-unit of analysis that is embedded within the case (Yin 2003).

A semi-structured interview process was used to explore the experiences of learners, teachers and community leaders regarding the participation and performance of learners in secondary schools. Major topics framing the interviews included the implementation of the programme, the impact (success and challenges) of the intervention on attendance, retention and progression of learners, as well as recommendations for improving the quality of education among learners.

Data Analysis

Measures of attendance, retention, educational performance and promotion were used to examine the impact of the intervention. Registers were kept for students in both the intervention and control schools to track attendance and retention. While registration records within schools were sourced to determine promotions, tests in English and Mathematics were also used both at the beginning of the intervention and at the end of the intervention in order to measure the educational achievements of the learners.

Interviews were transcribed, and codes were developed using the most common themes from the data (Glaser and Strauss 1967). The emerging themes were then refined by referring back to the theoretical framework adapted from Bronfenbrenner (1979) and subsequently used by Demi, Coleman-Jensen and Snyder (2010) to examine how the multiplicity of factors at individual, family and school levels interact to influence enrolments in a rural secondary school setting.

Impact of the Intervention

This section presents the results of the experimental design used to evaluate the SOFIE intervention, focusing on learner outcomes of retention (reducing dropout rates), promotion and attainment. The live interview transcripts cited to illustrate the intervention are marked by a code to indicate the region from where the response emerged (such as FHS, SRV or MNS). The section also

discusses additional benefits and anticipated outcomes from participants' involvement in the intervention. This is premised on the view that retention is just as important as opening up access. Key outcomes of the intervention were the reduction in dropout rates and the improvement of progression rates.

Participation and retention rates

The retention and participation rates of students were monitored by recording the dropout and absenteeism of students in both intervention and control schools, with special attention and follow-up maintained with SOFIE club members. Table 2 summarizes the dropout rates and absenteeism rates in intervention and control schools during the year of the intervention.

Table 2: Impact on Retention and Progression

ID:/School status		S:/Dropped out from school	S:/Absenteeism
Intervention	Mean	1.9725	.0065
	N	1529	1529
	Std. Deviation	.16350	.14457
Control	Mean	1.9736	.0030
	N	1324	1324
	Std. Deviation	.16049	.10993
Total	Mean	1.9730	.0049
	N	2853	2853
	Std. Deviation	.16208	.12964

No differences were found regarding the dropout rates and the absenteeism rates between learners in intervention and control schools, with absenteeism rates being somewhat higher in the intervention schools. However, it was notable that while no statistical difference could be found between the groups, club members reported virtually no absenteeism during the year of intervention.

Admittedly, the intervention had not yet made any significant difference in the participation and retention rates among students. In some communities, the failure was attributed to the persistent poverty and lack of awareness among parents. Therefore, one community member suggested increased campaigns:

[ext] Parents here really need sensitizing, especially around the problems of children who are being taken out of school to look after animals or tend the fields. As community members, we should be campaigning more and holding meetings with parents about their children (SRV).
[ends]

The statement above was confirmed by other community members in the region (SRV) who cited the inflexibility of the curriculum of schools as a particular constraint in situations where children miss school for reasons such as those highlighted by the community member and cultural practices such as initiation schools. Moreover, although clearly not across the whole intervention, there were reports of some improved participation rates even among the vulnerable, where SOFIE had successfully implemented monitoring and support structures. Teachers across the different regions described how the wrap-around feature of the study guides enabled flexible learning even around rural practices and the growing socio-economic deterioration in rural areas, which are disrupting the participation of learners in schools.

Progression and Repetitions

Data from the intervention and control schools were collected on the students' repetition rates (in Form B) and their progression to the next grade (Form C). Table 3 summarizes the findings.

Table 3: Impact on repetition and progression

		S:/repeated Form B in 2009		Total
		Repeated	Progressed	
ID :/School status	Intervention	77	1,452	1,529
	Control	60	1,264	1,324
Total		137	2,716	2,853

A lower proportion of learners progressed from Form B to Form C in the intervention schools (94.96 per cent) than in the control schools (95.47 per cent). 'However, within the intervention schools, virtually all the students (134 out of 135 or 99.26 per cent) who participated in the SOFIE clubs, and thus benefitted from the full circle of support, progressed to Form C, while 2,581 (95 per cent) of those who were not in the clubs progressed. Indeed, while there was no difference in both repetition rates and progression to Form C between intervention and control schools overall, SOFIE club members repeated significantly less often and progressed significantly better than non-club members ($p = 0.05$). As will be indicated later, it does appear that the monitoring of students – and particularly showing care and interest in the well-being of SOFIE club members – had a significant impact on their progression.

When asked about what made the difference in the progression rates since the intervention, members explained that attention being paid to the well-being of orphans and vulnerable children had resulted in students feeling more cared for in the intervention schools. According to one principal, 'the teachers who were trained in psychosocial support have really become very good at talking to these teenagers' (MNS). This was confirmed by a story told by another community member who described how a teacher enquired about one double-orphan who was not attending school and then the teacher found out that he was living with a grandmother who was unable to monitor the child's attendance closely enough. Community members then assisted the grandmother and the school in following up on the child's attendance, and her attendance improved. The community member explains further:

[ext] Most of the children here live with grandparents who do not have capacity to support the children. So, the link between the schools and homes was not easy (before) because teachers are so busy (MNS). [ends]

Just as with the increased awareness among teachers and the attitude that it is their business to follow up on children's well-being, greater coherence was achieved in this community in the monitoring of children at risk of dropping out of school. Accordingly, another community member described this coherence as follows:

[ext] The community around this school has benefitted from SOFIE in that they also have become aware of the situation of their children and there is now a better spirit of collaboration and monitoring of children's behaviour (FHS). [ends]

Although statistically significant, the success was not however yet universal. For example, the researcher learned of a single orphan whose mother had left for South Africa to look for work; the orphan disappeared from the care of her aunt and dropped out of school completely. However, both parents and community members reported increased awareness and interest regarding the well-being of children as a result of the intervention. One teacher reported how she had noted improved awareness of social issues amongst her students, a change she attributed to the readers who ‘gave children exposure to a lot of important social issues around HIV, pregnancy and drugs’, thus raising their resilience levels (FHS). One community member contended that the approach of SOFIE was relevant to initiatives her community had started in order to follow up on orphans and vulnerable children (MNS).

Student Achievements

Student achievements in English were measured both pre-intervention and post-intervention. The results of these are summarized in Table 4.

Table 4: Impact on Student Achievements

ID:/School status		SCR:/ English score	SCR:/ Maths score	PostEng	PostMath
Intervention	Mean	50.8641	50.9363	50.3757	53.2208
	N	1052	1051	905	908
	Std. Deviation	13.54028	19.15357	18.85115	20.63540
Control	Mean	49.1235	49.4849	49.4881	46.7142
	N	891	892	628	628
	Std. Deviation	11.78470	18.01093	15.26970	17.71181
Total	Mean	50.0659	50.2699	50.0121	50.5605
	N	1943	1943	1533	1536
	Std. Deviation	12.79147	18.64699	17.47315	19.74809

No significant difference could be found in the performance of the students during post-intervention in both English and Mathematics. Nevertheless, there was a significant difference in the performance between the intervention group and the control group in the post-intervention mathematics scores ($p = 0.05$). During the post-intervention meeting, teachers in intervention schools across all regions reported that the mathematics study guides, which provided alternative ways of conceptualizing mathematics concepts, assisted them as well as their students. One mathematics teacher interviewed on the impact of the project singled out the usefulness of the mathematics study:

[ext]The study guides were able to mitigate the extremely negative attitudes that persist towards mathematics amongst the students and became additional reference materials for the teachers in the mathematics teacher's school (FHS). [ends]

One student traced the usefulness of the mathematics study guides back to the wrap-around elements which provided students with a more guided approach to tackling the exercises in the prescribed textbooks, giving students a more flexible opportunity to work even in the absence of proper teacher guidance (MNS). Implemented with the assistance of the Lesotho Science and Mathematics Teachers Association (LSMTA), buy-in was more evident in the case of Mathematics than English, and qualitative feedback from SOFIE teachers confirmed the value teachers attached to these materials. While it was not in the design of the project to implement the intervention through the teacher association as closely as happened in the case of mathematics, it was an important finding to learn just how critical such structures can be in enhancing buy-in. On the other hand, SOFIE teachers reported rather poor collaboration from their English teacher colleagues, which resulted in lack of support for SOFIE club members in the English learning aspect of the intervention.

Challenges

There were challenges that emerged during the implementation of what was a well-intended intervention, often revealing the socio-economic contexts affecting educational initiatives in Lesotho. Data collected through informants, including teachers and community leaders, highlighted the uneven terrain in developing countries and the scale of implementation intricacies. This shows that context cannot be regarded as a mere 'inert backdrop' but must be seen as playing 'an active role in shaping the outcomes of the intervention' (John and Rule 2004: 174).

The first major challenge involved the selection of learners who would participate in the SOFIE club which was allocating a very modest school-in-a-bag intervention package. The criteria for this selection were firstly that the child should be a double-orphan and secondly that such child should be extremely poor, based on information supplied by teachers and verified by community leaders. Funding only allowed for a maximum of twenty participants per school, and this appeared to be a reasonable number to manage in a club. In some schools, the scale of poverty and HIV/AIDS was so massive that the number of eligible learners was more than double than what could be afforded. In the words of a teacher from a large school in a low-altitude semi-urban area, FPE has increased enrolments among orphaned and vulnerable children (OVCs) in particular. The teacher said:

[ext] There are just so many OVCs in Form B these days, especially after the introduction of FPE, that it is very difficult to decide who not to recommend for the club (FHS). [ends]

Therefore, whilst the logic of selecting *in* double-orphans who were significantly vulnerable appeared to make sense methodologically, the first major challenge the team experienced was how to select *out* other OVC learners who were extremely needy of such an intervention because of the impact of poverty and HIV/AIDS. This situation presented challenges not just at a methodological level but also a serious ethical dilemma of designing an intervention that seeks to overcome inequality and yet practically excludes needy learners.

The challenges increased with implementation, first with teachers struggling to find a means of making time to give attention to the clubs. A few teachers appreciated the concept of providing support to OVCs and gave the clubs their attention, but the clubs were generally run with very little assistance from the teachers because of the curriculum demands of secondary schools on teachers. Moreover, the problem was compounded by the fact that the children themselves, especially the OVCs, struggled to find time to participate meaningfully.

Other more subtle challenges included the issue that many of the orphaned boys were much older than the rest of the learners and were rather embarrassed to be singing and playing games with younger learners:

[ext] And for the girls, it's very difficult because they often have to rush home to attend to family chores...and avoid walking home late because of high rates of abuses by herdboys (MNS). [ends]

There were also reports of a growing incidence of girls – more so than boys – being called on to look after sick members of families and siblings as they grow older, according to one chief (SRV). Additionally, in poor families, girls were reported by community members to be more likely to accede to early marriage in an attempt to escape the increasing burden of poverty at home.

Discussion and Concluding Remarks

Measuring for the overall impact of the intervention has produced some rather mixed results but notable possibilities. In particular, creating circles of support enabled what emerged as important *ecologies of sustainable support for the retention of learners and particularly their progression in rural areas*. The most positive results were found in the use of mathematics study guides, where an improvement was notable in the intervention schools. Evidently, open and flexible modes of delivery can complement circles of support and thus sustain participation and achievement in notoriously unpopular subjects such as Mathematics. In terms of dropout and progression rates, it was encouraging that more learners in the intervention schools progressed to the next level (Form C or Grade 10) than those in the control schools. In particular, control schools appeared to lose more learners than intervention schools. This indicates that monitoring processes and follow-ups on children were beginning to impact positively on the retention and progression of learners. However, it appears that the effect had not yet become significant and that many constraints were still frustrating the implementation during the final evaluation stage. Most notable were the poor levels of cooperation between teachers and that the context of secondary schools makes it very difficult to implement strategies for the reduction of dropout rates and the improvement of performance.

Finally, it has become evident that in the current socio-economic context, more needs to be done to ensure that gains made towards the Millennium Development Goals (MDGs) are not set back in many developing countries as a result of the impact of HIV/AIDS (Kadzamira et al. 2001). There is therefore a clear call for development partners not to hold back on aid to developing countries and for developing countries not to sacrifice spending on education even when resources diminish. The imperative for Lesotho to develop a policy framework for the inclusion of marginalized children, **particularly at secondary school**, needs to be urgently addressed. Commendable initiatives from the Government of Lesotho and local role players in schools and communities need to be harmonized by policy.

This study has highlighted a number of inequalities and disadvantages that frustrate progress towards the MDGs. Some of these can be addressed at a macro-level, but education can no longer be business as usual; that being the

case, there is a great deal that clearly needs to change at school-level. Schools need to become more aware of some of the explicit and subtle exclusionary practices. Removal of fees is not yet a viable option for many schools, although more regulation could assist in reducing the extent of exclusion as a result of very high fees in some cases (Lerotholi 2001). Nonetheless, it is clear that practices within schools could play a more significant role. Awareness about the situation of orphaned and vulnerable children and how to monitor and support their progress was one of the initiatives of the SOFIE project.

The challenges at secondary level regarding the monitoring and support of children are massive because unlike at primary level, some secondary school teachers are involved, and collaboration is required. It requires a different mindset from the traditional role played by class teachers. The traditional practice of class teachers needs to evolve into a more professional and caring support practice. A framework where class teachers are as critical to the system as heads of departments needs to be set up; an allowance for the exercise is not an excessive requirement in order for them to take it more seriously. This study has indicated that the current format of class teachers is not effective in supporting or monitoring attendance and performance. A change in mindset among teachers is also needed. Schools need to consider more affordable interventions that are grounded in current philosophies of teaching and learning. ODFL approaches are not just complementary to conventional teaching but are also very much part of the current thinking in meaningful teaching and learning. ODFL can be used to enhance teaching approaches by increasing learner participation and meaningful learning.

The interventions in schools were challenged by logistical constraints such as the late arrival of materials. But they demonstrated the potential to improve learning even in the most notorious subject such as Mathematics. The demonstrated potential to improve mathematics depended more on learners supporting one another than on the effort of teachers. A key issue emerging is the importance of creating ecologies of support for supporting participation and improving achievement through circles of support, especially within the much-disrupted rural contexts. With minimal supervision, it can be concluded that even the English skills of learners would benefit from such clubs. The clubs further provide an opportunity for these children to engage in other activities that are relevant to the developmental stage. Teenagers are at a stage of discovery and social exploration, and in some of the clubs, they were able to engage in activities such as drama and debates. This affordable form of intervention that draws mostly on learner-to-learner interaction and teacher supervision – a cycle of support – clearly has huge potential for rural education in Lesotho and other countries experiencing similar disruptions to learning. Part of the

'big push' towards the MDGs will require that stakeholders in the field, such as teachers and health workers, receive support towards introducing and sustaining low-cost initiatives to address social inequalities and marginalization. Therefore, even with issues of uneven buy-in and the major socio-economic challenges affecting participation rates across the country, open and flexible approaches – implemented with a circle of support – have the potential to improve retention and progression in the rural areas, even positively affecting performance in notoriously difficult areas of study such as mathematics.

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Note

1. Thakaneng is a Sesotho practice whereby boys and girls are accommodated separately overnight in order to be socialized around cultural norms, presided over by an elder.

References

- Atkin, C., 2003, 'Rural communities: human and symbolic capital development, fields apart', *Compare* 33 (4), 507–18.
- Bandura, A., 2001, 'Social cognitive theory: an agentic perspective', *Annual Review of Psychology* 52 (1): 1–26.
- Bronfenbrenner, U., 1976, 'The experimental ecology of education', *Educational Researcher* 5 (9): 5–15.
- Bronfenbrenner, U., 1979, *The Ecology of Human Development: Experiments by Nature and Design*, Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. and Morris, P.A., 1998, 'The Ecology of Developmental Processes', in W. Damon and R.M. Lerner, eds, *Handbook of Child Psychology, Volume 1: Theoretical Models of Human Development*, New York: Wiley.
- Bureau of Statistics, 2002, *Lesotho Core Welfare Indicators Questionnaire Survey 2002*, Maseru: Ministry of Finance and Development Planning.
- Clark, C. and Zimmerman, G., 2000, 'Greater understanding of the local community: a community-based education programme for rural schools', *Art Education* 53 (2): 33–39.
- Conger, R.D. and Elder, G.H., 1994, *Families in Troubled Times: Adapting to Change in Rural America*, New York: Aldine de Gruyter.
- Creswell, J., 2009, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, London: Sage.

- Davis-Keane, P.E., 2005, 'The influence of parent education and family income on child achievement: the indirect role of parental expectations and the home environment', *Journal of Family Psychology* 19 (2): 294–304.
- Demi, M., Coleman-Jensen, A. and Snyder, A., 2010, 'The rural context and post-secondary school enrollment: an ecological systems approach', *Journal of Research in Rural Education* 25 (7). Retrieved from <http://jrre.psu.edu/articles/25-7.pdf>.
- Glaser, B. and Strauss, A., 1967, *The Discovery of Grounded Theory*, London: Weidenfeld and Nicolson.
- John, V. and Rule, P., 2004, 'Shifting ground: making sense of context in examining HIV/AIDS and schooling', *Journal of Education* 38: 165–86.
- Kadzamira, E.C., Banda, D.M., Kamlongera, A. and Swainson, N., 2001, *The Impact of HIV/AIDS on Primary and Secondary Schooling in Malawi: Developing a Comprehensive Strategic Response*, Lilongwe: Ministry of Education Science and Technology, University of Malawi.
- Kimane, I. and Mturi, A.J., 2001, *Rapidly Assessing Child Labour in Lesotho*. Report submitted to the Government of Lesotho and UNICEF, Maseru.
- Lerotholi, L.M., 2001, *Tuition Fees in Primary and Secondary Education in Lesotho: The Levels and Implications for Access, Equity and Efficiency*, Paris.
- Mahlomaholo, M.G., 2012, 'Social communication towards sustainable physical learning environments', *Journal for Communication and Information Impact* 17: 3–20, Special issue.
- Melby, J.N., Fang, S., Wickrama, K.A.S., Conger, R.D. and Conger, K.J., 2008, 'Adolescent family experiences and educational attainment during early adulthood', *Developmental Psychology* 44 (6): 1519–536.
- Merriam, S., 1988, *Case Study Research in Education: A Qualitative Approach*, San Francisco: Jossey-Bass.
- Ministry of Education and Training, 2012, *Education Statistical Bulletin 2012*, Maseru: Government of Lesotho.
- Nyabanyaba, T., 2009, 'Factors influencing access and retention in secondary schooling for orphaned and vulnerable children and young people: case studies from high HIV and AIDS prevalent contexts in Lesotho, SOFIE opening up Access Series, No. 7. Retrieved from <http://sofie.ioe.ac.uk/publications>.
- Nyabanyaba, T., 2010, 'Developing, implementing and evaluating the SOFIE intervention package to support educational access for vulnerable students'. Retrieved from <http://sofie.ioe.ac.uk/publications>.
- Pridmore, P., 2009, 'SOFIE School-based intervention', *SOFIE Newsletter* 3: 2–3. Retrieved from <http://sofie.ioe.ac.uk/publications>.
- Pridmore, P. and Jere, C., 2011, 'Education and social justice in challenging times', *Compare* 41 (4): 523–31.

- Pridmore, P. and Yates, C., 2006, 'The role of open, distance and flexible learning (ODFL) in HIV/AIDS prevention and mitigation for affected youth in South Africa and Mozambique', *Researching the Issues* 61, London: DFID.
- Scaramella, L.V. and Keyes, A.W., 2001, 'The social contextual approach and rural adolescent substance use: implications for prevention in rural settings', *Clinical Child and Family Psychology Review* 40 (3): 231–51.
- Smiley, A.C., 2011, 'Redefining vulnerability: orphanhood, educational participation, and agency among secondary school learners in Lesotho', unpublished doctoral thesis, Columbia University.
- Tsotetsi, C., 2013, 'Implementation of professional teacher development policies: a continuing education perspective', unpublished doctoral thesis, University of the Free State.
- UNICEF, 2007, *The Humanitarian Action Report 2007*, New York: UNICEF.
- Unterhalter, E., Hoppers, C. and Hoppers, W., 2000, 'The Elusiveness of Integration: Policy Discourses on Open and Distance Learning in the 1990s', in C. Yates and J. Bradley, eds, *World Review of Distance Education and Open Learning*. Volume 12, London: Routledge Falmer.
- Yin, R., 2003, *Case Study Research: Design and Methods* (3rd edition), Thousand Oaks, CA: Sage.

