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Contributions and Constraints to the Implementation of Inclusive Education in Lesotho

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This article reports on a study that investigated the extent to which central ministry policy initiatives result in large-scale educational change in developing countries. Specifically, Lesotho's policy of inclusive special education was examined as a case study. The study employed a multi-method approach to yield a large data-set. Results indicate that policy implementation was limited in both depth (the approaches to inclusive education in some schools) and breadth (the number of schools that have received training in inclusive education). Where implementation was present, perceived teacher knowledge and skill was a strong predictor of success and teachers had positive attitudes toward children with disabilities.

Keywords: Africa; disability; education; inclusion; Lesotho; policy

Introduction

One of the most perplexing issues facing education officials in any country is how to ensure that education policies promulgated at a central level actually shape practice in intended ways at the school and classroom level (Chapman, Mählck, & Smulders, 1997). Policy is of little value if it does not yield the intended impact on practice. While considerable research documents the failure of school-level reform when national policy frameworks are not in place, national policy without effective strategies for implementation may be equally ineffective (Crouch, Healey, & DeStefano, 1997; Fullan, 2001). Yet, the loosely coupled nature of education systems in many developing countries often makes effective implementation problematic (Moore & Chapman, 2003; Nagel & Snyder, 1989). Consequently, the search for how central education ministries, with limited resources and limited contact with schools, can effectively introduce and promote policies intended to change school-level and classroom-level practice is of considerable interest to educational planners. To that end, this study investigated the extent to which efforts to implement national policy aimed at introducing inclusive education practices in Lesotho actually led to more inclusive practices at the national, district, and classroom level.

Conceptual Framework

Policy serves to legitimise, sanction, encourage, and disseminate desired practice. Perhaps the most common policy implementation strategy employed by central education ministries is to announce a policy, offer training to a limited number of teachers (or other relevant personnel) to enable implementation on a pilot basis, and hope to benefit from a demonstration effect in which other schools learn by example and are motivated to adopt the policy,

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either from a desire to comply with the new policy or because they see the merit of the new practice.

From the framework of organisational theory, policy implementation can be viewed as a principal-agent problem (Galal, 2003; World Bank, 2005). The principal (e.g. politician, ministry official) is interested in a particular outcome (such as inclusive education or quality instruction) but that official has to rely on an agent (teacher or other school official) to obtain these outcomes. To encourage implementation, central level officials have to rely on incentives that reward teachers for compliance, sanctions for non-compliance, and monitoring systems to know what is actually happening. As noted by Sabatier and Mazmanian (1979), however, policy implementation is rarely simple because implementers often have individualised notions of what a policy means.

One reason for teacher resistance or misunderstanding of innovations (in this case, implementation of a new national policy) is captured in the "worklife complexity hypothesis" (Chapman et al., 1997). By introducing policy and instructional practices that alter the activities of the classroom, instructional interventions may seriously impinge on the work lives of teachers. Virtually all innovations increase the complexity of teachers' work lives by expecting them to learn new content, teach in new ways, or use different instructional materials. The increased complexity often leads to teacher resistance of the innovations (Chapman et al., 1997; Spillane, Reiser, & Reimer, 2002). This resistance can be met either by decreasing the level of complexity of the intervention or by increasing the incentives so that teachers believe their extra effort is being rewarded (Chapman et al., 1997).

Complexity can be altered either by simplifying the intervention or by providing teachers with sufficient training that allows them to master, and feel confident that they have mastered, the new approach being advocated. However, changing complexity may also have a deleterious effect on the intended outcomes of policy initiatives by making the reform so simple that nothing really changes (Fullan, 2001). If the intended practices cannot be simplified without risking the very characteristics they were designed to introduce, then raising incentives offers a more promising approach. Incentives can take the form of financial compensation or lower-cost alternatives, such as professional recognition, special preference in future assignments, or other improvements to teachers' working conditions.

No simplification of tasks or amount of incentive, however, will aid school personnel who do not understand the behavioural requirements of the policy. An important aspect of policy implementation is to help teachers understand exactly what is expected of them (Hall & Hord, 2001). In addition, support for implementers must be continuous. Research indicates that one-off workshops with little or no follow-on support generally do not lead to widespread implementation (Asian Development Bank, 1999; Fullan & Stiegelbauer, 1993). Short-term training often fails to meet stated objectives because teachers may lack a clear image of what implementation will look like in their professional schema (Spillane et al., 2002) and that teachers who participate in the same training may have radically different interpretations of the training material (Bax, 2002).

While teacher training is an essential component of launching a policy with implications for classroom practice, many policy-makers gamble that, once launched, those practices will be more widely adopted. Their hope is that demonstrating the effectiveness of an intervention on a small scale, but in a way that is highly visible to a wider audience, will create a local demand for wider implementation. Planning for the range of individualised implementation efforts rarely goes beyond such hopes (Sabatier & Mazmanian, 1979).

With both the effectiveness of short-term training strategies and the spread-effect of demonstration projects open to question, there is considerable interest in more clearly understanding how central ministries of education can promote policy implementation in a

way that actually influences pedagogical practice at the classroom level. To that end, this study was conducted as a study of the implementation of inclusive special education policy in Lesotho.

Inclusive Education in Lesotho

Lesotho is a small nation surrounded by the Republic of South Africa. Its surface area is about 30,000 square kilometres (World Bank, 1999). Lesotho's first King (Moshoeshoe I) was primarily responsible for its modern education system. In the mid-1800s, Moshoeshoe worked with French missionaries and let them create outposts in the land then called Basutoland. Missionaries served as advisors and liaisons for Moshoeshoe, and set up schools throughout Lesotho (Lye & Murray, 1980). The pre-independence schools built by French (and later British) missionaries set the foundation for modern schooling in Lesotho today (Ferguson, 1990; Muzvidzwa & Seotsanyana, 2002). In contemporary Lesotho, many schools are still managed by religious groups, although teachers are paid by a central Ministry of Education. Because of this, all schools must follow central Ministry policy.

The history of policy-driven inclusive special education in Lesotho probably began with a proclamation from a civil society organisation. In 1987, King Moshoeshoe II's charitable social organisation *Hlokomela Bana* (Care for People) called for a national discussion about how to educate its children with disabilities. Shortly after, the Ministry of Education hired an outside consultant to evaluate special education options in Lesotho. Csapo (1987), the author of the study, recommended that Lesotho should move toward inclusive education because it was cost-effective (Lesotho had no real infrastructure for additional special schools at the time) and fit into Lesotho's cultural framework of extended family and caretaking of all children. Two years later, policy was put in place based on these recommendations.

Inclusive education, as understood in Lesotho, is a practice whereby students with physical, sensory, or intellectual impairments that affect learning (i.e. students with disabilities) are educated in regular schools. Lesotho's 1989 policy was somewhat radical, preceding universal declarations such as Education for All (UNESCO, 1990) and the Salamanca Statement on Special Needs Education (UNESCO, 1996). Lesotho's neighbour, the Republic of South Africa, adopted an inclusive education policy only after the demise of apartheid (Republic of South Africa Department of Education, 2003). Botswana (a country in which many people from Lesotho share cultural and linguistic roots) has a balanced approach to special education by keeping special schools for students with disabilities that were introduced by missionaries and providing more inclusive approaches in government schools (Abosi, 2000).

Once Lesotho's policy was in place, a feasibility study was conducted by an external consultant from Zimbabwe and a local education official (Mariga & Phachaka, 1993). The authors of the study concluded that providing services to children with disabilities in general education classrooms was feasible, and the Ministry of Education followed with policy and a plan of action. The original diffusion plan for inclusive education training (based on data from the feasibility study) called for a Special Education Unit to train all teachers in 10 pilot primary schools in inclusive special education practices during school breaks. The selection of 10 pilot schools was deemed a cost-effective method of creating a cadre of schools that could act as demonstration schools and work with neighbouring schools on implementation. Mariga and Phachaka (1993) noted that pedagogical practices were more amenable to inclusive education in the primary curriculum at the time of this

reform, and thus made primary schools the main target for training. Lesotho's Special Education Unit planned to add secondary and post-secondary schools to the plan in future activities (Mariga & Phachaka, 1993). Training of teachers in schools continued into the 1990s, when external evaluators Peter Mittler and Penny Platt (1996) recommended that the training program continue by adding 10 new schools as "registered" special education schools per year.

In 1996, the Lesotho College of Education (LCE) also employed two foreign aid workers to introduce inclusive education into the existing "professional studies" pedagogical curriculum. At this time, the LCE also became autonomous from the Ministry of Education and its units. Therefore, the connection between the LCE and inclusive education was based on prior agreements between the LCE and the Ministry of Education. The leadership of the LCE was then, and continues to be, committed to inclusive education efforts, but has lacked the human resources it needs to promote its program. One reason is because the foreign aid workers were supposed to be replaced in 1999 by a Lesotho national faculty member who studied in the United Kingdom from 1996 to 1998, but the arrangement did not come to fruition. From the period of 1998 to 2004, inclusive special education remained a component in the LCE, but there were no formally trained lecturers teaching the subject matter. In 2004, a lecturer who has extensive training in special education began teaching at the LCE, reviving the inclusive education component.

This study investigated centralised training and the extent to which inclusive education practices were employed in both original and newly Special Education Unit-registered schools following initial implementation. The study addressed two questions: (1) to what extent did national policy Lesotho influence inclusive education pedagogy? and (2) what factors fostered or constrained implementation? For this study, "implementation" was defined by local norms, and included the following characteristics: social inclusion of students with disabilities, the ability of teachers to differentiate instruction, educational progress of students with disabilities, and students with disabilities who are welcomed members in general education classes (Mariga & Phachaka, 1993). Appendix 1 provides a copy of the questionnaire used in the study.

Research Methods

Overview

This research took place in 2005 in three phases. Over the course of the three phases, different participants were involved, and different measures, procedures, and analyses were used. The three-phase approach was intended to provide a rich data-set that included information from national, district, school, and classroom levels of implementation.

Participants

Four Ministry of Education officials were interviewed in Phase One. Participants included the current and the retired Chief Inspectors for Special Education and two of four current Division Heads in Lesotho's Special Education Unit. At the time of research, these participants composed all of the national-level special education personnel because two Ministry-level posts were vacant.

Twenty teachers in two schools (one pilot school in the lowlands and one newly registered school in the highlands) were interviewed in Phase Two (n = 10 per school). The 20 teachers selected were those who had training in inclusive special education (either from Ministry officials or via in-school training). One of the 10 teachers selected in each school

was the head teacher. The two schools were selected by Special Education Unit officials as informative research sites based on their record of including students with disabilities, the progress students with disabilities were making, and reports from teachers and the community about the social integration of students with disabilities. The rationale for this selection was that, if Lesotho's teachers were implementing inclusive education at all, it would be most apparent in these schools. In order to represent the diversity of registered schools, one of these schools was located in Lesotho's lowlands and had been one of the original pilot schools; the other school was located in the highlands and had only been registered as a special education school for four years.

In Phase Three, a sample of 130 teachers was selected from 21 of the 82 schools (in nine out of Lesotho's 10 districts) in which teachers had received Ministry training in inclusive education approaches. The sample of 21 schools was a representative sample of the population of Ministry-trained schools. Ten of these schools were selected because they participated in the original pilot program that trained teachers in inclusive education as part of the 1993 launch of the national policy. These schools had the greatest opportunity and most experience in implementing the national policy. The other 11 schools became "registered" after the program evaluation in 1996 (Mittler & Platt, 1996). In addition, Special Education Unit staff expressed interest in whether geographical factors influenced implementation; therefore, 10 schools were in the lowland districts (n = 65 teachers) and 11 schools were in the highlands (n = 65 teachers).

Measures and Procedure

In Phase One, interviews were conducted with Ministry of Education officials to collect information on the history of inclusive education policy in Lesotho, government plans for disseminating information about the policy, and central government support for these implementation efforts. Interviews followed a semi-structured protocol that collected information on the extent that teachers believed they had the knowledge, attitudes, and resources to implement inclusive education. Each interview lasted between 45 minutes and one hour. All interviews were conducted in English. Interview questions are found in Appendix 2.

In Phase Two, in-depth interviews and classroom observations were conducted with 20 teachers (including two head teachers). The purpose of the interviews was to gather in-depth information on the teachers' participation in training, their assessment of the problems in implementing inclusive education, their views about its impact on students, the attitudes of their colleagues to inclusive education, and the support they had received in implementing this policy. Interviews were conducted in English with Sesotho translation as necessary. Interview items are presented in Appendix 3.

In addition to these interviews, the same 20 teachers were observed teaching a lesson. This allowed information to be collected for the purpose of understanding how teachers implemented the inclusive education policy in their classrooms. There was not a specific protocol used for observations, but the first author observed all lessons in the same way. First, direct observations of events were noted chronologically (e.g. the teacher walks to the board and says "today we will discuss multiplication of double-digit numbers"). Interspersed throughout the direct observations were observer comments. These comments were separated by "O.C." in field notes and were thoughts or comments that came to the researcher during field observations. These comments were often related to pedagogy or general classroom environment. Any questions that arose from observations were immediately clarified after the lesson.

In Phase Three, teachers' questionnaire responses were collected on a Likert-type scale (one = completely false to 10 = completely true). Questionnaires were administered individually to help minimise validity concerns that can arise when there are cultural or linguistic differences between the creator of a questionnaire and research participants (Fetterman, 1998). That is, when administering questionnaires, the first author of this article translated any English phrases or vocabulary into Sesotho for teachers who were unsure of the meaning of the items. Through the questionnaire, data were collected on teachers' perceived implementation of the special education policy, teachers' perceived knowledge about and skill in implementing the national policy concerning inclusive education, teachers' beliefs about the inclusive education policy, and the perceived adequacy of resources available to teachers to support policy implementation. The survey administered had four main "strands" of items to which teachers could respond. These strands of items were: implementation (how teachers perceived they were implementing inclusive education policy); attitudes (how teachers felt about inclusive education and students with disabilities); knowledge/skill (teachers' perceived ability to teach in inclusive environments); and resources (teachers' perceived level of resource availability to teach in inclusive environments). Each strand contained five items (with accompanying sub-questions where appropriate).

Analysis

Qualitative theme and content analyses for Phases One and Two were conducted using qualitative research analysis software (QSR, 2002). All interviews were transcribed and read for content. All transcriptions were then entered into a qualitative research software program. Once uploaded, transcripts were read, sentence by sentence, for content and meaning. For these analyses, reactions from interviewees and field notes from observations were given one-word or two-word codes. Codes reflected the main meaning of a participants' response to a question or an event in the classroom. For example, when Ministry officials described the pilot program of training teachers in inclusive education strategies, paragraphs were coded "pilot". Paragraphs from transcripts and field notes were often coded more than once (e.g., paragraphs coded "pilot" would also have descriptors such as "strategies" or "attitudes" that described perceptions or actions in the program). After all of the transcripts and field notes were assigned codes, the codes were examined to determine whether major themes existed in the qualitative data. As part of this process, interpretations were reviewed by a team of senior researchers assigned as dissertation advisors to the first author of this article.

Phase Three of the research yielded quantitative data. For the questionnaire data, descriptive and correlation statistics were computed for teacher data using data analysis software (SPSS, 2004). For each question and each "strand" of questions (i.e. implementation, attitudes, knowledge/skill, and resources), means and standard deviations were calculated. Mean scores from entire strands were calculated and analysis of variance (ANOVA) techniques were used to determine whether there were differences in teacher responses in pilot versus non-pilot schools and highland versus lowland schools.

Finally, regression analyses (Howell, 1999) were conducted to determine whether attitudes, perceived knowledge/skill, or perceived resources were predictors of inclusive education policy implementation (according to teachers' perceptions of their own work). For these calculations, the formula $Y' = a + b_1X_1 + b_2X_2 2 + b_3X_3$ (whereby Y = mean implementation scores, b_1 = attitude mean scores, b_2 = knowledge and skill mean scores, b_3 = resources mean scores) was used to examine the relationship between the dependent and independent variables.

Results

History of the Program as Reported in Interviews

Interviews with Ministry staff undertaken in Phase One yielded information about events and decisions made during policy formulation and initial implementation that continue to influence implementation of the inclusive education policy today. There was a high degree of consistency in the information and personal assessments provided by those interviewed.

At the time of policy adoption, the Ministry of Education Special Education Unit was staffed by only one person, a Director who had no special education background. The national policy at that time was focused narrowly on educational access to any kind of education for children with disabilities. It was only after Csapo's (1987) report and the Director's study tour to the United State that Lesotho opted for an integrated (and later inclusive) approach to educating students with disabilities. Following Mariga and Phachaka's staff visits to 318 primary schools to determine whether inclusive education was feasible (Mariga & Phachaka, 1993), they selected 10 schools for pilot implementation of the policy. The Special Education Unit intentionally selected schools that were amenable to policy implementation and those opposed to it. Their intention was to use these pilot schools as demonstration sites. The schools (and associated teacher training) were intended to be district models for inclusive education.

The Ministry team focused initial training on developing positive teacher attitudes toward disability and knowledge about disabilities (including informal screening techniques). The training was meant to circumvent attitudes that teachers held about disability that might curtail inclusion efforts. For example, some teachers worried that disabilities were contagious, which led them to have guarded interactions with students with disabilities. Consequently, attitude training and basic disability awareness constituted much of the early training curriculum. To this day, the training curriculum is largely unchanged.

Interview results indicated that official documents did not always capture serendipitous events that had lasting effects on policy and practice. For example, official documents (Csapo, 1987; Mariga & Phachaka, 1993) implied that integrated special education services were the primary educational goal in Lesotho as early as the early 1990s. Interviewees, however, noted that the coincidence of the first Director's study experience in the United States and teachers' attitudes that reflected their fear of students with disabilities reported by Mariga and Phachaka (1993) may have led more to the shaping of inclusive education policy in Lesotho than the intentions of "education for all" cited in government reports.

Early evaluations of the Ministry training program (Mittler & Platt, 1996) highlighted the positive outcomes of the direct training model employed by the Special Education Unit. However, interviewees noted that there had been both successes and challenges with the initial dissemination plan. For example, the Special Education Unit dissemination plan involved training teachers in all schools. Most new schools received biannual training for several consecutive days per training period. In addition, all District Resource Teachers (master teachers assigned to several schools) received training. This individual school training model taxed Ministry staff. One consequence of having to train teachers in all of the schools in the country was that the Special Education Unit stopped visiting the 10 pilot schools and struggled to meet the needs of the other schools where teachers had no training.

Attitudes toward Disability at the Local Level

Despite the struggles faced by the Special Education Unit, national policy and subsequent teacher training appeared to have a positive effect in changing some teachers' attitudes

toward students with disabilities. Teacher questionnaire data (Phase Three) indicated that most current teachers expressed a caring response toward students with disabilities. Interview data (Phase Two) corroborated the questionnaire data, and indicated that teachers expressed a protective attitude toward students with disabilities, often taking on the role of the students' guardian who wanted to shield the students from harm.

A second theme that emerged from both interview (Phase Two) and questionnaire (Phase Three) data was that teachers appeared to understand that disability affected daily functioning and that it was relatively common across the lifespan. In these respects, training seemed to have helped the teachers develop a better understanding and empathy for students with disabilities. In the words of one teacher interviewed in Phase Two:

> We really like special education … In the past we were not used to working with these children, but of late now we are very positive and we like that thing (inclusive education) in our schools because we have changed our behaviours toward the disabilities and we know that we too might get the disability … In the past we thought "now God is punishing you" but I think it's very good to work with these children. (Teacher Interview, Phase Two)

The training seemed to result in goodwill toward students in classrooms, but observational and interview data (Phase Two) indicated that the educational needs of students were inconsistently met.

Pedagogy

Interview results in Phase Two suggested that inclusive education policy had led to only some limited changes in teaching practice at the classroom level. Lesotho's teachers frequently exhibited a common set of pedagogical practices. A typical lesson consisted of: a lecture to the class, students independently completing or copying an assignment from the board, and students coming to the front of the room with their work for teacher feedback. During class time, teachers spent 10 to 20 minutes per period checking student work in student exercise books in order to provide feedback to students. Students with disabilities were taught individually at the discretion of the teacher, in whatever spare minutes the teacher had available. Teachers perceived their teaching methods to be effective for most students, but not conducive to the needs of learners with disabilities. Asked whether the above-noted pedagogical practice was appropriate for students who needed more time or could not respond to tasks in writing, one teacher's response captured the general professional approach to teaching: "[W]e always mark them right after writing. We want them not to forget what they have done. After writing we need to mark them." Such a comment spoke little to the promise of inclusive education, which is characterised by individualised student need and accommodation. Such a finding also does not support Miles' (1999) assertion that inclusive education will revolutionise teaching in developing countries because of its potential to encourage effective practices for *all* students. Rather, policy in Lesotho only appeared to create superficial changes in the classroom.

Most instruction of students with disabilities was not undertaken as a part of a coherent approach to teaching based on access and accommodation, but in teachers' spare time. For example, one teacher observed that, "it [teaching learners with special needs] is too much of work, because they need time. If you put them in your class, then on your spare time you take them, you give them their work." Another teacher agreed, saying "[w]e just give them the lessons in the large group. Then during our spare time we take those with disabilities alone in their group."

Teacher Training

Despite these shortcomings, the teachers may have been implementing the inclusive education policy according to the way they were trained. An examination of the training materials indicated that many of the Ministry training sessions focused on awareness and screening for possible disabilities. Many of Lesotho's teachers can adequately (informally) screen student academic and sensory functioning, and do care deeply for students with disabilities. However, the Ministry's training placed little emphasis on how differentiation or accommodation of diverse learners' needs can be met in large group settings. This lack of emphasis in training created a lack of emphasis in teaching.

Statistical Results: Predictors of Implementation

As noted above, perceived "implementation" was used as a dependent variable for which attitudes toward inclusive education, perceived knowledge/skill, and perceived resource availability were examined. Prior to regression analyses, however, ANOVAs were conducted to determine whether there was a statistically significant difference in perceived implementation, attitudes, perceived knowledge skill, and resources mean scores between highland versus lowland and pilot versus new (teachers more recently trained) schools. Results indicated no statistical difference between groups on factors of implementation, but statistical differences in knowledge/skills and resources for highland versus lowland teachers and knowledge/skill in terms of when teachers were trained. All scores representing teacher responses are discussed in detail below and are presented in Table 1. Table 1 reports teacher mean scores for each of the predictors in this study as well as statistical significance (including effect sizes) between types of teachers (teachers in highland versus lowland schools and teachers in pilot versus new schools).

Statistical Results: Teachers' attitudes about inclusive education

Teachers' perceived implementation of inclusive education yielded the highest mean scores of all strands of questions (mean = 8.06), indicating that teachers felt they were implementing

Table 1. Statistical results from attitudes, perceptions, knowledge and skill, resources, and implementation.

Item	Attitudes	Knowledge/skill	Resources	Implementation
Mean	7.59	7.44	4.30	8.06
Standard Deviation	1.53	1.62	1.67	1.22
F (highland/lowland)	2.12	4.26	8.98	1.03
p (highland/lowland)	0.15	0.04	0.00	0.31
Partial η^2 (highland/lowland)	NA	0.03	0.07	NA
F (years trained)	3.72	5.81	1.30	1.08
p (years trained)	0.16	0.02	0.26	0.30
Partial η^2 (years trained)	NA	0.04	NA	NA
F (interaction)	1.97	0.98	4.18	1.32
p (interaction)	0.16	0.32	0.04	0.25
Partial η^2 (interaction)	NA	NA	0.03	NA

Note: NA, not available.

inclusive education at a high level. One reason for this high level of implementation was teachers' attitudes about inclusive education and students with disabilities. Attitudes' prompts yielded a mean score of 7.59 (out of 10), indicating teachers had generally positive attitudes about inclusive education. ANOVA techniques were used to examine whether scores from the attitudes toward the Ministry of Education policy of inclusion were statistically significant different with respect to school location (highland versus lowland) and year of training (pilot versus new schools). Teachers across Lesotho related positive attitudes toward the Ministry of Education policy of inclusion. There were no statistically significant differences in the attitude scores of teachers of lowland or highland schools or pilot or new schools (see Table 1).

Knowledge/Skill Questions

Mean scores for teachers' perceived knowledge and skill levels relevant to inclusive education were also relatively high (mean = 7.044), indicating that teachers had relatively high opinions of how much they knew or could do relevant to inclusive practices. When comparing groups (highland versus lowland, pilot versus new schools), ANOVA results of scores on knowledge and skill items yielded unusual results. Typically, educators in Lesotho perceive lowland schools to have the most knowledgeable and skilled teachers. Because the lowlands are in closer proximity to the capital city, such perceptions may create biases against the perceived skills of rural (in this case, highland) teachers. When asked about knowledge and skills specific to inclusive education, however, scores related to perceptions of knowledge and skills from highland schools were statistically higher (see Table 1). Such a finding may indicate a shift in thinking about the capacity of highland schools or it may simply be explained by the fact that teachers may perceive their knowledge and skills to be better or worse than they actually are.

A second ANOVA also yielded statistically significant findings. In this study, teachers in the 10 original pilot schools scored higher on perceptions of knowledge and skill than their more recently trained colleagues, meaning that teachers that participated in the first Ministry of Education training sessions thought they knew more about inclusive education than those who had participated in the training more recently. This finding may be explained by the relative experience that pilot school teachers had compared with their more recently trained colleagues.

Although statistical significance was present, these findings may have little practical significance. We calculated effect sizes for the statistically significant results. Results indicate that the highland factor only has a 0.033 effect size, while the pilot school factor only has a 0.044 effect size. Such effect sizes are very small, indicating again that differences in perceived knowledge and skill may be relatively even across all of Lesotho (see Table 1).

Resources Questions

Questions relevant to resources received the lowest scores in the study (mean = 4.300), indicating that teachers perceived the resources they had available to them to be inadequate. Mean scores for "resources" items were very low and visibly different from both "knowledge and skill" and "attitudes toward policy" items. Within this strand of questions, ANOVA calculations determined that there was a statistically significant difference in "resources" mean scores between highland and lowland schools and between pilot and new schools. Results indicated that perceived resources in the lowlands and highlands differed significantly ($F = 8.981$, $\alpha = 0.003$). Teachers in highland schools reported greater satisfaction in

the amount of resources they had available compared with teachers in the lowlands. Such a finding may be because teachers in Lesotho's highlands typically have access to fewer resources and therefore feel more satisfactorily toward the amount of resources present, or that the gap between rich and poor schools in the lowlands is large, and teachers may be more aware of resource discrepancies in such areas. Despite statistical significance, the actual effect size of school location was low, indicating that satisfaction for resource availability may be more the same than different in Lesotho. Such similarities centred around relative dissatisfaction with availability of material and support (human) resources.

Correlation of Teacher Attitudes, Teacher Knowledge/Skill, or Teacher Resources with Policy Implementation

After initial analyses were conducted within strands of items, regression analyses were used to determine the extent to which attitudes, perceived knowledge and skill, or resource satisfaction were predictors of implementation. Overall, the combination of attitudes, perceived knowledge and skill, and perceived resources had a positive correlation with implementation ($r^2 = 0.290$, $p < 0.001$), meaning that—at least in the perceptions of teachers—attitudes, knowledge and skills, and resource availability predict policy implementation. For specific strands, however, only perceived knowledge and skills were significant predictors of implementation ($t = 6.148$, $p < 0.001$). Given the scale used in this study, for every one unit of gain of perceived policy implementation score, 0.53 of that unit could be predicted by perceived teacher knowledge and skill ($\beta = 0.53$). Table 2 demonstrates the overall regression data.

Qualitative Factors that Hinder and Promote Implementation

According to the teachers' responses in the interviews (Phase Two), there were several factors that hindered successful implementation of inclusive education policy. Teachers indicated that lack of time and materials constrained their ability to implement the national policy. In particular, they felt they needed materials to assess students with disabilities and adaptive equipment for students with more complex disabilities. However, while expressing a desire for more materials and help in their classroom, they were not always sure what they needed. Teachers were unable to name the materials they needed for the majority of students, a finding consistent with earlier research by Mittler and Platt (1996). For example, a teacher who had not had a blind student in her 18-year teaching career still stated that she wanted further training in Braille. Such responses indicate a desire to improve teaching, but a lack of awareness of strategies and resources that are most relevant in inclusive classrooms.

As noted above, Phase Three data indicated that only perceived teacher knowledge was a significant predictor of perceived policy implementation. Although Phase Two data

Table 2. Summary of regression analysis.

Model	F	R^2	Predictor	Beta	t	p
Regression	17.102	0.290				
			Constant		9.577	0.0005
			Knowledge	0.528	6.148	0.0003
			Attitudes	0.002	0.037	0.9700
			Resources	0.017	0.282	0.7780

indicated that that resources were lacking, the teachers' inability to note specific resources they needed or their requests for inappropriate resources may explain how data from Phase Two and Phase Three fit together. It is likely that the most knowledgeable and skilled teachers were those who were most adept at finding and creating materials that could reach a wide variety of students. In essence, there were few resources for all teachers, but some teachers knew how to work with limited resources better than others.

Policy-level Factors that Hinder and Promote Implementation

Despite efforts made by teachers to implement inclusive education policy, the interview (Phase Two) and questionnaire (Phase Three) data revealed why Lesotho's policy had struggled to take hold in the country 15 years after initiation. Efforts of teachers to implement inclusive education were hindered because of two major policy-level shortcomings. First, national-level policy-makers did not consider the intense needs of students with significant cognitive disabilities. Phase Two data indicated that teachers who were supportive of the inclusive education policy doubted whether it best served the needs of students with high levels of need. Teachers had some ability to teach most students with disabilities; however, as disabilities became more complex, teachers became more frustrated with their ability to help such students learn. In the words of one teacher: "The children with mental retardation … there are some that are hopeless that we cannot help, but those that we can help we do." Such frustration led teachers to desire an alternative placement for students with more challenging needs. Teachers observed that, to teach students with cognitive disabilities, either more resources were needed in the classroom or students should be provided with a separate educational setting.

Second, Phase Two interview respondents reported that persistence in implementing the inclusive education policy was dependent upon a personal willingness to implement the policy. There were no external incentives for teachers to continue to adhere to the policy after initial implementation. Closely related to the lack of incentives was a sense of inequity. As noted above, there are 82 registered schools in Lesotho and over 1000 non-registered schools. Teachers in registered schools appreciated the additional training they received, but wondered whether teachers in non-registered schools were working to include students with disabilities at all. When probed further about the type of compensation or recognition they should receive, some wanted additional salary while others expressed a desire for recognition of the additional training and skills that they possessed. Most teachers, however, saw inclusive education skills as important in furthering their careers and wanted official documentation of their training. One teacher, explaining why certification was important, observed: "If they say 'how much do you know about special education?' I can say 'I know a lot, I even have the certificate.'"

Discussion

Overall, adopting a national-level policy on inclusive education had an effect on shaping teacher behaviour in some schools in Lesotho. Attitudes of teachers were very positive toward students with disabilities, and teachers appreciated the training they received from the Ministry of Education. Teachers' perceptions of implementation were more likely when teachers' perceived knowledge and skill levels were high. Unfortunately, many teachers taught in ways that were not conducive to inclusive classrooms. Teachers who taught using traditional lecture approaches saw inclusive special education more as a supplementary service rather than a systemic approach. One contributing factor to the lack

of implementation may have been the narrow focus of official training. Teachers' attitudes and ability to screen for suspected disabilities demonstrated that training, on some level, was effective. The inability of most teachers to engage in pedagogical approaches such as differentiated instruction or curricular accommodations, however, demonstrated that more interventions may be needed. In addition, the scope of the centralised training (82 schools nationally) is not wide enough to yet create a critical mass of educators implementing policy.

The reality of centralised training efforts is that the number of schools that were registered was kept small out of necessity. The small but dedicated Special Education Unit has worked diligently to train a nation of teachers, one school at a time. Adding any more than a handful of schools per year would have prevented the Special Education Unit staff from having any administrative presence. Furthermore, there are no national level laws or incentives that encourage (or require) teachers to include students with disabilities, so the Ministry of Education limited in its ability to make inclusion a national priority.

The results of this study, in some respects, confirm what is already known: that centrally promulgated written policy does not, by itself, have the power to transform a nation's educational structure. Policy implementation needs significant infrastructure in order to be effective. Shortcomings in the Ministry of Education's infrastructure resulted in inadequate incentives and rewards, lack of accountability, and a lack of geographic dispersal. The most salient aspect of the centralised implementation effort was direct teacher training. Even with seemingly effective training, the limited follow-through left national staff inaccessible, dependent upon teachers' desire to implement, and left most of the country uninfluenced by inclusive education policy. Data indicate that knowledgeable teachers can implement a policy, but creating a nation of knowledgeable teachers is a significant challenge.

Way Forward

It is approaching 15 years since the policy of inclusive education was introduced in Lesotho. The extent to which Lesotho's inclusive education policy can be said to be effective depends, in large part, on which problem the government and Education Ministry's personnel were trying to solve. With a written policy in place, the Government could show it had subscribed to an international convention, demonstrated a commitment to wider school access, and embraced an inclusive approach to educational access. At a symbolic level, the policy was an important step in formalising and legitimising government concern for students with disabilities. Without the formal policy, it was unlikely that any change in the treatment of children with disabilities would have occurred. Yet, in practice, little did change at the local level. As a practical concern, the level of policy implementation was mixed. It did not have a national scope, and thus opportunities for transforming the educational experiences or circumstances of children with disabilities in a majority of Lesotho's schools were lost.

The principles of policy implementation are reasonably widely known and well understood among educational planners in Lesotho, as elsewhere. Despite widespread recognition among education planners of the need for sufficient incentives for policy implementation, adequate funding, regular monitoring of teacher performance, ongoing teacher training, considerations for special populations of students, systematic efforts to move to ever wider levels of implementation went largely unaddressed in Lesotho. From one perspective, this reflects the realities of governance in the developing world. Lesotho's Ministry of Education is drastically understaffed and strapped for resources, but has dutifully followed

recommendations made in previous evaluations of inclusive education efforts that the Special Education Unit train teachers in 10 schools per year.

It appears that the Lesotho Ministry of Education in its entirety, however, has not been able to fulfil the promise promoted by its policy of inclusive education. Inclusive education has been treated largely as an "add-on" program to be handled by a small number of personnel. At the local level, teachers view inclusive education in a similar way (i.e. students with disabilities are supported after class, as an "add on" to the teachers' work day). In reality, if the policy had a greater infrastructure (i.e. was better funded, better monitored, better entrenched in all mainstream teacher training institutions, and supported by law), positive results might occur for both students with disabilities and non-disabled learners. If every teacher in the country could differentiate their instruction, support behaviours positively, and assess student learning using a variety of approaches, inclusive education's reach would be far wider. In this case, however, as in many countries around the world, the language of policy itself had little effect on practice.

As a next step to address the broken link between policy and practice it may be to better utilise Lesotho's teacher training colleges, improve inclusive education monitoring efforts for all schools, and provide teachers with appropriate incentives for carrying on their work (such as recognition or certificates for additional training). It is unknown how such approaches might improve the flow from policy initiation to policy implementation, but it is clear that the current system of training a few teachers at a time has not had lasting effects across Lesotho's schools or changed pedagogy in its classrooms. Results such as those from this study are not unique to Lesotho, but point out the perennial challenges of implementing national policy at the local level. Inclusive education is an example of a policy initiative that is socially just, but requires significant commitment and knowledge to implement.

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Appendix 1. Questionnaire

Date: _____

1. School (District): _____
2. Standard [Grade] Taught: _____
3. Age_____
4. Number of Years Teaching_____
5. Gender (Check one): _____Male _____Female
6. Ethnicity (Checkone):_____Mosotho _____Ndebele _____Xhosa
   _____Other African _____Other Non-African
7. Country of Origin_____
8. Languages Spoken (check all that apply): _____Sesotho _____English
   _____Other (please specify)
9. Number of Years at Current School

Directions: Please select the number that most accurately reflects your feelings
Weighting Scale

Completely False *(Ha sa nete ho hang* ←								→ **Completely True** *(Ea nete kao fela)*	
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Example

1. I like sugar in my tea

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Implementation Questions

1. I practice inclusive education every day

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

[The other questions are listed here but have not been set out as presented in the Questionnaire]

2. In my classroom, students with disabilities are friends with non-disabled students.
   1 2 3 4 5 6 7 8 9 10
3. In my classroom I structure lessons so that children with different abilities can learn.
   1 2 3 4 5 6 7 8 9 10
4. Children with disabilities are welcome in my class.
   1 2 3 4 5 6 7 8 9 10
5. Children with disabilities make progress in my class.
   1 2 3 4 5 6 7 8 9 10

Knowledge/Skill Questions

1. I know how to teach children with disabilities.
   1 2 3 4 5 6 7 8 9 10
2. I know ways (assessments) for determining if a child has a disability.
   1 2 3 4 5 6 7 8 9 10
3. I do the following

3a. I keep track of student progress.
   1 2 3 4 5 6 7 8 9 10

3b. I allow students to work together on projects.
   1 2 3 4 5 6 7 8 9 10

3c. I teach using all of the senses.
   1 2 3 4 5 6 7 8 9 10

3d. I explain things in many different ways.
   1 2 3 4 5 6 7 8 9 10

3e. I use both English and Sesotho in my class.
   1 2 3 4 5 6 7 8 9 10

4. I have had training in inclusive education strategies.
   1 2 3 4 5 6 7 8 9 10
5. I can manage challenging behaviours.
   1 2 3 4 5 6 7 8 9 10

Attitudes Questions

1. I think children with disabilities should go to special schools.
   1 2 3 4 5 6 7 8 9 10
2. I think children with disabilities should stay home.
   1 2 3 4 5 6 7 8 9 10
3. Basotho ways dictate that students with disabilities should be in the regular classroom.
   1 2 3 4 5 6 7 8 9 10
4. I enjoy teaching children with disabilities.
   1 2 3 4 5 6 7 8 9 10
5. I think Lesotho's policy of inclusive education is a good one.
   1 2 3 4 5 6 7 8 9 10

Resources Questions

1. I have the support I need to teach inclusive education.
   1 2 3 4 5 6 7 8 9 10
2. I have the materials I need to teach inclusive education.
   1 2 3 4 5 6 7 8 9 10
3. My class is too large for inclusive education.
   1 2 3 4 5 6 7 8 9 10
4. I have enough time to teach students with disabilities.
   1 2 3 4 5 6 7 8 9 10
5. One teacher per classroom is enough for inclusive education.
   1 2 3 4 5 6 7 8 9 10

Appendix 2. National-level Participant Interview Questions

1. Tell me about the history of inclusive education in Lesotho.
2. What, specifically, does the policy say?
3. Was there argument over wording? How was this resolved?
4. Tell me about the Ministry's plan of action concerning implementation.
5. Now we are ten years into the policy, how would you say it is going? Why?
6. What have been the biggest challenges? Successes?
7. What support does MOE provide schools/teachers?
8. In your opinion, do Basotho teachers have the knowledge and skills to implement inclusive education? Why or why not?
9. In your opinion, do Basotho teachers have the attitudes to implement inclusive education? Why or why not?
10. In your opinion, do Basotho teachers have the resources to implement inclusive education? Why or why not?

Appendix 3. Semi-structured Interview Questions

1. Tell me how you *do* inclusive education in your class. (Implementation)
2. Tell me about the training you have received for inclusive education. (Knowledge/skill)
3. What are the easiest things when teaching inclusive education? (Knowledge/skill)
4. What are the most challenging? (Knowledge/skill)
5. Tell me your feelings about inclusive education. (Attitude)
6. How much good do you think inclusive education is doing? (Attitude)
7. How much do teachers believe in the ideas of inclusive education? (Attitude)
8. What do you need to really make inclusive education possible? (Resources)
9. Tell me about your support systems as a teacher. (Resources)
10. What supports or materials help you now with inclusive education? (Resources)