

## Transforming primary schools in Kenya through action research

Catherine Dean, Strathmore University

[cdean@strathmore.edu](mailto:cdean@strathmore.edu)

Margaret Kariuki, Strathmore University

[mkariuki@strathmore.edu](mailto:mkariuki@strathmore.edu)

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### **Abstract**

The aim of this paper is to make public the transformative action research projects carried out by primary school teachers who did the Diploma in Educational Management at Strathmore University (Nairobi, Kenya) from 2009 to 2013. The program was developed to empower teachers to implement effective improvements in their schools in light of the deterioration in public primary schools in Kenya. The paper focuses on the case of one teacher who achieved significant transformation at her school using action research.

### **Introduction**

This paper outlines the challenges faced by public primary schools in Kenya since 2003 based on the experience acquired by a team of educationalists at Strathmore University (Kenya) while running short courses for teachers from 2002 to 2007. We provide a brief description of the diploma in educational management which was subsequently designed to help teachers address these challenges. We showcase the action research project of a teacher at a school in Nairobi to illustrate the impact this methodology can have in transforming teachers and their schools.

The theoretical framework is rooted in an understanding of the need to link theory and practice within higher education (Lacueva, 2014, p. 198). Knowledge for its own sake is not enough to fulfill the needs of the person. If it can be applied to real life to bring about positive transformation, it is more enriching and can contribute to making our world a

better place. We can facilitate this process through well designed practical projects that require students to apply their knowledge to their personal and professional circumstances (Lacueva, 2014, p. 199). This strengthens their learning, fosters the desire for improvement and makes it possible.

The findings show how teacher-learners can apply theory to their real life contexts in a transformative manner using action research. Some of the implications that may be drawn from the use of action research in Kenya are highlighted.

### **Challenges in the public primary education sector**

In 2002 a team of experienced educators at the Institute of Humanities and Education Studies (IHEDS) at Strathmore University (Nairobi, Kenya) began running short courses for head teachers and classroom teachers to help them manage their schools and classrooms more effectively. The unplanned implementation of Free Primary Education (FPE) by the Kenyan government in January 2003, with the problems produced by the influx of pupils to public primary schools made these courses even more necessary. Over 2,000 teachers received training from 2002 to 2007 (Roche, 2009, p. 4). The experience and information acquired by the IHEDS team through interaction with the teachers during those five years highlighted some of the main issues being faced in public primary schools.

Schools were not prepared for the influx in January 2003 of 1.3 million children who had not been there the previous December (Ministry of Education, Science and Technology, 2005, p. 28). They lacked the physical conditions and resources needed to educate the increased number of students. Neither did public primary schools have sufficient teachers to manage the number of children they now had to teach (UNESCO, 2005, pp. 35-6). The material conditions in these schools deteriorated quickly as funding was insufficient to meet the needs of so many students. Buildings were allowed to decay, school compounds were neglected, and hygiene and dining facilities became potential sources of disease. Tables, chairs, books, classrooms, etc. were all inadequate compared to the number of students and were soon damaged and not repaired (UNESCO, 2005, pp. 53). Gradually teachers became overwhelmed by the lack of resources, the numbers they had to teach and poor salaries. This contributed to further reduction in their morale, loss of interest in their students, neglect of duty and a growing tendency to abandon schools or seek financial gain in various forms of corruption both within schools and beyond. Little by little, the impact was felt by students whose test results started to drop, giving rise to large gaps in performance in State exams between public and private schools. This led to what was called “the flight to private schools” by those students whose families could afford to move them out of public education. As a result, enrolment in private primary schools experienced a growth rate of up to 10% from 3.1%, before the introduction of Free Primary Education (Ministry of Education,

2012, p. 19). The initial surge in enrolment in public primary schools began to reduce over time due to conditions in public primary schools (Ministry of Education, 2012, p. 61 and p. 108).

The unplanned introduction of Free Primary Education gave rise to a serious crisis in public primary education.

### **Diploma in Educational Management**

In 2007- 08 the education team at IHEDS developed a one year diploma in educational management for heads of primary schools, classroom teachers who wished to move into leadership positions and private school owners. The diploma ran from 2009 to 2013 with the aim of providing educators with the theoretical and practical tools to manage some of the challenges described above, especially in the public sector. Action research was chosen as the core methodology to enable the participants to bring about change in their educational contexts.

The methodology was explained in detail and the teacher-students were provided with a clear structure as the basis for the design of their research. They were required to identify a real problem in their context, work out ways of solving it, gather evidence about the situation before they began their research and on completion, rely on critical friends for feedback, reflect on the outcomes of their actions, draw conclusions and make recommendations, etc. Their final reports brought together all these elements along with appendices containing relevant data to support their claims.

Most of the participants carried out effective action research projects which brought significant change to their schools. Here we focus on one specific case to illustrate how action research is being used to transform public primary schools in Kenya.

### **The case of XX Primary School (Nairobi)**

Repher has been deputy head teacher at XX primary school since 2009. She teaches English, Kiswahili, Religious Education and Science. She is also responsible for discipline and environmental issues. When she arrived at the school it was in “a pathetic state”. She was struck by situations that constituted a health hazard for everyone such as the dirty compound. Other causes of concern were the disrespect shown by students who wrote on walls, desks, tables and chairs thus spoiling valuable items; the hindrance to learning caused by students’ noisiness and indiscipline, giving rise to conflict amongst students, teachers and administrative staff; the damage to trees and flowers by careless children, etc. Repher believed that the unattractive, dirty and uncomfortable environment was not conducive to learning. It was also an unpleasant place for newcomers, which could prevent new enrolments. Some parents were already moving

their children to other schools. Absenteeism by pupils and staff was increasing partly due to health problems. Repher realized that academic performance was likely to fall as a result of the compounded situation.

### Identification of the research question

In the Report on the action research project she carried out as a requirement for the diploma in educational management Repher states that she used to think that these problems were caused by the students and their parents, without seeing herself “as a contributing factor”. Through reflection on the situation she discovered that she needed to improve her own practice. She realized that she could achieve this by planning and implementing changes, followed by an evaluation of the outcomes. Repher identified this research question: “How can I upgrade the environment of XX Primary School (Nairobi) in order to turn it into a comfortable place for children to learn better?” (Report, p. 3).

### Data collection prior to intervention

Repher provides evidence of the situation in her school before her intervention using descriptive narrative based on observation and photos that illustrate some of the problems in the school.

She describes the dirtiness and unattractiveness of the school due to children throwing litter everywhere. The classrooms would become dirty very quickly because of how they were used by students. She found that the learners were irresponsible and had a negative attitude to study. She explains that the compound was very dusty, especially when the wind blew, because of lack of vegetation. She was concerned about the tall, unkempt grass behind the classrooms as snakes could hide there. The washrooms were also very unhygienic (Report, p. 3). This summary is supported by photographic evidence.

Photo 1 below shows that the school dumping site is clearly a health hazard as the mound of rubbish has piled up and children are playing on the site. Photo 2 illustrates the bare, dusty playing fields. This situation can contribute to breathing difficulties, allergies, etc. Children can hurt themselves more easily when playing on these fields.



Photo 1: The school dumping site



Photo 2: Bare, dusty playing fields

### Interventions

Repher decided to take action to improve the environmental situation in collaboration with administrative and support staff, teachers, students and members of the environment club.

ACTIVITY
<p>Educational Interventions</p> <ul style="list-style-type: none"> <li>• Meetings to sensitize people to environmental problems in the school</li> <li>• Explanations about the positive impact of a clean environment on health, friendliness, academic performance and student enrolment</li> <li>• Sensitization of students to the importance of hand-washing</li> <li>• Time management sessions with teachers</li> </ul>
<p>Environmental Actions</p> <ul style="list-style-type: none"> <li>• Environment Day School Cleanups</li> <li>• Trench and sewage clearance</li> <li>• Tree and flower planting</li> <li>• Purchase and strategic location of litter bins around the compound</li> <li>• Fund-raising walk to construct new toilets</li> </ul>

#### Ongoing efforts to maintain cleanup

- Duty roster for all classes to take turns in keeping the environment clean
- Provision of effective detergents for frequent daily cleaning of toilets
- Potholes on compound filled up and school gates and buildings painted
- Competitive sense of maintaining cleanliness; weekly trophy to best class
- Long grass is cut regularly to protect people from snakes, etc.
- Rubbish is burnt regularly and so the dumping site is kept clean
- People are encouraged to put rubbish in the bins rather than throw it around
- Regular hand washing each day
- Collaboration of parents in ensuring children are clean, uniforms are clean, etc.

#### Positive Actions

- Classrooms and compound swept and rubbish collected daily
- Environment Club Members sing slogan songs “No to dirty environment”
- Everyone gathered at dumping site with rubbish to be burnt
- Students learnt to clean their own homes
- People donated money to purchase soil, seedlings, etc.
- Planting of trees and flowers and grass planted in bare, dusty areas
- Environment club members water and care for seedlings, weeding, etc.
- New toilets under construction
- Teachers plan their work in advance; they are more child-centered and arrive at school early to receive students with a smile; walls now have good teaching aids
- Noise pollution, class disruption and conflict has ceased
- Children disciplined through guidance and counseling

#### Data collection and analysis

Repher provides evidence of the changes at the school using photographs that illustrate the process of improving the situation and the outcomes; minutes of school management committee meetings; commentaries from critical friends and students; records of class performance in tests and exams, and her observation of the sustained change of attitude amongst students and staff.

The photographs below provide evidence of the environmental days dedicated to the school cleanup. Photo 3 shows the students who had gathered to collaborate and start collecting the rubbish on the compound. Photo 4 illustrates how the environment club members had prepared a song and banners protesting against the evils of a dirty environment. Song and signs are a visible, catchy way of helping other students to realize that such an environment is not good. Photo 5 shows the litter bins that Repher

purchased being used by students to discard rubbish. These actions during the cleanup process helped students to learn about the importance of a clean environment by doing, that is, by actively contributing to cleaning up the school compound.

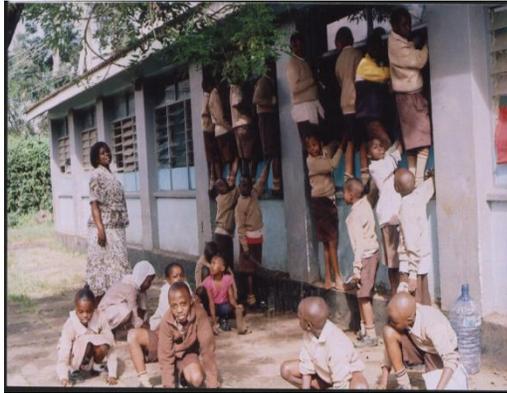


Photo 3: School Environment Day

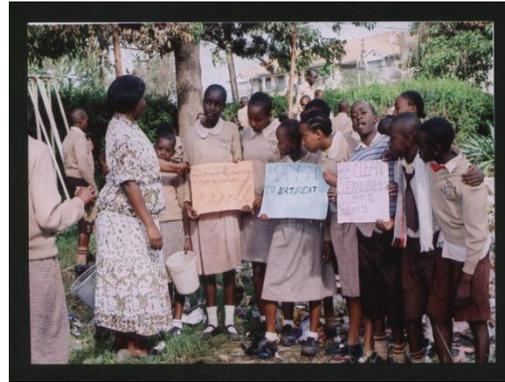


Photo 4: "No to dirty environment"

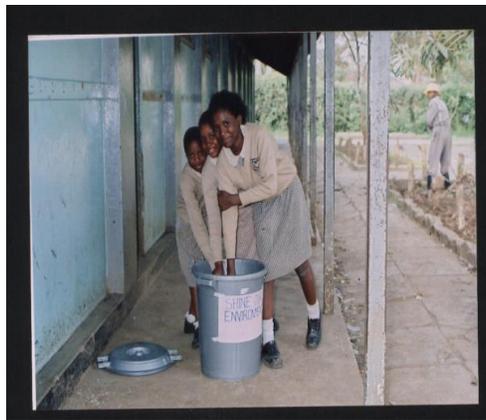


Photo 5: Rubbish disposal

### Comments from Critical Friends and Students

The written comments that Repher received from staff members who acted as critical friends during her action research project confirm that the school environment has improved and is being maintained through Repher's efforts. As critical friend PK puts it, in terms of "the environment, she really changed the school. The compound, the classrooms, the toilets and everywhere is thoroughly cleaned through her efforts (Report, p. 27). Environmental changes such as a litter free compound, clean classrooms and particularly clean toilets are all significant contributions to enhancing the quality of life and work for everyone at the school. These are features which are not so common in Kenyan public primary schools. Frequently the poor standards in the

washrooms become a cause of absenteeism from school, especially among girls. The following comment by a female student in Class 6 highlights the importance of what Repher has achieved. “As we look back at old times, the toilets had (an) unpleasant smell which affected most of us (so much) that it was hard to concentrate in our studies. Now she has bought some detergents and the toilets are not so unpleasant...” (Report, Appendix 4). Another of Repher’s critical friends, MN, describes how Repher ensures that cleanliness is maintained in the washrooms by instructing and following up the cleaners, providing materials and detergents, etc. (Report, pp. 28-9).

Another change that Repher achieved was increasing awareness among staff, students and their parents about the importance of keeping their homes and clothes clean and in good condition. Some staff members now purchase detergents from her for use in their own homes (Critical Friend MN, Report, pp. 28-9). One of the male students from Class 8 describes how they have learnt to bathe daily at home so they come to school “spick and span” (Report, Appendix 5). These testimonies indicate that Repher’s activity has extended beyond the school itself to the homes of those who study or work there. This shows that the impact of her interventions exceeded the material changes. She has brought about a transformation in understanding and behavior in those around her which has empowered them to bring those improvements wherever they go. This “extension” of Repher’s activity outside the school is meaningful in the Kenyan context where there can be an attitude of simply “putting up with” poor standards at home and elsewhere due to ignorance, etc. She has motivated others to seek and contribute to improving personal and environmental hygiene as a way of life.

Linked to this is the increased awareness of the role of each individual in contributing to keeping the school compound clean. PK indicates that now one does not “find litter scattered on the compound” (Report, p. 27). One of the male students explains that “When you find litter in the wrong place you pick it up and put it in the dust bin” (Report, Appendix 5). He goes on to say that previously, when a pupil found a paper on the ground, he or she would just leave it there. These comments illustrate that along with the daily effort of staff and students to clean the school compound each morning, they have also developed the personal initiative to collect rubbish and dispose of it appropriately at any time. Again, this is quite a transformation in the Kenyan context where we are accustomed to seeing litter all over the streets of Nairobi, etc. yet do nothing about it. Photo 6 below shows the clean school compound which is the fruit of the efforts of staff and students. Photo 7 illustrates that the school dumping site is no longer left to accumulate rubbish because it is burnt regularly and so the site is clean, and no longer a health hazard.



Photo 6: Clean, attractive compound



Photo 7: Dumping site is kept clean now

Another aspect of the environment which improved through Repher's efforts was the enhancing of physical beauty through the planting of flowers and trees which are now watered and weeded regularly by the students. As well as making the compound more attractive, the trees and flowers also improve the quality of the air by providing more oxygen, thus facilitating better health. The fact that the students care for the flowers and trees themselves is also positive as here in Kenya we do not always appreciate environmental beauty. Although parts of the country are very beautiful, the aesthetic sensitivity of most Kenyans has not been fostered. The children at Repher's school now have the opportunity to develop their sense of beauty and their capacity to create beauty around them. Photo 8 below shows a flowerbed being weeded and watered by students.



Photo 8: Flowers being watered, weeded

Finally another outcome of Repher's work which is highlighted by both her critical friends and students is the improvement in the educational atmosphere in the school. PK explains that the teachers have learned to manage their time, work and classrooms better which helps them to treat the students in a friendlier manner (Report, p. 27). Appropriate systems for discipline have been put in place, which makes the teachers' work easier and problematic students are attended to through guidance and counseling. This has led to a reduction in noise and conflict in the classroom and improved learning by students. This situation has also been enhanced by the increased sense of order that a clean environment produces. One of the female students refers to this as follows: "Mrs. Oyombe has changed the school's environment from worse to better. All the noise from classes polluted the environment which has decreased. She has tried her best to make sure that we all learn in a clean environment" (Report, Appendix 4).

In the Appendices to her Report Repher includes charts showing the improvement in student grades from one school term to the next, over the period in which she implemented her project. She thus confirms that the link between the improved environment and better student learning has been established in response to her initial research question.

## **Conclusions**

Upon completion of her action research project, Repher reflected on what she had achieved. She also invited her critical friends and others to think about further improvements that could be made in the school. The impact of her enthusiasm and effectiveness may be seen in the minutes of various meetings with different stakeholders included in the Appendices of her Report. They illustrate the interest of these stakeholders in collaborating with Repher to maintain the school environment and continue improving it as well as helping teachers to further improve their skills. Plans were made to raise funds to purchase new desks, tables and chairs, equip the school library with books and employ a librarian, install computers to foster computer literacy, build a school hall, mark the school field appropriately for different sports and events and to construct a swimming pool amongst others. Clearly Repher helped the principal, teachers and the school management to discover that they themselves can take the initiative in improving the school. This willingness is not often found in Kenyan public primary schools as many people tend to think that it is up to the government to provide funds, intervene, improve conditions, etc., which rarely happens. Repher has shown that the various stakeholders in local public primary schools do not have to wait for the government to act but rather, can become agents of change themselves.

Repher makes some interesting points in the final reflection with which she concludes her report. She explains that although the school environment became clean, attractive and comfortable to facilitate student learning, it was not easy to achieve these

outcomes. “For any success, combined effort is required i.e. from teachers, parents, students, support staff and the community” (Report, p. 31). This is particularly the case in action research where one often needs to “win” the collaboration of other people who will be involved in the research process. Repher’s success also lies in the fact that she achieved this cooperation on a large scale across her school.

Another factor that Repher discovered through her research is the importance of being determined and focused in order to facilitate true transformation. The design of a clear plan with distinct steps to be followed is key in carrying out effective action research. The guidelines provided to Repher in the Research Methodology course that formed part of the diploma in educational management helped her to work out what she needed to do at each stage in her research to make it effective.

Repher also highlights that “An effective school is made up by parents, teachers, students and the community” (Report, p. 31). Action research helps one to make such discoveries. A school is not just the students and teachers. It also includes parents, support and administrative staff and the local community. All these stakeholders need to be engaged with each other through positive relationships for the overall good of the school. This combination of efforts allows the school to grow, develop, improve and be transformed. Within this context Repher discovered that a truly effective teacher is one who is interested in whatever s/he is doing and fosters a positive relationship with pupils. This is relevant in the Kenyan context where many public primary schools are overcrowded, have poor and run down resources, etc. Such a situation can have a negative impact on teacher morale with further repercussions for students. Repher has shown how a concerted effort to work together by all members of the school community can help teachers to develop greater interest in their work and discover that they can make a difference to their students through their activity in the classroom and beyond.

### **Reflections and Implications**

The evidence in the case study of XX Primary School shows that Repher has assimilated the knowledge she acquired regarding management of people, finances and resources while doing the diploma in educational management. She was able to apply this theory to her real life context in a transformative manner using action research.

The case study illustrates how action research may be used by teachers in developing countries to find solutions to problems sometimes thrust upon them by others, without waiting for the government to fix them. Repher has illustrated that a motivated educator can bring together teachers, administrators, support staff, pupils, parents and the local community to work collaboratively in enhancing the student learning experience. In the case of Kenya this shows that there is a way forward in solving the many problems faced by public primary schools through the unplanned implementation of Free Primary Education.

The role of Strathmore University as an institute of higher education in offering the diploma in education management with the action research component is also significant. It shows that higher education has an important role to play by ensuring the link between theory and practice in a curriculum. This makes any program more relevant and effective as well as enabling the university to contribute to transforming society in practical ways.

At the end of her action research report Repher encourages Strathmore University to reach all teachers through the diploma course because it helped her to reflect on her practice and come up with solutions instead of blaming others. "The course can change many (teachers) with negative attitudes in the entire nation" (Report, p. 37).

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