



'Magic Classroom': Giving teaching and learning room to thrive in rural primary education

'Magic Classroom': Giving teaching and learning room to thrive in rural primary education

TABLE OF CONTENTS

	Acknowledgements	
1.	Introduction	2
2.	Background	2
3.	The Magic Classroom	3
3.1	A 'Magic Classroom'	3
3.2	Objectives of a 'Magic Classroom'	4
3.3	Classroom re-design - creating a classroom from a room	5
4.	Minimum conditions for broad-based and sustainable academic achievement	6
4.1	Basic resources matter	7
4.2	Quality teaching and learning matters	9
4.3	Teacher education and development matters	9
4.4	School feeding matters	9

Acknowledgements

This booklet is dedicated to the memory of Vuyiswa Juliet Buhlungu (1956-2009), a gifted Mqanduli teacher and a moving spirit behind the Magic Class Collective.

We are grateful to our partners for their generous support: Schools for Africa, Nelson Mandela Foundation, Friends of Mandela and Eastern Cape Provincial Department of Education.

Strength and courage to educators of the Magic Classroom Collective.

brian ramadiro
deputy director
Nelson Mandela Institute for Education and Rural Development
September 2009

1. Introduction

This booklet is written with two objectives in mind. The first is to present one programmatic response to the crisis in primary schools serving poor urban and rural children - the Magic Classroom Collective. Its objectives, physical design and pedagogical features are reviewed.

A second aim is to review key ideas and approaches informing the design of the 'Magic Classroom', as well as the work of the Magic Classroom Collective. Many of these ideas originate in our applied research work with classroom teachers, teacher educators, education scholars and education officials in the Department of Education.

Magic Classrooms are not just resources in rural classrooms. Magic Classrooms are an active network of rural teachers and teacher educators. This network debates, co-creates and tests various approaches, strategies and activities that can be usefully incorporated into and expand the existing patterns and rhythms of rural classrooms.

It is not our intention to set up Magic Classrooms as an exemplar or model to be followed. They are only an example of what is possible in rural primary education. They are an educational experiment in progress. Having said that, we believe some of the ideas, approaches and practices discussed here can be usefully adapted to other contexts.

2. Background

The educational background to the Magic Classrooms is the widespread crisis of underachievement in our education system. This crisis is neither limited to a particular phase of education nor province. The crisis is, however, concentrated in poor urban and rural schools.

Given the long history of unequal provisioning in public education under apartheid, it is not entirely surprising that:

- Only 35% of our children in Grade 3 can read at Grade 3 level.
- Only 40% of our children in Grade 6 can read at Grade 6 level.

- Only 18% of our children in 2008 obtained a Grade 12 pass good enough to gain admission into an undergraduate degree programme.

Year after year of such dismal underachievement of our education system after apartheid points to the urgent need for bold and radical initiatives at all levels of the system - classroom, school, district and province.

Anyone who has been to a poor urban or rural school, or watches television would correctly arrive at the general conclusion that what is probably needed to improve achievements in these schools include:

- Committed, knowledgeable and skilled teachers;
- Well-fed learners who regularly present themselves in school;
- Adequate and appropriate print material (e.g. books, newspapers, reference material) in classrooms; and
- Basic infrastructure (classrooms, lighting, water and toilets), furniture and equipment.

It would be correct to also conclude that, unless such basic pedagogical and resource conditions are put in place, it will remain unreasonable to expect schools to make significant and sustainable educational achievement.

In addition, it is important to keep in mind that, in the long term, educational achievement in South Africa will partly depend on:

- a sharp reduction in child poverty;
- access to adequate food and nutrition;
- safe drinking water; and
- quality early-childhood-development programmes for all our children.

3. The Magic Classroom

Following three years of applied research and teaching in rural schools and dialogue with teachers and teacher educators, the first pilot Magic Classroom was launched in Mqanduli at Pangindlela Junior Secondary School on the occasion of Mr Mandela's 90th birthday on July 18th, 2008.

The classroom quickly became known as the 'Magic Classroom' for two reasons. First, the classroom aims to re-create a magical kind of environment for learners, especially at the level of meaning making and creation. Second, teachers started to see things they had never seen in their classrooms before: children didn't want to leave school at the end of day and slowly but surely learners began to read. Parents and community leaders who have been to these classrooms often remark: "This is a classroom for a human being". In the Mandela Institute, Magic Classrooms are formally known as: isiXhosa-English Bilingual, Integrated and Differentiated Foundation Phase Classrooms.

When the school year started in 2009, we had established 72 Magic Classrooms in Qunu, Mqanduli and Bizana in Grades R through 3. The detailed development of the curriculum, pedagogy, assessment strategic and appropriate teacher support methodologies represent a central programme for the Mandela Institute over the next five years. This process is conducted primarily with the classroom teachers and in collaboration with the district officials of the Eastern Cape provincial Department of Education.

3.1 A 'Magic Classroom'

A Magic Classroom is:

Child friendly: It is based on a child's authentic engagement with knowledge through a language the child can understand and through which s/he can spontaneously be creative. It is conscious that a child learns most effectively in spaces that are safe, productive and loving. It aims to be child focused. It recognises there is no necessary contradiction between focusing on the individual needs of every child and creating a collective ethos among children. It seeks to assist each child to develop interest, self confidence and self motivation in their process of learning.

Teacher friendly: It understands that educators who are personally fulfilled are better, more caring educators. It recognises that educators, who experience too much classroom failure, inevitably become

demoralised. The Magic Classroom seeks to provide educators with the professional tools, skills, and experiences of success every day to become increasingly fulfilled human beings.

Parent and community friendly classroom:

It recognises that South African parents are committed to the education of their children. However, for various reasons, they are too often excluded from meaningful participation in their children's process of formal learning. The Magic Classroom seeks to establish practical programs to engage parents and community members in the education of their children. It recognises that parents will take part in their children's formal education if this helps them to parent more effectively, and teachers will encourage parent participation in schooling if this helps them to teach better.



3.2 The four objectives of a 'Magic Classroom'

isiXhosa-Based Bilingualism and Biliteracy: To give children a good grounding in isiXhosa and English. This requires adequate and appropriate print materials (e.g. books, magazines, reference materials) to support language and literacy in the languages of the child (in this case, isiXhosa and English). Development and use of pedagogical strategies that recognise that English language proficiency and literacy must be built on strong isiXhosa foundations. Recognises that for the foreseeable future, beginning in the Senior Phase, English will increasingly become the language through which children are expected to acquire and demonstrate knowledge. Magic Classroom focuses on creating excellent "English as Second Language Acquisition" programs, beginning in Grade R.

Interaction: Magic Classrooms seek to increase interaction between learners and teachers, learners and learners, and learners and texts and pedagogical activities. The pedagogy is designed to maximise a number of learning interactions: a) teacher-learner interactions during whole-class, group, and individual instruction; b) learner to learner interaction to enable collaborative learning; c) learner and text interaction by creating time and space for individual reading of texts selected by learners themselves; d) ways in which classrooms interact with their immediate and more distant surroundings via discussion, reading, radio, television and the internet. This also includes maximisation of use of classroom time, ensuring that the school day is used fully for learning. This includes a careful study of how time and space is used in schools and how this could be reorganised to better serve special conditions of rural schools and work styles of rural teachers.

Differentiation: The common classroom tradition in poor rural and urban schools makes it difficult to differentiate and respond to the individual needs and interests of each learner. It is often very difficult for teachers to identify, and respond to, the different learning levels within each classroom,

due to a severe shortage of resources. The pedagogy of the Magic Classroom is aimed at differentiation, in ways that can build upon learning abilities and potentialities across individual children.

Production and play: Magic Classrooms aim to ensure that classrooms are playful and productive. Pedagogy in the Foundation Phase needs to tap into the sense of wonder, physical and mental play that children in Foundation Phase bring with them into the classroom. Over and above sitting in classrooms and poring over books, children need to engage in activities inside and outside the classroom that require them to speak, sing, talk, run, skip, dance, move and draw.

3.3 Classroom re-design - creating a classroom from a room

Learner Chairs and Tables: Many rural schools do not have enough chairs or desks for learners. The desks-cum-benches that are available are inappropriate for foundation phase classrooms; they assume an impersonalised 'row-based' teaching method; they do not allow for physical movement of children; they are too heavy to move around to shift the classroom environment for pedagogical purposes; and many are physically dangerous with broken wood and metal. In the Magic Classroom, these traditional desks have been replaced with light, robust, and colour coded plastic chairs and a light four-legged wooden table. Children and teachers find it easy to lift, move, stack and clean the furniture and to manipulate it to create a variety of classroom forms of organisation. The wooden table makes it easier for children to do group work and to get in and out of their chairs. The teacher is able to walk through the classroom to supervise and support learners (individually and in small groups) wherever they are sitting.

Classroom libraries: Books often do not make it to the classroom in most poor urban and rural schools. Firstly, there are too few books. Secondly, most of them have not been internalised into the teaching rhythm of class time. And finally, teachers

are so worried that the books will be either mistreated or stolen, that they often remain locked in a centralised office. The Magic Classroom brings books into the classroom, and makes them visibly central to the aesthetic of the classroom. Two bookshelves split the classroom into two parts. The shelves are lockable, with transparent doors so that books can be kept secure. They are low enough for teachers to see over them. The bookshelves hold carefully selected books in the first and second language of the child, including storybooks, information books and reference books.

Stations: The classroom is carefully divided into learning stations (*edlelweni, ifektri yokufunda, izikolokubala, isithebesokufundlela somlingo*). Given the small size of classrooms and the large learner numbers, this requires careful engineering. Learners in the first half of the classroom (*edlelweni*) work on new activities and concepts that require direct interaction with the teacher. Children in the stations at the back of the classroom work on activities designed for practice, requiring less direct oversight by the teacher.

Reading carpets: Each classroom is fitted with two carpets. One of the carpets is permanently rolled out on the floor and makes up the independent 'magic reading carpet'. Each child spends at least two hours every week in silent reading on the carpet. At the beginning of each school day the second carpet is rolled out and joined with the first carpet where the teacher reads a story for the whole class.

Cubby holes: Classrooms in poor urban and rural schools tend to be overcrowded. There is no sense of personal space for learners to care for their belongings and classroom work. In the Magic Classroom each child has an individual storage space in the class with their name on it. The storage box is used to store the child's items such as school bag, jersey, lunch, as well as classroom work. The cubby holes also provide learners and the teachers with a sense of power over caring for their belongings and school work. The classrooms are very neat as only the items related to the specific lesson are allowed outside the cubby holes. Every child is

responsible for keeping their storage box neat and clean.

'Magic slippers'/no shoes: Rural and urban learners and educators fight an uphill battle to keep the classrooms clean. With little paving, learners enter classrooms from dusty areas that turn muddy on rainy days. The physical 'dirtiness' creates ongoing tension between and amongst educators and learners. Through the process of *lilima lokufunda*, communities came together to ensure all classrooms had linoleum tiles. No shoes are allowed in the Magic Classroom. In the winter relatives of learners knit woollen socks, that are known as 'magic slippers' for indoor use at schools. Children and teachers take great pride in cleaning and keep the classroom neat and clean. They are so clean that learners go for lunch for a short while and then stack chairs and tables away so that they can roll around on carpets and classroom floors.

Teacher professional space: A Magic Classroom has an organised professional space for the educator. A teacher workstation is made up of a chair, desk and stationary and filing cabinets. These basic items can have a profound pedagogical impact. Importantly, this space attracts teachers to the classroom, as opposed to teachers who spend most of their time in the staffroom or their personal cars. The filing cabinet and appropriate stationary allows teachers to set up usable learner assessment systems that provide teachers with systematic information about the development of each child and how to support it. Such a system is also a basis for communicating about the progress of each individual child, rather than the progress of the class, to their caregivers.



4. Minimum conditions for broad based and sustainable academic achievement

Minimum conditions for broad based and sustainable academic achievement in our schools include understanding and resolving the following:

- Basic resources
- Quality learning and teaching
- Teacher development and support
- School nutrition

4.1 Why basic resources matter

Children are fragile: A warm building in winter, a cool building in summer, hygienic toilets, water and lighting, chairs and desks that don't hurt: This is what the restoration of ubuntu and human dignity to every child, woman and man means in the context of poor urban and rural schooling.

Self respect: It might not be possible to show a direct link between a warm classroom, a clean toilet and safe drinking water on the one hand and a high maths and literacy score on the other hand. However, nobody would suggest that former Model C or private schools should not provide such services simply because a direct link between basic infrastructure and academic outcomes is difficult to show. Profound self respect and respect for our children requires that we address these most obvious and concrete manifestations of Bantu education.

Teaching and learning: Just as it is difficult to teach soccer without a ball, it is difficult to teach and to support children's development without adequate and appropriate buildings, learning support materials, basic facilities and safe playgrounds. This is especially important if we are holding teachers and learners to the same high standards of achievement. If our children are to take the same tests as children in better-resourced schools, as they currently do, they need to have access to a comparably strong resource base.

Getting the right resource mix: While it is important to ensure that children in poor urban and rural schools do not get less than children in other kinds of schools, the main goal of re-sourcing schools is not to make

poor urban and rural schools resemble ex-Model C schools. The right mix is one which responds to the resource, pedagogical and social context of (rural) poverty. So that, for example, in order to achieve high levels of literacy it is vital that the children have access to a well-stocked classroom library. (This resource and pedagogical strategy is even more important in rural schools than it is in schools where children's reading is supplemented by books in the home and the local library.)

Classroom configuration and furniture can influence classroom pedagogy. Heavy furniture arranged to a lecture hall format encourages:

- Lecture style delivery;
- Passivity of learners;
- Whole class teaching (regardless of the needs of the children or subject matter);
- Teacher-child interaction (but no child-to-child interaction);
- Teachers who spend their time with their backs to the children (writing notes on the board); and
- Children who spend a lot of time copying notes from the board.

The right resource mix is one that:

- Works in physically small, and overcrowded classrooms;
- Facilitates achieving national curriculum goals and standards; and
- Addresses developmental needs specific to children.

Furniture: Appropriate and adequate furniture:

- Allows children to work together, to move to different stations in the classroom, to walk up to the teacher;
- Allows teachers to move through the classroom, monitor and provide support to children at their desks;
- Is light but durable furniture that allows for configuration and use of classroom as a reading and writing space, laboratory and theatre;
- Is classroom furniture that makes possible configuration for whole class and small group teaching and learning;

- Is easy to clean and maintain (including work and floor spaces and furniture);
- Provides personal spaces for each learner to store their books, lunch boxes and other personal belongings;
- Includes teacher's classroom workstation – the nerve centre off the classroom. This is where the teacher prepares lessons, stores portfolios and assessments of each learner and classroom resources.

Print: Children learn to read and write by reading and writing. To do this they need to be immersed in school, home and community activities that require them to read and write.

Children:

- Are naturally curious;
- Work for very long periods on activities that are interesting and meaningful (linguistic sense is important to this);
- Require regular feedback and discussion with a peer or adult;
- Model their activities, behaviours on more competent peers or adults.

In terms of print (books, newspapers, magazines or posters) children:

- Will read books that speak to their interests or experiences (or books that open up new experiences based on what they already know)
- Read a book of their own that they can take home, share with their family and friends in a non-threatening environment
- Need ready access to adult role models who read well. This is often very difficult to achieve in overcrowded rural classrooms where teachers are stressed. Over time children learn that it is difficult to get ready and frequent access to their teachers, that it is not possible to show someone their developing reading and writing abilities to others, thus intrinsic and extrinsic motivation for reading diminishes.

Resources have a finite lifespan: All children are hard on furniture, floors, walls, books and the school environment. Facilities

such as toilets, water and electricity need regular maintenance. Floors, walls and school grounds require maintenance and renovation. Books get worn and have to be replaced. Children, teachers, parents and the broader community of the school can be mobilised to do much of this work. In the Magic Classroom this annual process of taking stock, maintenance, renovating or replacing resources is undertaken by children, teachers, parents, youth and university students through an *ilima* (isiXhosa for work party to plough and cultivate fields).

All schools can, of course, find better ways of structuring the lifespan of their resources, but the fact of the matter is that resources have a limited lifespan. In poor rural and urban schools too, resources – no matter how well looked after they are – have to be replaced at one point or another.



4.2 Quality teaching and learning matters

Resources do not teach. Resources assist teachers to create a learning environment, make possible application of a wide range of pedagogies, support teachers in assisting learners to gain understanding and acquire skills, and enable peer learning and independent learning that is mediated by books, lab activities, play and field trips.

Learning and teaching has collapsed in many poor urban and rural schools. The breakdown in a commitment to teaching and learning is manifested in:

- Late coming (by teachers and learners)
- Absence (by teachers and learners)
- No teaching and learning on teacher pay days or pension payout days
- Litter in the school yard; untidy staff rooms; filthy toilets (where these exist); dirty classrooms.

As a consequence too little time is actually spent on teaching and learning and ultimately this is manifest in low scores at Grades 3, 6, 9 and 12. The breakdown is part of a wider social breakdown and lowered expectations about education for the poor, resulting from chronic, intergenerational and deepening poverty. When schools are given the resources and support they need, they can become social spaces in which the social breakdown is pushed back; healing of society and reconstruction begins. A starting point for this is working out how to support learning and teaching in schools.

The National Curriculum Statement – as it currently stands – cannot be implemented in many poor urban and rural schools because, clearly:

- The resources required to implement it are not adequate;
- Teachers do not have the skills or support needed to implement it;
- Only a handful of teacher trainers (so-called experts) can claim to know how to make the new curriculum work in the context of bilingualism, overcrowded classrooms, and of limited resources.

How the curriculum is enacted obviously differs from school to school, cohort to cohort, district to district as a function of teaching systems, educator needs and district priorities. This is as it should be. The problem is when differences in implementation of the curriculum is not because of pedagogical considerations but because of unequal access to well trained teaching staff and resources. Such differentiated access leads to substantive differences in how children experience the curriculum and the education system.



A lack of appropriate resources influences classroom teacher behaviour in the following manners:

- Many teachers spend much of their time with their backs on children (writing out notes on the board because there are no adequate textbooks) and children spend too much time copying notes from the board
- Since it takes too much time to teach, support, monitor and assess enriched activities to a large class, many teachers give simple (or cognitively impoverished) and few activities to such large classes. Teachers construct too few learning activities for children to do because it takes too long to teach them;
- Many children have never had the experience of reading and completing a book;
- Overemphasis on low order basic skills like:
 - o Copying from the board
 - o Handwriting
 - o Reading the alphabet or multiplication table
 - o Obedience
- Much less emphasis is placed on children using their developing knowledge of the alphabet and number system to create stories, write reports and solve problems.



4.3 Language matters

Children can be taught through any language provided they understand the language of teaching and learning well enough. This requires that the following basic conditions exist:

- The teacher must have excellent spoken and written command of the language of teaching and learning.
- The language of instruction is used by the child for spontaneous communication with peers inside and outside of school, in the home and the community. There are many informal (real) situations in which the child can learn and use their developing language ability.
- There is access to good and varied fiction and non-fiction reading material in the language of the child in and outside of school.

It is obvious that if there is to be meaningful teaching and learning in our classrooms the main language of teaching will be the Home Language (isiXhosa), minimally, for the first six years of school.



The place of English in rural education

English should be present in our schools as early as Grade R. We need to start our children as early as possible hearing, manipulating and communicating through English. It takes a long time to learn languages. Starting early often helps. It is important to understand that teaching the English language is not the same as teaching through English. Teaching through the medium of English means teaching content through English.

It is not possible to meaningfully teach through the medium of English in poor

urban and rural primary classrooms. It is too soon to teach through English in these early grades. The children do not yet have enough English language proficiency and literacy through English.

Because for the foreseeable future English is likely to remain the medium of learning and teaching in high school and post school education, all rural schools need to have access to excellent *English as a second language* specialists, who can assist them to design and implement English language and literacy acquisition programs.

4.4 Teacher education, development and support matters

There is much truth to the commonplace saying that teachers teach the way they were taught. As much as 80% of teachers in our schools received their training under apartheid. This is not to imply that teachers are impervious to change or innovation. Or that all teacher education under apartheid was terrible all round. Or that teacher education after apartheid is better.

Even after apartheid teacher education continues to be founded, paradoxically, on norms, abilities and standards of a minority of schools. Much teacher training assumes that new teachers will teach:

- In a relatively administratively functional school;
- In English language monolingual or in conditions in which most teachers learners and parents speak English as their home language;
- Children who come from fairly literate homes and communities;
- In reasonably well resourced schools (with books, copiers and reasonable numbers of children);

Teacher training based on these norms is not likely to succeed in real poor urban and rural schools. This kind of training sets up a war of frustration between teachers and learners, teacher educators and teachers. Teachers are frustrated that their children are not learning, and teacher educators are frustrated over the seeming inability of

teachers in poor urban and rural schools to learn and implement what are deemed to be tried and tested classroom strategies.

Teacher development in primary education need to be built on the following principles:

- Deep respect for teachers in poor rural and urban schools. They may not know how to make education work for poor learners, but they know what doesn't work. While teacher educators may have good ideas about how to improve education in rural classrooms, they need to have the humility to recognise that they don't have the experience of having made education work over time in poor urban and rural conditions.
- Teachers have to be trained in the medium of the mother tongue if they are to teach effectively through the mother tongue. It is irrational to teach teacher through the medium of English to teach through, for example, in isiXhosa in primary schooling.
- A large part of teacher development needs to be classroom based. Teachers in poor urban and rural schools need to provide classroom-based support, demonstration and mentorship. Yes, indeed, this is a time and resource intensive way of doing teacher development, but it is the one of few that stands a reasonable chance of producing success in poor schools.

4.5 School feeding matters

Making sure that all children have adequate food and nutrition does not create so-called dependency. It creates healthy children who are ready to learn, create and explore their world. Given widespread child poverty in South Africa, we can assume that many school-aged children do not have adequate access to food in their homes. To ensure all our children have access to all the energy and nutrition they need, we need to serve two warm meals a day in all poor urban and rural schools.

Nelson Mandela Institute for Education and Rural Development
at the University of Fort Hare
Faculty of Education
28 Commissioner Street
East London
5201

Postnet Suite 369
Private Bag X 9063
East London
5200

Tel: +27 (0)43 704 7235
Fax: +27(0)43 704 7240
sdotyeni@ufh.ac.za (Ms Sindiswa Dotyeni)
www.nelsonmandelainstitute.org.za

