

***Training of teachers in poor rural areas through a multigrade intervention to achieve millennium development goals :
Our experience of using ODL as a tool for building capacity and what lessons can be learned?***

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Summary

The aim of this paper is to share analyzed, MG on-line training in South Africa, by means of empirical data as well as first hand experience, with other countries as a contribution to the successful implementation of the Millennium Development Goals.

Education for Rural Areas (ERA) is one of the flagships that were launched as an action by UNESCO to ensure quality education and the abolishment of inequalities in rural areas. In UNESCO publications it is stated that the realization of the Millennium Development Goals is to be found in Multigrade Education (MGE). MGE is the focus in a debate of how enrolment numbers in rural areas can be increased and therefore improve the quality of education in rural areas.

In the Western Cape Province of South Africa a Multigrade rural intervention was implemented, 335 schools participated and more than 900 educators were trained. Out of this intervention different empirical data were collected and further successful educational actions were started. The distances between and isolation of teacher clusters (networks) formed the core of this intervention. The implementation was accomplished by linking teachers in person, as well as through electronic means (e-mail , WWW) with other teachers and groups to explore and discuss topics of interest, share information and strategies, and identify and address common problems.

Consequently from the intervention, the following on- line training courses were developed for South African and African in-service teachers by CPUT.

- SHORT COURSE: An accredited training course [40 credits]. Basic principals of MG teaching. More than 1500 teachers obtained this certificate already.

- ACE in MG: CPUT developed an Advanced Certificate in MG [on-line] in 2005. Emphasize is on numeracy, writing and reading. More than 100 teachers obtained this certificate at the end of 2007.
- From March 2008 there will be a Med degree in Rural Education available at CPUT.

The challenge for academics and policy makers is to identify the relevant and common policies out of relatively small-scale interventions. A critical aspect would be to share these experiences with other countries.

As planner and project manager of this intervention, the authors would like to address insights, suggestions and problems in the training and employment of teachers, the production of support material, the role of information technology and the lack of vision by civil servants.

1 – Context of this paper

We as researchers realize that:

- 1.1 Everyone has the right to an education. The researchers realize the importance of international policy, with specific regard to the Millennium Development Goal efforts in eradicating excessive poverty and famine, and the importance thereof in achieving the goals of Universal Primary Education.
- 1.2. The goals of MDG and UPE are not attainable unless the biggest problem of rural education in the context of poverty is not achievable.
- 1.3. Isolation, vast distances from the school and poor or non-existent pre-and post on-the-job training initiatives, these are all factors the rural educator has to contend with and commonly has a significant negative effect.
- 1.4. Multigrade education training does not exist in SA; furthermore, the rigidity of the qualification framework resulted in the tackling of relevant qualification improvements being near impossible.
- 1.5. Situated in close proximity to rural communities, CPUT Wellington Campus is surrounded by poor Multigrade rural schools. These schools are characterized by poor quality facilities and education, due to poverty, unemployment, unskilled and unmotivated teachers, these factors are all reflected in the poor performance of the pupils.

2 – Rural Education is in a crisis in SA

“There is evidently a lack of political interest in the rural world,” points out Aicha Bah-Diallo . “Rural people have no real political voice, so when there is competition for limited resources – and education for remote areas can be costly – they tend to lose out”, says Lavinia Gasperini. (FAO and UNESCO 2003)

Like other developing countries in Africa, South Africa’s rural communities remain disadvantaged compared to their counterparts in urban areas. Once in a school in South Africa, there is only a 1 in 3 chance that a student will complete primary level. More than 8 million children can be found in rural school classrooms in SA. (Emerging Voices 2005)

Poverty continues to put large numbers of learners at risk of school failure. Illiteracy often coincides with poverty and hunger, with problems of child and maternal health and with greater exposure to HIV/AIDS. Nelson Mandela has reminded business representatives on numerous occasions, “You can smell poverty when you visit many parts of rural South Africa”.(Cape Argus , 26 April 2005)

Basic reading scores, and maths and science literacy, are consistently amongst the world's worst, including much of Africa. Recent scores showed that only 20% of 6th-graders could do maths at the appropriate grade levels (average score 27%) and only 40% in language of instruction (average score 38%)

An intervention directed towards radical change, and nothing less, is needed to manifest a significant improvement in rural education for the sake of millions of previously disadvantaged children attending such schools and never actually learn to read, write and do arithmetic properly.

The achievement of the goals set for 2015 by the Millennium Declaration – and especially, poverty reduction, food security, universal primary education and gender equity– will require special efforts in rural areas. This is of particular significance in South Africa where it is crucial to develop policies and programmes designed specifically to target “the poor” and the “disadvantaged” and thus principally rural people. An important touchstone for judging progress is the Millennium Development Goals (MDGs).

3 – Multi-grade Teaching

The Multi-grade model of education is receiving new interest and attention as a model that can provide a viable opportunity for educational delivery to help achieve the EFA goals. (Rowley & Nielsen 1997).

The term “multi-grade teaching “is not universal, but the practice is widespread. The strategy, promoted in the 1960s and currently enjoying something of a renaissance in Africa, is to use Multi-grade schools. (McEwan 1998)

Multi-grade teaching is not a new idea, but it now calls for a much broader operational and technical definition to address problems and issues facing most educational systems (Birch, I. & Lilly, M., 1995) especially in Africa.

It is estimated that nearly 30 % of the schools in the world include Multi-grade classes, in Africa this number is more than 50%: suggesting that Multi-grade teaching, though not always recognized and legalized, is more highly developed and more widely found than is generally thought. (Colbert 1993) More than 2 million children attend MG schools on a daily basis in SA.

Ironically, while Multi-grade classes could be a solution for educating rural people in many African countries, governments tend to focus on improving conventional schools, often leaving the development of Multi-grade schools to local initiative. (Birch 1995) For this reason, Multi-grade schools in rural Africa tend to show poor results, which in turn bequeath them with a negative image. (Juvane 2007)

In Africa, as a consequence of shortages of teachers, teacher absenteeism owing to HIV/AIDS related causes and budget restraints facing many countries, the end result is that Multi-grade classes are the only foreseeable option. Ministries of Education see Multi-grade teaching approaches as a key pedagogic tool that can assist teachers to cope with teaching in these very difficult situations.(Juvane 2006)

In 1987, there were 73 million children at African school desks; in 2001, the figure had increased to 106 million. If African countries are to meet the goal of universal primary education, their school systems will have to enroll nearly 180 million children in 2015. To cope with this huge challenge, the number of teachers must increase at an even higher rate than the number of pupil's .MGT will be part of this solution.(Juvane 2007)

Multi-grade teaching has become one of the priority topics on the agenda of the Working Group on the Teaching Profession (WGTP). The reason for bringing this issue on board was the recognition that Multi-grade teaching has the potential to the improve quality of teaching, thus contributing to the global effort of achieving EFA goals and education- related MDGs. (Juvane2007)

If government does not recognize and more importantly acknowledge Multi-grade education, then neither would local government, education initiatives-and departments; such is the case in South Africa. This would almost undoubtedly result in the failure of such schools to provide proper education for its learners. In a South African context, Multi-grade education is seen as an inexpensive form of education, such schools are typically regarded as being second-rate schools; schools that parents would not like their children to go to. (Joubert 2004)

The two best examples that were found, wherein these practices were applied in the training and assistance of rural teachers through the means of an intervention, include the famous *Escuela Nueva* and a less famous South African example.

4 – South Africa : Multi-grade Intervention

As their contribution to the plan (Rural Upliftment), the Western Cape Education Department implemented the Multi-grade rural schools Intervention in 2002 .

The Western Cape Education Department approved a plan to eliminate this situation, called the Multi-grade Rural Schools Intervention (MGI). Implementation took place by means of 10 cycles (9 month per cycle). In the Western Cape more than 335 schools, 876 teachers and about 25 437 learners are in this category. Because of distances and isolation teacher clusters (networks) formed the core of this intervention.

This was being implemented by linking teachers in person, as well as through electronic means (e-mail and the World Wide Web) with other teachers and groups to explore and discuss topics of interest, share information and strategies, and identify and address common problems. (Jordaan 2007)

The design of the intervention was strongly influenced by a set of publications from the international Multi-grade Education Conference held in Canada in 1992. The research at the Northwest Regional Educational Laboratory (NWREL) in Oregon, Canada, as well as research funded by DFID at the University of London was equally influential. The IT component in the intervention also benefited from experiences at the University of Twente and specifically the doctoral studies of Bert Moonen (Teacher Learning in In-service Networks on Internet, 2001). The particular approach to the concept of number followed by the Freudenthal Institute at the University of Utrecht was equally useful. (Jordaan 2006)

The intervention was built on four key pillars focussing on classroom management and instructional strategies, in-service training, ICT and the value of mental maths. It targeted six areas, which includes the configuration of learning spaces and classroom organisation, classroom routines and discipline, curriculum structuring and planning, teaching strategies, self-directed strategies and peer tutoring. It furthermore focussed to train teachers in these schools to use, develop and apply such learning programmes optimally. (Jordaan 2006)

The sustainability of the project was rendered a fatal blow by the incompetence of newly appointed officials to manage funds in a sustainable fashion. As a result the project leader left which in turn left teachers without assistance and motivation. Back to square one.

The intervention was terminated after three years by the Department of Education. No reasons for the termination were given nor were any scientific research conducted on the implication of the termination thereof. Interestingly, independent research proved that the Intervention resulted in a significant improvement in literacy and numeracy skills as well as the professionalism of the teachers. (Joubert 2006)

The approach in this program emphasizes the changed role of the teacher. Since the teacher has to impart knowledge to a diverse group of students, he/she has to develop a wide variety of teaching learning strategies. The teacher has to find ways of encouraging self learning and of older children helping younger ones. (Mouton 2003)

On a global scale there seem to exist very little interest in Multi-grade education, South Africa is no exception. No census statistics are available for Multi-grade schools; furthermore very few if any publications mention these schools. Multi-grade schools are for the most part seen and treated as normal schools. Multi-grade education, especially in Africa, is seen as an inexpensive form of education, such schools are typically regarded as being second-rate schools; schools that parents would not like their children to go to. (Juana 2007)

If Multi-grade education is not recognized and acknowledged, then it will never receive any attention, which to say the least is much needed at that, with the net result being the failure of Multi-grade education, this failure of Multi-grade education has a cascading effect. If Multi-grade education fails, parents no longer send their children to school, this results in underdevelopment of such communities and eventually even more poverty. (Mouton 2003)

Underdevelopments in rural regions are ascribed to three reasons:

1. Lack of motivation by local and national government to provide rural regions with services necessary for expansion.
2. Lack of motivation of the teachers
3. Lack of educational resources (Daniel 2004)

5 - Protect the “profit” of the Intervention

In an effort to protect the “profit” of the Intervention, CPUT initiated and implemented a number of actions. One of these initiatives was the design and implantation of a University accredited (40 credits) course specifically aimed at rural Multi-grade teachers. This course was run and about 900 teachers from rural Multi-grade schools completed it. This was the first time that teachers were trained especially for Multi-grade teaching and received accreditation therefore in South Africa.

The demand for further study and skills improvement with specific regards to Multi-grade education was so overwhelming that another course in advanced teaching was developed, and has been run since 2004. More than 100 teachers have completed this course and the demand is ever increasing, more than 150 teachers are following this course in 2008.

These courses together with research initiatives prompted an increased interest in Multi-grade Education. From 2008 an M.Ed in Rural Education will be offered. This as well as the already developed shorter courses is currently marketed in the rest of Africa.

There are currently three students that are busy with their D.ed studies and a further six M.ed students, all focusing on Rural Education or Multi-grade education.

Both the initial short course as well as the more advanced MG ACE- course was evaluated in 2007 by a research project. The evaluation was conducted on the basis of the following research question; *to what degree did the professionalism of teachers improve after completing these courses and how should one build on such improvements?*

Questionnaires, completed by all 900 teachers whom followed the short course as well as all 100 teachers whom completed the ACE course was processed and analyzed. A qualitative research methodology was followed.

One of the data acquisition techniques involved video-recordings of a number of the first students that completed the advanced ACE-course.

Important information gathered from the research includes:

1. The schools are situated between 260km and 410km from Cape Town
2. Not one of these schools is situated next to a tarred road.
3. On average these schools are situated between 21km and 70km from the nearest town.
4. Very few of the teachers actually live in close proximity to the school and have to travel significant distances between their house and the school.

All evidence suggests that teachers teaching in Multi-grade Schools should receive specialized training for effective education in such schools. It is also clear that government does acknowledge the specific need for such specialized training, evidence for this exists in that until very recently no specific training courses for Multi-grade Teaching was available in South Africa.

The contribution of both the short course and the more advanced ACE course as summarized by the a number of the participating teachers;

“My teaching improved greatly, my results in the classroom have improved much and I feel much better about myself and my school”

“It was one of best things that has happened in my life, previously everything was fed as short term information, it was a nightmare, now you are trained after which you can go back to your classroom and actually use the skills you gained”

6 – The Solution

As already proved in developed countries, universal primary education in sparsely populated rural areas can only be achieved by Multi-grade education. In order to address this issue it is of the utmost importance to start with the training of officials that will be spearheading rural education development initiatives as well as the teachers, whom are responsible for the actual education of the learners.

It is therefore critical to determine what precisely the Multi-grade education Open Learning has taught us:

- 1- There are no quick fixes for providing education to the rural poor; this requires a long-term effort and commitment, with concerted action at the local, national and international level.
- 2- Effective implementation of rural teaching requires establishment of mechanisms for regular supervision, monitoring and support at regional/district and teacher/classroom level. It requires support structures in place and definition of minimum standards and benchmarks against which pupils' learning achievement will be assessed.
- 3- Empowering rural people is an essential first step to eradicating poverty.
- 4- We need to train and equip teachers to enable them to teach students of different ages and mixed abilities within a classroom.
- 5- A massive gap currently exists between international policies and the implementation of these policies on local governmental level. Officials are only executioners of policies and in many instances they do not understand the policy which results in the aimless implementation of policies. Policies are planned and implemented on a national level to be in accordance with international arrangements, without taking into account the effect it will have in the classroom itself. The irony lies therein that those for whom the international goals are set up are the people that eventually suffer the most from the efforts to reach these set goals.
- 6 - Investment in the skills of Multi-grade teaching should therefore be seen as contributing to the goal of quality basic for all and so that these schools/children are not forgotten and that they can really take part in the future of South Africa and escape being marginalised.

7 - To regard Multi-grade teaching as an important strategy that can improve the quality of teaching and learning.

8 - To mainstream multi-grade courses within existing pre-service and in-service training programmes.

9- To start a research and assistance facility for Multigrade education as soon as possible, this centre should contribute toward the effort of SA to reach the "MG2" by 2015...

10- Open Learning was utilized to cope with problems such as: correct qualification and the desperate need for educational material. The growing number of students enrolled in the ACE program is testament to success of the program.

It gave the students flexibility and choice over what, when, at what pace, where, and how they learn :

- * Through effective support for Teachers

- * and the provision of appropriate Learner Support Materials to improve the effectiveness of teaching and learning in impoverished rural primary school classrooms,

- * using innovative Open and Learning programmes . 100% of the students passed the course.

7 – REFLECTION

Solving, and successfully so, the international formulated problems of poverty and development is greatly dependant on the implementation of quality education. This flagship asks for cooperating actions to address the inequalities that exist between rural and urban areas through targeting the specific educational needs of rural people. This issue is clearly addressed by the South African example discussed earlier and if the rest of the South African educational system does not follow this example then the future for many South African children is a dark and troublesome one.

Multi-grade education can only truly contribute to education provision in sparsely populated rural areas if it viewed as an actual alternative which is planned, implemented and sustained by government. Without maintainable and sustainable support initiatives teachers quickly loose interest, performance of the system decreases dramatically and Multi-grade education quickly loses creditability. If the intervention is successful the techniques can be applied within normal schools to address problems.

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