The ACEMaths Project: a Collective Open Educational Resources Initiative for Teacher Education

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Maryla Bialobrzeska reports on the first phase of this SAIDE project that is investigating effective management strategies for mitigating the impact of HIV and AIDS on schools.

SAIDE Signs Agreement to Develop an OER Portal for the African Virtual University

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Contributions to Inclusive Education Developments

Over the course of the past year, SAIDE has been a member of a broad consortium of organizations working together on a human resource development programme for the national Department of Education (DoE) in South Africa. Known as the Sisonke Consortium, the partners work together at national and provincial levels in order to help achieve the main objectives of Education White Paper 6 on Inclusive Education, which was released in July 2001. Ian Moll and Sheila Drew provide more detail.

SAIDE Supports FET Colleges with the Roll-out of the New National Certificate Vocational Curriculum – Professional Development for Lecturers and more...

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Funding has been given to provincial departments through Treasury's mid-term expenditure framework to enable higher education institutions to offer a range of Advanced Certificate programmes for serving teachers in their provinces as from 2008.

The ACEMaths project is designed to pilot a collective approach to the sourcing and adaptation of existing suitable teacher education materials for use in these ACEs as well as in other teacher education programmes.

Between mid-September 2006 and mid-March 2007, nine higher education institutions collaborated to produce a primary mathematics module entitled Teaching and Learning Mathematics in Diverse Classrooms based on a module from UNISA.

The module is intended as a guide to teaching mathematics for in-service teachers in primary schools. It is informed by the inclusive education policy (Education White Paper 6 Special Needs Education, 2001) and supports teachers in dealing with the diversity of learners in South African classrooms. The module is divided into six units:

- Unit 1: Exploring what it means to 'do' mathematics
- Unit 2: Developing understanding in mathematics
- Unit 3: Teaching through problem solving
- Unit 4: Planning in the problem-based classroom
- Unit 5: Building assessment into teaching and learning
- Unit 6: Teaching all children mathematics.

Click here for module details.

The units in the module were adapted from a module entitled Learning and Teaching of Intermediate and Senior Mathematics, produced in 2006 as one of the study guides for UNISA's Advanced Certificate in Education programme. On 31 October 2006, UNISA granted SAIDE permission to use the module in the project and to re-licence the adapted version under a Creative Commons licence.

A staff member of the RADMASTE Centre at the University of the Witwatersrand was contracted by SAIDE as the content expert responsible for the adaptation of the module. SAIDE's role has been to provide conceptual leadership and project management for the project as a whole, as well as to take responsibility for the pilot version of the module.

A team of teacher educators (maths specialists as well as inclusive education specialists) from the participating institutions collaborated in the adaptation of the module so that issues related to inclusive education (the teaching of diverse learners), as well as a more representative selection of 'basic' mathematical knowledge could be included. Material from the General Education and Training (GET) Mathematics ACE programme delivered by the RADMASTE Centre as well as from the Learners with Special Educational Needs (LSEN) ACE programme offered by
the Wits School of Education has substantially enhanced the original module. Contributions were also received from the Rhodes University Mathematics Education Project, as well as from the Malati materials available on the web (http://academic.sun.ac.za/mathed/MALATI/).

The six units will be piloted in a variety of programmes/courses (Maths ACE programmes, BEd maths courses, an LSEN ACE, PGCE maths courses) during 2007. The findings from the pilot will be used to inform the process for the larger initiative, as well as to refine the units before they are made available in 2008 in an Open Educational Resources repository.

Participating institutions include:

- Cape Peninsula University of Technology
- Nelson Mandela Metropolitan University
- RADMASTE Centre at the University of the Witwatersrand
- Rhodes University Mathematics Education Project
- University of KwaZulu-Natal
- University of Limpopo
- University of South Africa
- University of Venda
- University of the Witwatersrand.
Managing Schools in the Context of HIV and AIDS – Work in Progress

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Background

A number of key themes emerge from the various policy and guideline documents dealing with education and issues around HIV and AIDS in the South African context. These include:

- Protection of children's rights and in particular, the right to basic education;
- The role of the School Governing Body and the School Management Team in enabling access to quality education for all children; and
- The role of schools as centres of community life.

SAIDE's research thus far, however, suggests that there is a significant gap between policy and implementation. This is at least in part due to:

- Each provincial Education Department having different structures for support and monitoring of policy implementation;
- A lack of capacity and resources at provincial/district level that hamper implementation and;
- A lack of capacity and resources at school level.

Purpose of the SAIDE project

The aim of this project is to support the extended role of schools to best manage the health and social needs of vulnerable children and educators infected and affected by HIV and AIDS. SAIDE's role in this project is to research an approach to management that will help to mitigate the impact of HIV and AIDS across various socio-economic bands within the schooling sector.

Findings thus far

Overview of existing initiatives: A plethora of initiatives around mitigating the impact of HIV and AIDS, especially related to orphans and vulnerable children exist. Many of these excellent initiatives are making a difference, however there is little, if any coordination amongst these projects which seems often to reduce the potential impact.

Additionally, there is a category of initiatives that seem not to get beyond the pilot phase. These are typically short-term projects, launched with donor funding and minimal training and materials provided to the targeted community. The organization driving the project then withdraws leaving the community to manage as best as possible. There is frequently little or no follow-up process or evaluation of impact, leading to a lack of sustainability.

Barring the important initiative set up by SADTU, the Tsepang Trust Pilot, which offers free testing, counselling, and treatment for teachers, currently being rolled out in three provinces, KwaZulu Natal, Eastern Cape and Mpumalanga, there does not appear to be any other initiative aimed at supporting educators.

Field work: The initial field research was done across 18 schools – six schools in each of the following three provinces Mpumalanga, Free State and the Western Cape. Schools were chosen because of their location in extremely poor communities.

Evidence from the field work showed that responses to vulnerable learners were of an ad hoc nature with no evidence of any systematized attempt of dealing with issues.
The schools visited reflected the following generic characteristics:

- **Lack of capacity and resources**: This meant that these schools were typically overwhelmed by a range of interrelated problems. These included high rates of unemployment (60% and more) which meant that very few parents paid the minimal schools fees – in some schools up to 90% of parents did not pay fees (even where fees were as low as R50.00 pa). In the Western Cape schools visited there was extensive evidence of the breakdown of the family unit; instances of sexual abuse and violence; alcohol and drug abuse; teenage pregnancies and gangsterism.

- **Lack of school capacity to collect, process and store information on orphans and vulnerable children**: Site visits reflected a complete lack of documentation/record-keeping/data on orphans and vulnerable children, nor the ability to identify necessary follow-up actions.

- **Lack of capacity of School Governing Bodies to provide, or even support, leadership processes**: In-depth interviews with schools principals reflected that parent representation on school governing bodies was at best limited to assisting with logistical matters such as helping to cook food as part of the provincial feeding scheme, standing on playground duty or cleaning the school. There was no capacity to provide leadership or any guidance or support on school policy matters.

- **Lack of involvement of the parent body as a whole**: Apart from the School Governing Body function, the majority of parents at these schools did not participate in school meetings or functions. Enlisting parent support was generally noted as a problem.

Despite their best efforts, schools in this category struggled hugely to offer support to vulnerable learners.

Examining the wider educational context, the research also pointed to:

- **Lack of support from district and provincial education offices**: This seems to be due in part to lack of prioritization of HIV and AIDS on the part of government, as well as lack of capacity at district and provincial levels to monitor and support schools in systematizing implementation of policies and strategies for mitigating the impact of HIV and AIDS on school communities.

- **Lack of capacity in other government departments – Social Welfare, Home Affairs and Health**: Although it was found that many schools did not have any processes in place for accessing the services offered by these departments, when attempts to access these were made, they often resulted in frustration due to lack of capacity in these departments as well.

**The next steps**

These finding have led SAIDE to think about the role of the school and the school principal in particular.

- Is it realistic to expect the kind of schools profiled above to be agents of change?
- What role can such schools play in supporting vulnerable learners and staff?
- What is the role of the community?
- What role could a potential external agent play in facilitating a two-way supportive interaction between community and school?

**The role of the school in the community – school as agency**: South African government policy promotes the view that schools must become centres of community life (Tirisano). This raises the questions around the role to be played by the school principal beyond the school walls.
The role of the community in the school - community as agency: Concomitantly, there is also a notion that the core business of schools is teaching and learning and that schools are in fact not prime sites of organization around HIV and AIDS matters and that community based organisations (NGOs/CBOs) should take on this role.

The role of an external agent: This option explores the role of an external agent in facilitating outside/community involvement in the school and vice versa.

In conclusion
To date SAIDE’s research has focused on the first option – school as agency. However, having selected some of the poorest of the poor schools, it is not surprising to find that the role played by schools, is a limited one. Yet even in these circumstances, some examples of good practice emerged – however, thought still needs to be given as to how best to systematize these.

SAIDE’s next steps in this research project include:

- An examination of how schools in other socio-economic bands are responding to HIV and AIDS;

- Further exploration of the different combination of roles and options – school as agency, community as agency or outside agency.

It is hoped that a possible typography may emerge that may eventually contribute to wider policy perspectives and possibly advocacy around how to best support the schools and systematize the management of schools in different contexts.
SAIDE Signs Agreement to Develop an OER Portal for the African Virtual University

Neil Butcher reports on a recent agreement reached with the AVU to assist it with the development of an OER Portal, to be funded by the Hewlett Foundation.

During 2006, SAIDE worked with the African Virtual University to prepare a proposal for presentation to the Hewlett Foundation on taking forward the concept of Open Educational Resources (OERs). OERs are typically understood in broad terms as educational resources of any kind which have been developed within a licensing framework that permits others to use and adapt them without paying additional fees. In the case of the AVU, the concept of OERs is located within the licensing framework of the Creative Commons.

Within this context, SAIDE is excited to be able to report that the Hewlett Foundation awarded a grant to the AVU for the proposal and that SAIDE will be supporting the AVU with its implementation during 2007 and 2008. This will build on other related initiatives in which SAIDE is currently involved, such as management of Thutong, the South African National Education Portal (www.thutong.org.za) and implementation of a pilot access project for the International Association for Digital Publications.

In the project, SAIDE will have unique opportunities to advance its own knowledge in the field of OERs, while assisting the AVU to advance the objectives of the OER movement. Our responsibilities include:

- Designing and facilitating capacity enhancement workshops on the utilization of OERs (targeted at employees of African educational institutions);
- Developing a series of 'Knowledge Guides' on key OER topics, including Creating OERs, Organizing OERs, Utilizing OERs, and Disseminating OERs;
- Supporting the AVU in the design and implementation of a continental conference of OER practitioners;
- Leading the design and implementation of an OER portal for the AVU, building on work currently being done by the BBC for the TESSA project.

Thus, our agreement with the AVU provides SAIDE a unique space to contribute to the shape and momentum of the OER movement, ensuring that the developing world is able to make a thoughtful and meaningful contribution to this global process (which is currently – and problematically – dominated by the developed world). We believe that this movement has significant potential benefits to the developing world.

OER development is premised on the idea that the principles of the open source and free software movements can be productively applied to content. Most OER projects release the products of work completed using a Creative Commons licence, which allows authors to retain certain rights while granting other rights to users, particularly the right to make copies of content produced (see www.creativecommons.org for more information). In this way, the OER movement poses a serious threat to many vested interests in educational content development, whose livelihood is based on protecting copyright. This movement is still in its embryonic stages, but is starting to provide a compelling case for different economic models of educational content.

Click here for further information on Guidelines for Successful Implementation of OERs into Education Systems.
Contributions to Inclusive Education Developments

Over the course of the past year, SAIDE has been a member of a broad consortium of organizations working together on a human resource development programme for the national Department of Education (DoE) in South Africa. Known as the Sisonke Consortium, the partners work together at national and provincial levels in order to help achieve the main objectives of Education White Paper 6 on Inclusive Education, which was released in July 2001. Ian Moll and Sheila Drew provide more detail.

The White Paper argues, “the key to reducing barriers to learning within all education and training lies in strengthened education support services”. It identifies three types of institutions to be strengthened to provide this support collaboratively through an integrated community-based model of service delivery:

- Full-service schools, i.e. mainstream schools geared up to handle a diversity of learners who experience barriers to learning associated with disability;
- Special schools which will service learners and function as resource centres at a district level; and
- District-based Support Teams.

The long-term goal of the inclusive education policy is to develop an inclusive education and training system that caters for the different needs of all learners, so that they can fully participate in South African economic and social transformation initiatives. In the first stage of implementing Education White Paper 6, the DoE has developed an intervention programme consisting of various projects to strengthen these institutions. One of these projects is the development of human capacity. This is being done through training in the following:

- 30 primary schools that are to be converted into full-service schools
- 30 special schools that are to be converted into Resource Centres
- 30 District-based Support Teams (DBSTs)
- All four reform schools

SAIDE’s role in the project has been to lead the development of appropriate training materials for the identified target groups. Two sets of draft learning materials have been produced, one focused on the Screening, Identification Assessment and Support of learners within overall inclusive education practices, the other on curriculum adaptation strategies and practices to help put in place Inclusive Learning Programmes in schools.

Each training manual is designed to support a total of 72 notional hours of training and development time. This time includes some 20 hours of face-to-face contact at plenary training, five hours of self-directed reading, 15 hours of portfolio development and 32 hours of on-site support and training.

The learning strategies that are built into the text are a version of the reflective ‘learning cycle’ approach that we have been developing over a number of years in SAIDE’s work in materials development. The instructional design principles might be represented as follows:
Importantly, this strategy rests on the principle that structured, systematic reflection on activity (the actions that the learner brings to bear on learning material in situated knowledge contexts) is the key to the realization and construction of new forms of understanding. On the one hand, learning does not take place simply on the basis of one being told something. On the other hand, it does not take place merely on the basis of having some experience or another, without critical reflection that allows one to integrate new understandings into one’s developing frameworks of meaning. The purpose of learning materials is to mediate the relation between the two, and not to fall in to the trap of providing random ‘activities’ that are not developmentally structured in relation to each other, nor properly consolidated in supported reflection. Providing ‘answers’ to tasks does not constitute reflection.

In the attached example we set out how we attempt to realize this design principle in the Screening, Identification Assessment and Support text. Answers to the questions are written, hence requiring systematic engagement with them, and the reflection section is written in such a way as to guide learners and trainers in setting up the critical discussion of the task that will allow emerging new understandings to be identified and internalized.

At SAIDE, we would welcome your reflection on this activity and the processes that we have attempted to design into the learning text around it. Equally importantly, we expect to get this kind of feedback from educators in various schools implementing Inclusive Education during the course of this year. The piloting of the materials in this project has now taken place in all nine provinces through the various Sisonke partners. In 2007, feedback received from various monitoring and evaluation processes, as well as from critical readers in government education departments and higher education institutions, will be taken into account in producing finalised versions of the training materials for the Department of Education. These will then be used in the ‘roll-out’ of the Inclusive Education strategy nationally.
SAIDE Supports FET Colleges with the Roll-out of the New National Certificate Vocational Curriculum – Professional Development for Lecturers and more...

January 2007 saw the introduction of a new curriculum for FET colleges with 13 new programmes comprising the National Certificate Vocational (NCV). The introduction of the new curriculum heralds a new approach to content, and both method and mode of delivery in the vocational and technical sphere of education. Maryla Bialobrzeska reports on various SAIDE activities supporting this process.

Design of the new vocational programmes
The NCV comprises seven subjects, four vocational subjects, such as Engineering, Management, Marketing, Tourism, by way of example, and three compulsory foundational subjects: a language, maths/maths literacy and life skills (including IT skills).

Approach of the new curriculum
The new curriculum is significantly different from the previous curriculum which was largely examination-led. It is competence-based and integrates theory and practical learning and teaching. This denotes a shift from memorising information to applying information. In the new curriculum there is greater focus on the development of higher cognitive skills such as the ability to analyse, organize and critically evaluate information. Assessment is integrated into the delivery of the new curriculum, where previously it was often something that was merely tagged onto the end of a unit of learning.

Mode of delivery
The curriculum guidelines also encourage FET colleges to develop more flexible methods of programme delivery, including part-time and distance methods so as to increase access to vocational and technical training.

All the above have direct implications for the day-to-day practice of FET lecturers and the way in which FET colleges approach the necessary transformation of their institutions.

Five areas in which SAIDE offers professional development and training to FET colleges
SAIDE does not view professional development as a once off event, but rather as a phased process. Preparing FET lecturers to deliver a new curriculum requires a strategy in which a variety of college-based training activities are provided. Lecturers will be trained to:

- Interpret the new curriculum and its translation into classroom practice.
- Develop skills necessary to facilitate outcomes based, learner-centred, activity based learning and teaching and assessment. This includes capacity-building in learning materials development.
- Develop strategies for students support – including the design and development of foundational programmes.
- Implement e-learning, and integrate the use of ICTs in their learning and teaching.
- Introduce distance education as an alternative to face-to-face delivery of programmes to promote greater access and flexibility to Further Education and Training.

Examples of SAIDE’s recent work in the FET sector
SAIDE has had considerable experience in the FET band and in particular, within the FET College sector. Most recently, in late 2006 we were commissioned by the Department of Education (DoE) to design training materials and deliver training to FET lecturers nationally as part of the DoE orientation to the new Level Two NCV English First Additional Language.

We are currently conducting further training at other colleges to consolidate and deepen this training. This includes work with the DfID-sponsored Khanyisa Programme of the Limpopo Department of Education focussing on supporting colleges in the implementation of a number of the new national programmes. This is the second phase of a project with Khanyisa.
In the first phase we assisted in building lecturer capacity in materials development, assessment, OBE and learner-centred pedagogy.

In 2005 SAIDE was also part of a consortium engaged by the FET Directorate of the NW Education Department to do a situational analysis of the FET college sector and develop a blueprint for the transformation of the sector which included both a strategic and an operational plan. SAIDE's role in this process focused on the transformation of the curriculum and approaches to learning and teaching. We also developed strategic and operational plans pertaining to quality assurance in the delivery of learning and teaching in the colleges.

SAIDE's 15 year track record in the education sector and in particular, its ongoing work in the FET college band, means its is uniquely placed to offer quality, tailor-made training courses for sustainable professional development of lecturers in FET colleges. For further information about professional development and training courses offered by SAIDE, contact Maryla Bialobrzeska, SAIDE FET coordinator on 011 403 2813 or email: marylab@saide.org.za.

Training at FET Workshop in November 2006