

INSPIRE -TSWALA PHAHLA TRAINING

Summary Report

Report on INSPIRE -Tswala Phahla Training	1
Description of Project	2
Provision of services	2
Implementation Plan	3
Phases of training	6
Review of the first phase training	6
Participation of subject / curriculum advisors in ICT skills for Teachers.....	6
Participation of Teachers/ principals in ICT Skills.....	8
Participation of Subject/ Curriculum Advisors in ICT Leadership for Education Managers Workshop	9
Participation of Principals /SMT in the ICT Leadership for Education Managers Workshop	11
Review of the second phase training	13
Overview of the Training of trainers	13
Coordination and Logistics around the Train the trainer Workshops (10-12 March 2010).....	14
Training of Trainers Workshop- ICT Leadership for Education Managers (10-11 March 2010)	14
Training of Trainers Workshop - ICT Skills for Teachers (11-12march 2010).....	16
Quality Assurance on ICT Skills Practice Training (25 March – 31 March).....	19
Deploying Student Help Desk Solutions (26-31 March 2010).....	22
Review of the third phase training	26
Overview of the Training of Trainers	26
Coordination and Logistics around One Step Further workshops	26
Train the trainer – One Step Further	26
Quality Assurance of One Step Further training in Schools	27
Train the trainer Webquests.....	27
Training of trainers in peer coaching	28
Conclusion and Recommendations	28

DESCRIPTION OF PROJECT

The Limpopo Office of the Premier and Provincial Information Society Strategy Development Programme in the Republic of South Africa (INSPIRE) in collaboration with the Limpopo Department of Education and funded by the Finnish and South African governments wished to establish an information society strategy and model. The intention was to roll out a pilot in one district of Limpopo with a view to replicating the model in other districts, other provinces and ultimately in other SADC countries.

The project goal was “To enhance teaching and learning through the use of information and communication technologies in schools, circuit offices, and district offices in the Limpopo Province at selected pilot sites. The core focus was to be on ICT professional development for education managers, subject advisors, principals and teachers to build a core training team to further implement professional development training to education managers and teachers.

The overall objective was to provide proof of concept “through a strategy of building capacity within subject / curriculum advisors and district officials as well as principals and teachers in order create a self sustaining model of teacher professional development in the effective uses of ICTs in education.”

PROVISION OF SERVICES

SchoolNet SA provided the following services:

- Conceptualisation, co-ordination and implementation of learning pathway and component training courses.
- Liaison with the Office of the Premier, Inspire and the Department of Education around logistics and dates and times for training
- Identification of the appropriate facilitator for each course
- Confirmation of training details with circuit managers, district officials, curriculum advisors and senior management teams concerning training schedules
- Organisation of travel and accommodation for facilitators
- Provide CDs and/or manuals as required for each programme
- Monitoring and reporting on training at the end of each course as well as providing a final report at the end of the current planned activities in the intervention.

The Department of Education/ Office of the premier /Inspire were responsible for providing the following:

- Providing contact details of the selected participants from schools/ department offices. The Department was notified that participants must have access to working computers
- Catering for training sessions
- Travel reimbursement for participants (if required)
- Provision of a venue equipped with one networked computer per participant pre-loaded with the Microsoft Partners in Learning CD and Microsoft Office Software. The Department was notified that for the One Step

Further course One Note 2007 and Encarta software/Internet are required and that for Peer Coaching and WebQuests internet access would be required.

IMPLEMENTATION PLAN

Background

This project aimed to build capacity of department officials to enhance the support provided to schools and teachers. Ten project schools were selected to participate in this pilot to evaluate whether the project could be duplicated in other districts and provinces. The project proposal outlined an implementation plan based on the Teacher Framework Guidelines for Professional Development.

The Framework guidelines for Teacher professional development states that there should be a progression of ICT development according to these different levels:

- **Entry level.** The teacher is computer literate and is able to use computers.
- **Adoption level.** The teacher is able to use various ICT, including computers, to support traditional management, administration, teaching and learning, and is able to teach learners how to use ICT.
- **Adaptation level.** The teacher is able to use ICT to support everyday classroom activities at an appropriate NCS level, assess the learning that takes place and ensure progression. He/she is able to reflect critically on how ICT changes the teaching and learning processes and to use ICT systems for management and administration. Productivity increases at this level.
- **Appropriation level.** The teacher has a holistic understanding of the ways in which ICT contributes to teaching and learning. He/she has an understanding of the developing nature of ICT, and awareness that it is integral to the structure and purposes of the NCS. He/she has the experience and confidence to reflect on how ICT can influence teaching and learning strategies, and to use new strategies.
- **Innovation level.** The teacher is able to develop entirely new learning environments that use ICT as a flexible tool, so that learning becomes collaborative and interactive. ICT is integrated as a flexible tool for whole-school development through redefining classroom environments and creating learning experiences that leverage the power of technology.

Below is a graphical representation of the various development levels:

Description of the Plan

Enhanced Management Support & ICT Literacy

SchoolNet proposed that subject advisors and members of the school management team (SMT) from project schools first participate in the respective courses for ICT Skills and ICT for Education Managers courses. This training would provide entry level and some adoption level skills to both subject advisors and Project schools SMT/Principals. This was arranged so that participants' basic ICT literacy would be in place before they participate in the ICT Leadership for Education Managers course which could then focus on the modules directly relating to management of ICT resources and issues regarding ICT policy. Only after their participation could candidates for the training of trainers be selected.

It was therefore recommended that at least 20 subject advisors be invited to participate in the ICT Skills for Teachers and ICT Leadership for Education Managers courses as participants. The 15 most suitable candidates would then be selected to attend the training of trainers' workshop on each of the courses. Thereafter the 10 most suitable candidates would be recommended by SchoolNet to provide sustained support to teachers in schools. Participation in both courses were offered in two streams, one

SchoolNet SA Report on ICT Skills Training & ICT Leadership for Education Managers (March 2010)

for subject advisors and the other for principals/ SMT from the project schools SchoolNet further recommended that the ICT Skills for Teachers training not be conducted by subject advisors, but rather be conducted by skilled IT or CAT teachers. The reason for this was that the ICT Skills for Teachers course has relatively low pedagogical content and the capacity of subject advisors would be vastly under-used. We also anticipated that if subject advisors are the only people with the capacity to do the full range of training that in the future it would be very difficult to schedule training as a small group of people would be expected to facilitate many different courses. Furthermore there was no scope in this project for appointed trainers for the ICT Leadership for Education Managers course to practice their facilitation skills, although it is hoped that subject advisors would be able to put these skills into practice as part of their support to schools. We believe that this would be a better use of their skills than facilitating the ICT Skills for Teachers course.

ICT Skills for Teachers Practice in Project schools

In the planning phase of this project it was agreed that after the train the trainer workshop, the senior trainer, using a range of criteria including proficiency in ICT skills, would recommend trainers be appointed based on a grounded/holistic view of each candidate. Once trainers were appointed the Department of Education would then coordinate logistics around trainers being appointed to each train a group of 20 teachers in each of the project schools.

During each new facilitator's first training experience at one of the project schools the newly appointed trainers' facilitation skills would be assessed for purposes of quality assurance by established SchoolNet trainers who would be contracted to quality assure this training. It was agreed that each quality assurer would spend a total of one full day with each trainer during their "practice" facilitation of the *ICT Skills for Teachers* course. The quality assurer would then use observation templates, assessment tools and guidelines for providing feedback and support to be able to monitor and support the new facilitators. Reporting was then done after each quality assurance visitation was complete.

Deploying Help Desk Student Solutions

The Student Help Desk course aligns with technical competences in the framework guidelines for teacher professional development but also forms a foundation for all other competences to be achieved. A sustainable and working computer centre will promote ICT use and integration into the classroom. This course was designed to help schools setup learner-managed technical help desks in a hub school. The intention was for the best resourced school in a cluster of schools to provide the help desk service to the community and surrounding schools. The level of support was restricted to first line maintenance of equipment and simple network installations. The training also includes setting up a database to manage work flow within the school.

SchoolNet proposed that two groups of 30 participants from the project schools be trained in help desk support and basic troubleshooting over a period of five days. At least 2 teachers and 4 students from the project schools were expected to attend this training. Furthermore it was requested that students should be in different grades ranging from grades 9-11; this was to promote the idea that as students finish schooling the knowledge and skills gained through this programme will be passed on to other learners within the school environment. This programme also promotes students teaching other students in the school these skills to further ensure sustainability of the training the training.

Intermediate ICT Skills training

One Step Further

The One Step Further course is designed to address gaps in skills learnt between the basic ICT skills and WebQuests courses. The course was designed in One Note and uses Encarta as a resource for information gathering and the developing learning objects. This course is positioned within the Adaptation level in the Framework Guidelines for professional development document.

Through this course subject advisors were meant to move from working through administration tasks and lesson preparation toward thinking and working with basic elements of project based learning.

SchoolNet recommended that at least 20 subject advisors be trained over 3 days in the One Step further course. This training would include the facilitation skills of the course. Following this training, the trainer would once again use assessment tools to make a recommendation on the most suitable trainers for this course.

One Step Further Practice in Project schools

SchoolNet proposed that once we had appointed trainers they would each have an opportunity to practice their newly acquired skills. The Department of Education would coordinate logistics around training in terms of department times and schedules and would allocate appointed trainers to project schools. During this initial facilitation, the newly appointed trainers would have their facilitation skills and knowledge of the course assessed for purposes of quality assurance by senior trainers contracted by SchoolNet SA. The intention was for each quality assurer to spend a total of one full day with each subject advisor during the implementation of the One Step Further course. The quality assurer would then use observation templates, assessment tools and guidelines for giving feedback to monitor the training and would provide a report after each quality assurance visitation.

WebQuest- ICT Integration

20 subject advisors were invited to participate in the *ICT Integration (WebQuest)* course over a period of 3 days. Following this training a recommendation was made regarding the most suitable facilitators. A WebQuest will need to be developed by each participant and submitted to SchoolNet SA for assessment. The participants achieving a gold level assessment will then be eligible to become trainers in this course. The scope of this project did not include implementation of this course and it is hoped that subject advisors would be able to use skills learnt through this course to provide support to teachers in district schools.

Peer Coaching

Peer Coaching is a course that addresses competences in the adaptation and appropriation levels. In addition this course is positioned as a foundation course that could assist the school management team to design and implement a whole school development plan that targets lesson design, ICT integration techniques and coaching skills.

In terms of this project, SchoolNet proposed two modes of implementing this course; Subject advisors could be trained as participant peer coaches (to work with individual teachers in schools) or they could be trained as facilitators (to train school-based peer coaches). The latter training was recommended for the following reasons:

- Peer coaching is a school-based professional development approach
- Peer-coach relationships are not hierarchical, but peer-to-peer, and this is difficult to emulate in a subject advisor-teacher relationship
- Each school needs to take ownership of and drive its own peer coach programme according to its own needs – this is best done internally
- Training subject advisors as peer coach facilitators (trainers of school-based peer coaches) gives the province more capacity to train more peer coaches and scale the programme in each district which is essential to the model

The intention of this component of the project was that Peer coaching facilitator training would be offered to at least 20 subject advisors, following which a recommendation would be made regarding the 10 most suitable facilitators. This training was divided into 2 sessions as this allowed subject advisors to fully engage with the course materials and work through online activities between the two sessions and to then discuss any issues that arose at the follow up session. The scope of this project did not include any practice session for subject advisors to implement any of the skills learnt through this course.

All courses completed as part of the implementation plan, will have covered all of the competences listed in the Teacher Development Framework Guidelines as highlighted in yellow below. The competences relating to the 4th criteria address innovation and as far as possible this can be achieved in any of the aforementioned levels; however this is largely dependent on individuals.

(Adapted from the *Teacher Framework Guidelines Document*)

PHASES OF TRAINING

The implementation plan was divided into three phases. Each phase comprised training courses as listed below.

FIRST PHASE OF TRAINING

- Subject Advisors Participation in ICT Skills for Teachers
- Principals & Teachers Participation in ICT Skills
- Subject advisors Participation in ICT Leadership
- Senior Management Team (SMT) Participation in ICT Leadership

SECOND PHASE OF TRAINING

- Training of Trainers ICT Leadership for Education Managers
- Training of trainers ICT Skills for Teachers
- Quality Assurance of ICT Skills Practice
- Teacher/ Student Participation in Student Help Desk Solutions

THIRD PHASE OF TRAINING

- Training of Trainers in One Step Further
- Quality Assurance of One Step Further Training in Schools
- Training of Trainers in WebQuests
- Train of Trainers in Peer Coaching

REVIEW OF THE FIRST PHASE TRAINING

The training started off with participation in the ICT Skills for Teachers course for both subject advisors and teachers from project schools as this would provide a foundation for both ICT leadership for Education Managers and the subsequent training of trainers' workshops.

PARTICIPATION OF SUBJECT / CURRICULUM ADVISORS IN ICT SKILLS FOR TEACHERS

(17 -21 February 2010)

Training was organized at Tivumbeni Education Centre. There were 16 curriculum advisors (CAs) in attendance; however only 13 attended on all days. The three participants who missed sessions were Michael Ravele, Agnes Modiba, Tintswalo Mawila

Name/s	Surname	Circuit
Susan T	Shitlhelana	<u>Thabina</u>
Mafemana J	Mnisi	<u>Thabina</u>
Ruston	Mhlongo	<u>Nkowankowa</u>
Elizabeth S	Mamabolo	<u>Rakwadu</u>

Khaxane F	Nomvela	<u>Tzaneen</u>
Sylvia T	Hlatswayo	<u>Xihoko</u>
Davis	Mabunda	<u>Mopani District</u>
Michael N	Ravele	<u>Nkowankowa</u>
Thembanani B	Maswangari	<u>Nkwanedzi</u>
Mapula R	Khunwane	<u>Shiluvana</u>
Relebogile S	Motshoane	<u>Mafarana</u>
Nndateni Agnes	Modiba	<u>Mafarana</u>
Lesiba H	Ledwaba	<u>Thabina</u>
Laurence D	Nxumalo	<u>Shiluvana</u>
Pikani D	Khosa	<u>Shamavunga</u>
Tintswalo E	Mawila	<u>Mopani District</u>

The following circuits were represented at the training:

Thabina (3 CAs); Nkowankowa (2 CAs); Rakwadu (1 CAs); Tzaneen (1 CA); Xihoko (1 CA); Nkwanedzi (1 CA); Shiluvana (2 CAs); Mafarana (2 CAs); Shamvunga (1 CA); Mopani District (2 CAs).

Although sufficient computers were available at the venue, these were not networked and as a result hampered the sharing of training resources. There was no internet connectivity and this further proved problematic because participants were disappointed that they were unable to set up their email addresses and unable to practise using the internet for research. A projector and a screen were available for demonstration purposes. The fans provided were very noisy and were a hindrance to facilitation.

The first day's training was disrupted by a meeting convened by the MEC; participants attended the meeting in the morning and arrived back to the training session only after lunch. Only 5 curriculum advisors were present throughout the day claiming that the meeting had been for classroom teachers. Eight curriculum advisors returned to the training after lunch; however they arrived at irregular intervals which created facilitation problems because the trainer was forced to orientate late arrivals and repeat this process again when the remaining participants arrived.

Although there was a decision by the District senior manager to not have training on Sundays, this decision was apparently reversed when the participants decided to attend training on Sunday. Catering was reportedly well provided and very punctual.

Comments from Participants:

"I found this course to be useful. Things I used to do incorrectly I now do them the way they are supposed to be done. If time was not, this course should be taking a much longer period than this."

"The training come at the right time for me I was just using my laptop on trial and error approach not knowing the language and correct procedure ,thanks to the service provider now my eyes are open I am confident .My job will be simple , quick and stress free."

"Wish the course can be arranged for a longer period than a week and follow-ups to be made immediately for us so as not we do forget anything. This really has boosted my confidence in computer end using and will now be able to work well. Thanks to my course presenter for being so patient and eager to help me. Wish this can be extended to all educators."

“This was a very useful course for upgrading one’s computer skills. It will definitely serve the educators well.”

“The workshop leader guidance was easy and understandable. The computer instructions need to be followed to a letter. Thanks for the CD. This is the era of IT and the workshop came in the right time. The computer is the right tool for any work only if you know how to use it. I enjoyed the interaction with the facilitator and think more than half of the computer usage will be employed now. “

“The training in ICT has made me realise how easy and user friendly a computer is. Secondly I have discovered that one can manipulate it analyse and capture important data about schools performance. I have improved my presentation skills using animation.”

“This has changed my life”

PARTICIPATION OF TEACHERS/ PRINCIPALS IN ICT SKILLS

19-20 February & 26-27 February 2010

Once again training was held at Tivumbeni Education Centre.

The trainer went to the venue before the course was due to start to check that everything was in working order. There were insufficient chairs for the expected number of participants as well as computers that were incorrectly connected. Computers were not networked and there was no server to assist with training logistics. Internet access was not available and there was no projector; the trainer luckily was able to source one for use during the training.

Training started on the Friday afternoon at 12:00 and only 3 teachers were there on time; these teachers had received the message about training from curriculum advisors who had attended training in the previous workshop. Schools were apparently only sent communications on that same Friday morning. Normally notices should be sent out to schools and/or participants of training a minimum of one week in advance. Eventually there were a total of 13 participants at the training and two of them had never touched a computer before.

First Name/s	Surname	School	Initial	Follow up
Maruping William	Malatji	Molabosane	√	a
Mampedi Elizabeth	Baloyi	Sevengwana	√	a
Shadrack Machini	Bvuma	Khataza	√	√
Ntepane Elizabeth	Hlongwane	Phusela	√	a
Kgashane Vincent	Mashaba	Molabosane	√	√
Simon Nghwalunghwalu	Mashele	Professor Shiluvane	√	a
Tsakani Joesphina	Mashimbye	Molabosane	√	a
Audrey Rhulani	Mathye	Mathlari	√	√
Moses Mafanato	Mboweni	Khataza	√	a
Mthakathi Stanley	Mboweni	Sevengwana	√	a
Magaluza William	Mhlari	Khataza	√	√
Lesiba Edward	Mothwa	Phusela	√	a

Nkateko Portia	Ngobeni	Mathlari	√	√
Edward Salazar	Mondlane	DZJ	a	√
Mafanato Peggy	Shibambu	Letaba	a	√
Chester	Mushwana	Letaba	a	√
Tintswalo M	Ntlemo	DZJ	a	√

The following schools were represented:

Molabosane (3 teachers); Sevwngwana (2 teachers); Khataza (3 teachers); Phusela (2 teachers); Professor Shiluvane (1 teacher); Mathlari (2 teachers); DZJ (2 teachers); Letaba (2 teachers). Teachers from Khataza (2), Molabosane (1) and Mathlari (2) attended all 3 days of training. Merensky High School and Mafutsana were not represented at the training.

Further problems unfolded during the training; the antivirus programme was outdated and thus the trainer's attempt to share resources using flash disks was not possible after incurring infection with several viruses.

Once again the debate about training on Sunday was revived; participants choose to not have training on the Sunday. Thus the initial training occurred over 1.5 days as opposed to 3 days. Due to the tight time frames for this project; these "lost" days could not be rescheduled. Teachers were given tasks to complete before the follow up training for the next weekend.

Only 5 participants, from the initial training were present for the follow up training along with an additional four people from Letaba High School and DZJ Secondary School. These four teachers had between them attended ICT Skills training in 2007 and displayed sufficient skills to progress with the course. Ordinarily this would not have been acceptable but due to the poor attendance thus far it was accepted in this instance. Unfortunately the lack of internet access prevented access to email as well as practice on the Digital Literacy Curriculum.

Participants' skills were at varying levels ranging from people who had never touched a computer before to good computer users. Although the course is designed to meet these varying skills levels, first time computer users should not have been shortlisted as participants as this project's main focus was to train a core team of trainers in order to build capacity; the trainer list should have comprised good computer users that would fare well as trainers. Use of Office 2007 was especially revealing because it challenged the intermediate users to orientate themselves to the new interface. Some computers experienced problems when running PowerPoint; there was a recurring request for a product key which indicated that the software had not been properly installed.

Comments from Participants:

"This is a good material for us educators to impart the knowledge to learners. The approach is very good. The emphasis is on the practice until I get used to it."

"It was a very interesting cause and I wish to thank the presenter for her good approach and a helping hand all the time and that this training may continue throughout the year."

"The training is of more importance as its empowering us"

PARTICIPATION OF SUBJECT/ CURRICULUM ADVISORS IN ICT LEADERSHIP FOR EDUCATION MANAGERS WORKSHOP 2 - 4 March 2010

Tivumbeni Education Centre was used as the venue despite requests for a change to a more functional venue if the Internet access had not been resolved. A projector was available and speakers were quickly found for use during the introductory videos. The Internet access problem had not been solved and there was no air conditioning. This was especially problematic with the stifling heat. Only 16 participants attended the training out of a possible 20.

Name/s	Surname	Circuit
Susan T	Shithelana	<u>Thabina</u>
Mafemana J	Mnisi	<u>Thabina</u>
Ruston	Mhlongo	<u>Nkowankowa</u>
Elizabeth S	Mamabolo	<u>Rakwadu</u>
Khaxane F	Nomvela	<u>Tzaneen</u>
Sylvia T	Hlatswayo	<u>Xihoko</u>
Davis	Mabunda	<u>Mopani District</u>
Michael N	Ravele	<u>Nkowankowa</u>
Themhani B	Maswangari	<u>Nkwanedzi</u>
Mapula R	Khunwane	<u>Shiluvana</u>
Relebogile S	Motshoane	<u>Mafarana</u>
Nndateni Agnes	Modiba	<u>Mafarana</u>
Lesiba H	Ledwaba	<u>Thabina</u>
Laurence D	Nxumalo	<u>Shiluvana</u>
Pikani D	Khosa	<u>Shamavunga</u>
Tintswalo E	Mawila	<u>Mopani District</u>

All 16 curriculum advisors attended training on all 3 days.

Due to the lack of connectivity much of the course work was not covered online; these activities had to be completed using the offline version which is not ideal considering that this course was meant to prepare participants for the upcoming train the trainer workshop. The online ranking tool could also not be used. Furthermore participants were unable to register on Thutong, the National Education Portal, to increase awareness of resources that are currently available and the processes involved in populating this site. There was much discussion around problems faced at schools and how curriculum advisors could mediate solutions through this training. Most participants had email addresses and the remaining participants registered for email using 3G access.

Participants voiced concerns that they were not informed in time about the course and requested that communication must be sent well in advance so that adequate plans could be put in place.

Comments from participants:

“The workshop changed my attitude to be more positive and optimistic about ICT and its integration in the curriculum. The workshop is long overdue.”

“ICT Workshop has made me realize how technology can be used to integrate curriculum implementation. Secondly I am in a better position to train educators on how to use ICT to improve learner achievement.

“I would have gained more if the computers were connected to the Internet, getting hands on information online. Unfortunately most things were done offline.”

PARTICIPATION OF PRINCIPALS /SMT IN THE ICT LEADERSHIP FOR EDUCATION MANAGERS WORKSHOP**5-6 March 2010**

Once again Tivumbeni Education Centre was host to the training without any of the previous issues having been resolved. Connectivity and air conditioning continued to be a problem. In addition, the assistant manager was not aware of the training so when the trainer arrived he was not immediately granted access to the lab. In this instance only 2 participants were present at 8:30 as per directive from HOD. By 9:30 there were 6 participants. The District Manager, Davis Mabunda was alerted to this and he confirmed that 8 other circuit managers would be joining the group. None of these circuit managers did attend training. On the second day, 1 participant was unable to attend due to family problems and one additional principal came to the venue announcing that he had just heard about the course and when he found out how much work had been covered said that he would excuse himself as he would not be able to catch up.

Attendance was as follows:

First Name/s	Surname	School	Day 1	Day 2
Mankale J	Malesa	Mafutsane	√	a
Sarah	Nkuna	Professor Shiluvane	√	√
Maruping William	Malatji	Molabosane	√	√
Susan	Phelembe	Letaba	√	√
Mmatlou Petrus	Mashiane		√	√
Mogotlo	Moswatsi		√	√

The activities proved to be very useful to participants as one deputy principal reflected that both she and the principal delegated ICT activities to teachers because they knew very little about ICTs themselves. After this presentation, she felt she now needed to take the lead.

The course was completed using the offline version because of the lack of Internet access. As already mentioned, this was not ideal as participants would have benefitted from being online and being familiar with the online environment in preparation for the train the trainer workshop scheduled for the following week.

Comments from Participants:

“I have benefitted a lot. Will inspire the educators to be computer literate”

“The workbook is user friendly and I have enjoyed the workshop”

“Due to time constraints I couldn't attend the sessions properly, but hereby recommend further training on my part. As for the trainer, he is a pleasure to work with and I am grateful for his motivation and support.”

REVIEW OF THE SECOND PHASE TRAINING

OVERVIEW OF THE TRAINING OF TRAINERS

SELECTION OF CANDIDATES

There were 14 subject advisors recommended to attend the ICT Leadership for Education Managers Trainer workshop. The ICT Skills for Teachers Trainer workshop list of candidates proved more difficult to compile. Senior trainers reported that subject advisors skill levels were not all at a trainer level. Although six teachers from the February 2010 training were added to this group, this would not be enough to produce a pool of appointed trainers to train all 10 project schools. The project plan called for 20 candidates to be selected to attend a train the trainer workshop and this was suggested to ensure that the ten most suitable candidates would be appointed as trainers. In consultation with INSPIRE representatives and via email correspondence to project stakeholders, it was decided to include six additional teachers who had attended both ICT Skills and ICT Leadership training as part of previous ICT projects in the Limpopo Province and had demonstrated ICT skills of a suitable level to be considered as candidates to become trainers. Listed below are the candidates who were eventually selected to attend the ICT Leadership for Education Managers Trainer Workshop:

SUBJECT ADVISORS

Davis	Mabunda
Ruston	Mhlongo
Sylvia T	Hlatswayo
Pikani D	Khosa
Mapula R	Khunwane
Lesiba H	Ledwaba
Elizabeth S	Mamabolo
Thembanani B	Maswangari
Mafemana J	Mnisi
Nndateni A	Modiba
Relebogile S	Motshoane
Khaxane F	Nomvela
Laurence D	Nxumalo
Michael N	Ravele
Susan T	Shithelana

TEACHERS

Audrey R	Mathye
Nkateko P	Ngobeni
Tintswalo M	Ntlemo
Maruping W	Malatji
Kgashane V	Mashaba
Magaluza W	Mhlari

ADDITIONAL TEACHERS

Elize	Kruger
Ellen	Labuscagne
Cliff	Lambane
Franci	Le Roux
Martha	Leeuwner
Gilan	Shihawu

COORDINATION AND LOGISTICS AROUND THE TRAIN THE TRAINER WORKSHOPS (10-12 MARCH 2010)

The ICT Leadership for Education Managers & ICT Skills for Teachers trainer workshops were held at the Tivumbeni Education Centre and yet again the venue not well-prepared.

It was not possible to find 16 computers with CD Rom drives that would read the course materials which were on a CD. The course was copied onto a flash drive and then copied to the hard drives of several computers. Some computers were very slow and could not be used. Some were not even connected to a power supply. One was in perpetual sleep mode. All computers were infected with a virus which hampered copying and sharing of documents.

It had been agreed among stakeholders that a functional network would be available at the venue. However even though computers reportedly had network cables connected to them, there was no network and therefore no shared drive for participants to use. Shared network access in a training environment allows a trainer to model good training practice and good practice in schools; a trainer can easily capture training artefacts and access participants' presentations for demonstrations and peer review and creating folders and files on a network assists participants in locating their often "lost" files. Unfortunately the lack of a network at the venue meant that these advantages of a networked environment could not be realised. There was no technical support available at the venue to assist with the technical problems encountered and the nearest support was reportedly in Polokwane and could therefore not be called on to provide assistance.

The lack of Internet access at the Tivumbeni Education Centre was also problematic. Internet access as indicated in the project proposal and discussed in the project planning meetings was crucial as some course activities could only be accessed through the Internet. To overcome the lack of connectivity, nine 3G modems were supplied for use during the training and the trainer had to sign and take responsibility for them. Unfortunately this solution was not effective as only 3 modems worked successfully. Even where computers were connected to the internet, the GPRS MTN cell network at Tivumbeni was not sufficient to load the Intel Thinking Tools website. Internet activities which were central to the reflection and evaluation process were therefore not possible and eventually the modems were unplugged and packed safely away in a cupboard with the connectivity problem still not rectified.

The venue had no air-conditioning and the daily temperature averaged 37°C. Three large fans made such a noise that they had to be turned off for lengthy periods so that participants could hear each other talk. Participants then suffered from the heat.

There were no spare CDs or ICT Skills Trainer Manuals available when the trainer arrived and the only response to this was that they had been there in the room the previous week.

TRAINING OF TRAINERS WORKSHOP- ICT LEADERSHIP FOR EDUCATION MANAGERS (10-11 MARCH 2010)

There were 16 participants in this workshop comprising 14 subject Advisors, one deputy principal and one principal. The list of participants and their subject expertise is listed as follows:

Name	Surname	Subject
Sylvia T	Hlatshwayo	Life Orientation
Pikani D	Khosa	Mathematics
Mapula R	Khunwane	Sepedi
Fransie	Le Roux	Deputy Principal, Afrikaans
Lesiba H	Ledwaba	Mathematics

Davis	Mabunda	Mechanical Technology
Maruping William	Malatji	Principal, History
Thembane B	Maswanganyi	Tsonga
Ruston	Mhlongo	Life Science
Mafemana John	Mnisi	Electrical Technology
Nndateni Agnes	Modiba	Accounting
Relebogile S	Motshoane	English
Khaxane F	Nomvela	Geography, Life Orientation
Laurence D	Nxumalo	Mathematics
Michael N	Ravele	Technology
Susan T	Shitlhelana	Life Orientation

According to the trainer, the participants were somewhat subdued compared to previous groups for the same course. The reason for this was not evident however one could perhaps have attributed this to participants being overwhelmed by the course / activities at hand or perhaps the training environment was different to what they expected. The facilitator and participants worked through the entire course with the focus on facilitation and deepening understanding of critical activities.

The trainer was surprised and disappointed by the “visions” revealed in the “5 years from now” activity because the participants did not display insight or imagination. Some participants suggested that each school should have one computer lab. Mostly routine rather than imaginative characteristics of good professional development, teaching and management were given. One participant mentioned international collaboration between schools, which was slightly more insightful but was still focused on the current situation that already exists in many schools.

There was no tea organised for the first morning, and not even water was served. Water arrived at about 12:30 after it was requested by the trainer. Catering was the responsibility of INSPIRE and this matter was resolved by the afternoon.

The feedback and comments generally suggested that the subject advisors have a relatively poor experience of ICT in schools. This could perhaps be attributed to their subject expertise. There were 7 Maths, Science and Technology advisors, 4 language advisors, 1 Life Orientation, 1 Economic and Management Sciences and 1 Social Sciences advisor. Although ICT integration is meant to transcend all subject areas; the trend in schools is to focus on the Maths, Science and Technology subject area, most particularly, for use in the Computer Applications and Information Technology subjects rather than ICT integration across all subjects to improve teaching and learning practices. It was clear that it is going to be necessary to provide many more interventions of capacity building in this regard.

The trainer workshop was conducted over 1.5 days and the master trainer used 8 assessment criteria to assess participants abilities according to a rating scale of 1 to 5 (1 being not at all capable; 5 being exemplary).

- Ability to manage self, manage files, perform basic ICT skills
- Be able to navigate the CD, find paths easily and keep up with the pace of navigation through the course materials
- Know the purpose and structure of each module
- Be able to setup the online resources required for online activities, VR, SE and PiL Network
- Be able to follow the course proceedings and know the materials content

- Contribute towards discussion of issues in ICT leadership
- Show insight during discussions on ICT leadership
- Show evidence that they will be able to provide leadership to SMT in ICT matters (not to be confused with technical or ICT skills)

Based on these criteria, the candidates highlighted in orange below were highly recommended and were appointed as trainers in the ICT for Education Managers course. The names not highlighted indicate the other participants in the ICT Leadership for Education Managers course.

Mafemana John	Mnisi
Fransie	Le Roux
Susan T	Shithelana
Davis	Mabunda
Maruping William	Malatji
Thembane B	Maswanganyi
Michael N	Ravele
Nndateni Agnes	Modiba
Laurence D	Nxumalo
Ruston	Mhlongo
Relebogile S	Motshoane
Pikani D	Khosa
Khaxane F	Nomvela
Lesiba H	Ledwaba
Sylvia T	Hlatshwayo
Mapula R	Khunwane

TRAINING OF TRAINERS WORKSHOP - ICT SKILLS FOR TEACHERS (11-12MARCH 2010)

At the end of the ICT Leadership Training the trainer invited the subject advisors to reflect on their ICT skills, explaining that ICT Skills trainers have to be very accomplished ICT users in order to train others. It was noted that several subject advisors skills were not at the required level. The trainer reportedly did not direct anyone to leave as was reported in a project update meeting, but merely invited participants to do a self-assessment of their ability level and to let the trainer know if, at this early stage they felt that they did not have the confidence to potentially facilitate the ICT Skills for Teachers course. One person, Agnes Mobida approached the trainer during lunch and indicated that she would not continue. Another, William Malatji asked for the trainer's opinion and he was advised that it would not be worthwhile for him to continue. Sylvia Hlatshwayo was asked whether she had thought about the request to complete a self assessment and it seemed to the trainer that she interpreted this as a suggestion to leave. Although some weak ICT users had chosen to stay, they were given the chance to complete the training of trainers' course.

A number of additional teachers were invited to the training. The teachers were meant to supplement the pool of possible trainers for this project. In the end every person suggested as candidates to attend the train the trainer workshop arrived for training and so a total of 23 potential trainers were present (14 subject advisors, 2 principals, 10 additional teachers-less the three that had left).

Candidates who attended the Train the Trainer Workshop

Name	Surname	Designation
Pikani D	Khosa	Subject Advisor

Mapula R	Khunwane	Subject Advisor
Lesiba H	Ledwaba	Subject Advisor
Davis	Mabunda	Subject Advisor
Thembane B	Maswanganyi	Subject Advisor
Audrey Rhulani	Mathye	Subject Advisor
Magaluza William	Mhlari	Subject Advisor
Ruston	Mhlongo	Subject Advisor
Mafemana John	Mnisi	Subject Advisor
Relebogile S	Motshoane	Subject Advisor
Nkateko Portia	Ngobeni	Subject Advisor
Khaxane F	Nomvela	Subject Advisor
Laurence D	Nxumalo	Subject Advisor
Michael N	Ravele	Subject Advisor
Susan T	Shitlhelana	Subject Advisor
Elize	Kruger	Teacher
Ellen	Labuschagne	Teacher
Cliff	Lambane	Teacher
Martha	Leeuwner	Teacher
Kgashane Vincent	Mashaba	Teacher
Tintswalo Mercy	Ntlemo	Teacher
Gilan	Shihawu	Teacher
Fransie	Le Roux	Deputy Principal

The training started with a simple intermediate level scenario as a diagnostic assessment. Given the time that was wasted getting set up and trying to find computers that worked and other problems, a basic scenario was not provided but rather an intermediate one was selected that involved simple skills such as starting Excel, inserting an image as a background, changing column and row width and masking columns and rows to create an Interactive Picture.

In less than 10 minutes only the following participants had completed the scenario

Tintswalo Mercy	Ntlemo
Ellen	Labuschagne
Martha	Leeuwner
Mafemana John	Mnisi
Nkateko Portia	Ngobeni
Elize	Kruger

Another 15 minutes passed and the following participants were successful at completing the task:

Mafemana John	Mnisi
Nkateko Portia	Ngobeni
Elize	Kruger
Fransie	Le Roux
Susan T	Shitlhelana
Kgashane Vincent	Mashaba

After 40 minutes the activity was stopped. A facilitator of ICT Skills needs to be able to display proficiency in the course to be convincing as a competent trainer and therefore a candidate who could not complete this activity in 40 minutes could be regarded as sufficiently competent to train others.

A conceptual explanation of the course design and delivery model was then provided. Towards the end of the day the subject of who should attend the next day was broached. Whilst no one was turned away it was agreed that the participants with weak ICT skills would slow the group as the time was needed to focus on training techniques as opposed to improving potential trainers' own computer skills. The trainer was reportedly frank with participants saying that participants who had not completed the scenario before the trainer had started his presentation had not displayed the competence expected of a trainer. It was further noted that participants who took in excess of 40 minutes to complete a scenario could not in good conscience be recommended as trainers. The decision about whether to return on the following day was placed squarely in the hands of the relevant people. Some participants did arrive the next day and nobody was turned away. The trainer reported that the participants were mature about their capabilities and were reflective about their skills.

By the end of Thursday, only one subject adviser could confidently be recommended as a competent ICT Skills trainer. Had other teachers not arrived to supplement the group, the implementation of ICT skills training for schools at the end of March would have had to have been cancelled as there would have been insufficient trainers to continue. The teachers who had been invited to train as trainers were very good ICT users. It should be noted that in the project proposal it was recommended that Subject Advisors would most likely not have the time to be ICT Skills Trainers even if their ICT skills were adequate. It had been further recommended that this training should be conducted by skilled teachers such as CAT/IT teachers.

The trainer workshop was completed over 1.5 days and the master trainer used 11 assessment criteria to assess participants abilities according to a rating scale of 1 to 5 (1 being not at all capable; 5 being exemplary).

- Show no hesitation in managing personal files
- Be able to access the CD and find the course materials by exploring to the files on CD and browsing to the materials
- Be able to perform any of the basic scenarios in limited time taking no more than 10 minutes per scenario and requiring no assistance, with little or no reference to the tip sheets
- Be able to perform any intermediate scenario in limited time, taking no more than 15 minutes per scenario, with reference to top sheets if required
- Be able to use the tip sheets to perform any scenario in reasonable time (within 15 minutes) – this evaluate their ability to use the tip sheets
- Be in a position to help peers with any scenario during course time
- Understand the course delivery model of shaping and fading in line with the cognitive apprenticeship model
- Understand the principles of the course design, specifically the context rich scenarios, just-in-time learning principle, managing mixed-ability groups and the development of independent learning
- Understand how to keep explanations simple when modelling (demonstrating skills) to the whole class or individuals
- Understand how to chunk explanations of processes into small and manageable sections
- Be dynamic when fronting a class, making eye contact, projecting voice and appearing to be enthusiastic

Based on these criteria, the following candidates were recommended as trainers:

Tintswalo Mercy	Ntlemo
Ellen	Labuschagne
Martha	Leeuwner
Mafemana John	Mnisi
Nkateko Portia	Ngobeni
Elize	Kruger
Fransie	Le Roux

Susan T	Shitlhelana
Kgashane Vincent	Mashaba
Magaluza William	Mhlari

QUALITY ASSURANCE ON ICT SKILLS PRACTICE TRAINING (25 MARCH – 31 MARCH)

Logistics around Scheduling of trainers

The list of appointed trainers was submitted to the District office and District Manager who had been appointed as the project manager for INSPIRE. The district office coordinator was tasked with allocating appointed trainers because he would have the best knowledge of the schools and their geographic location. . Eight of the 10 project schools were due to receive ICT skills training. It was reported that Letaba Special School and Hans Merensky High School would be trained when schools opened in April.

The training was scheduled with the following trainers:

	School	Circuit	Trainer Name/s	SchoolNet Approved Trainer
1	Khataza High School	Shiluvana	Khunwane MR Shihawu Gilan	No No
2	Mathlari High School	Khujwana	Shitlhelana Lambane Cliff	Yes No
3	Mafutsana High School	Thabina	Mhlongo R Ledwaba LH	No No
4	Phusela High School	Thabina	Mhlari MW	Yes
5	DZJ Mtembule High School	Nkowankowa	Motsoane SR Leeuwner M	No Yes
6	Professor Shiluvane High School	Mafarana	Ngobeni NP	Yes
7	Molabosane High School	Mafarana	Ntlemo TM	Yes
8	Sevengwana High School	Xihoko	Mnisi MJ	Yes

Only six out of the 10 appointed trainers were allocated to training in schools. Four trainers had been occupied with marking District exams and it was therefore suggested that these trainers be substituted with trainers that were the next likely candidates from their assessments during the train the trainer workshop. This was not possible due to tight time frames and to having to contact trainers at the last minute. Four other trainers, chosen by the Department of Education were used as substitutes for the training and this compromised the quality of the training

DESCRIPTION OF THE STATUS OF COMPUTER CENTRES AT THE PROJECT SCHOOLS:

In general, schools were reportedly not adequately equipped for training. ICT requirements such as servers, networked computers, and connectivity were not in place which hampered training. Inadequate numbers of computers was a major problem as individual practice is then not possible and this detracts from the principles on which this training is based.

Below is a description of the status of the computer centers at each school that received training:

Khataza High School: There were 7 computers and 8 participants. Computers are carried on a daily basis from a nearby house to the computer centre for security reasons.

Mathlari High School: There were 9 working computers and 13 teachers attended training. Four additional computers were borrowed from a neighbouring primary school. It was requested that the number of functional computers be verified before One Step Further training was to be facilitated.

Mafutsana High School: There were 16 trainees and 17 computers. Some computers stopped working but fortunately technicians were on hand to solve these problems.

Phusela High School: There were 15 participants and 11 functional computers available during the training.

DZJ Mtembule High School: There were 21 computers but only 4 trainees arrived for the training. A data projector was available for presentations.

Professor Shiluvane High School: There were 13 trainees, 17 computers but only 4 in working order. The trainer brought her own computer to bring the total to 5 working computers.

Molabosane High School: There were 15 trainees, but only 6 working computers. Four laptops were secured but this was not adequate and trainees had to share.

Sevengwana High School: There were 20 trainees and 21 computers. One computer kept popping up a message requiring a product key for Microsoft office and the trainer could not do anything to assist did not know what to do.

QUALITY ASSURANCE REPORT ON TRAINER FACILITATION

Below is a summarized report on each of the trainers who conducted training, observed as part of the quality assurance process:

Mnisi, Mafemana John

It was noted that this trainer's presentations were centred on trainer-led activities and focused on MS Word and Excel. The trainer did not allow trainees to choose scenarios and the tip sheets resource was not used. Time limits were not set for tasks and as a result trainees took too much time on certain activities.

This trainer had earlier demonstrated proficiency. Although facilitation skills normally improve as experience is gained, this trainer experienced difficulty navigating the training CD. At one stage, it was reported that the trainer requested assistance from a clerk and another teacher; at this point it would have been much more successful had he opened the task up for discussion and had asked trainees to suggest solutions. Shaping and fading methodology was not utilized effectively during the training to assist participants to become independent learners. There was limited evidence of preparation for the training and his frustration was evident when challenges were presented.

Leeuwner, Martha

The initial presentation was good and the data projector was used adequately to discuss problems that many participants experienced. The shaping and fading methodology and adult learning principles were adhered to. This trainer's skills were reportedly very good and she was able to cope with and challenge participants during the training.

Mhlari, Maguluza William

Presentations were initially not possible due to the lack of a data projector. The trainer reportedly spent too much time on individuals rather than identifying common problems and then explaining to the group. The trainer was able to facilitate more effectively when a data projector was eventually used. Technical problems were experienced and assistance was sought by the quality assurance observer. The trainer reportedly explained concepts too quickly at times. More use of the tip sheets should be encouraged.

Ntlema, Tintswalo Mercy

The trainer demonstrated well on the screen and then moved from group to group to monitor progress. There were too few computers present at this training - 15 trainees and only 6 computers – but this is not the fault of the trainer who did the best that could be expected under the circumstances.

Ngobeni, Nkateko Portia

This trainer reportedly was tutoring participants on MS Excel and did not make use of or direct participants to the tip sheets. Only basic level scenarios were used during facilitation and none of the intermediate or advanced scenarios were accessed. This was a challenging situation as there were 13 participants with only 5 working computers; this could explain the more challenging scenarios not being attempted as logistically this would not have been practical for all participants.

Shitlhelana, Susan

There was no data projector available for demonstrations or presentations. There were poor quality computers and too few for all teachers to have individual practice. Trainees were grouped together to make it easier to work with beginners.

QUALITY ASSURANCE: GENERAL COMMENTS

Overall the trainers lacked experience and familiarity with the course materials. It was reported that time keeping of trainees would have to be improved, both in terms of punctuality and completion of course activities. Tip sheets had been designed to assist trainers and participants to learn how to reference problems when working through materials on their own and the quality assurers reported that their use must be encouraged by trainers in order to promote individual self paced learning. The course is specifically designed so that trainees can continue to learn once the trainer leaves the premises but most of the trainers did not develop this aspect.

Typically there is meant to be a period of practice time between participation in courses, being appointed as a trainer and facilitating training. Due to the short time frame for this project it was not possible to give participants/ trainers sufficient time to practice their skills or become more comfortable with the course materials.

Despite the first time efforts of these trainers, the participants of the training in general felt that these were useful and informative training workshops.

COMMENTS FROM TRAINERS AND PARTICIPANTS DURING THE QUALITY ASSURANCE

On catering:

"The food was of poor quality such that they were consumed because trainees were hungry during those times. On the first day, drinks, cool drinks and water were not served but the following days they were. Generally the food left much to be desired."

"A very poor meal and hot drinks were served at 15h30 on the first day. Breakfast was not served from the first to the last day of the training. On day 2 only 11 cans of drinks were supplied with lunch and on the last day lunch was served without water."

"There were complains each day on each meal on the food that was too little meanwhile the caterer knew that she was catering for twenty people. We did not have food on our first day of training."

From the trainers:

"I missed the first day of the sessions. Because of some reasons beyond my knowledge, I was only called to start with the facilitation on the second day, hence ended having 4 days facilitation. I think there was a communication problem on who should be deployed to facilitate the training at Khataza High School, hence I was called later."

"The training went well; it is just that it had challenges in terms of the shortage of workstations. The group of sixteen teachers had five computers to share. Despite the challenges of catering and shortage of computers, the teachers showed a great zeal in what they were doing. They managed to create folders with the samples of what they did. Some of the machines were not in good working condition to such an extent that when they saved something, after a while the data got lost. It was not easy, but the teachers improvised and borrowed laptops and we are glad, we made it."

From the participants:

"More trainings of this nature should be continually conducted as many things are learnt in a very short space of time."

"A follow-up course would be most helpful in assisting us perfect our skills."

"I still need further basic knowledge and training to enhance my computer skills"

"The computers are old and insufficient and there is no internet access."

"I expect follow up soon. THANK U"

"I am still in need of basic skills in ICT"

"This was too enriching I will face the world with confidence"

"I have gained a lot of experience. I am now confident when working with computers as a computer user. I am looking forward for other computer trainings".

"We were able to do many things in a short space of time"

"How I wish this could have started earlier."

"There is too much that is expected of individuals like me who have not even mastered the handling of a mouse."

"After a constant revisit to this material and work I think I will gain a lot."

"My computer skills have improved tremendously."

"A revisit and in-service training again would be of value for the sake of improvement."

"Everything went well and I gained a lot of knowledge ever since the training started."

"The course was enriching, I really enjoyed and gained a lot."

"I need more time to practice"

DEPLOYING STUDENT HELP DESK SOLUTIONS (26-31 MARCH 2010)

The two Help desk workshops were held simultaneously at Hans Merensky High School.

DEPLOYING STUDENT HELP DESK SOLUTIONS (26-31 MARCH 2010)

The two Help desk workshops were held simultaneously at Hans Merensky High School.

Below is a table of schools that participated in this course and the corresponding number of attendees

School Name	Number of Educators	Number of Learners
Merensky Secondary School	2	1
Phusela Secondary School	1	4
Mafutsana Secondary School	2	4
Professor Secondary School	1	4

D. J. Z. Mtebule Secondary School	2	4
Mathlari High School	1	3
Sevengwana High School	2	3
Khataza High School	1	5
Molabosane High School	1	3
Letaba Special School	0	0
*W M Kgatla Primary School	1	0

* WM Kgatla is not a project school

Mafutsane High, DZJ Mtebule High and Khataza High schools each had the maximum attendance of six participants allowed per project school. Letaba was not represented at all which was very disappointing. One teacher from a non- project school, WM Kgatla Primary, seized the opportunity and also attended the training.

Two teachers and four learners per school were expected but not all of them attended. The total number of participants was 45 (14 teachers & 31 learners) out of the intended 60 participants. Grade twelve learners were not expected to attend but some schools made these learners available. Some participants were not familiar with computers despite the course requiring ICT literate participants.

TRAINING VENUE

The trainers arrived at least two hours before training was due to begin to confirm that the training venue and training materials were adequately prepared. Hans Merensky High School had only reserved one computer lab and one classroom for the training. This would not have been sufficient for the training as two simultaneous Helpdesk workshops had been scheduled. The school was able to provide an additional lab and a classroom. Staff was very helpful and provided old computers for demonstrations. The Department of Education also assisted in this regard.

REPORT ON THE TRAINING

The training was meant to begin at 12:00pm on Friday afternoon and finish on the Wednesday afternoon. As per the Department of Education request, training could not be held on the Sunday. Most participants arrived late on the first day and the training only started at 13:00. The caterer had not arrived by then and Davis Mabunda, the District ICT Manager, was tasked with finding out why catering had not arrived. Mr. Mabunda returned to inform everybody that there had been a miscommunication between the Department of Education and the caterer and that there would not be catering on that day. Mr. Mabunda suspended training in light of this.

Introductions by participants established that many of the participants were not computer literate. The trainer started off by explaining the purpose of the training and all participants agreed on this training being necessary to help schools sustain their computer labs. Training continued the next day with a focus on how to plan a student helpdesk and learners were advised to recruit other learners so that the technical knowledge could be sustained at their respective schools. Classroom demonstrations and hands on activities proved very successful for participants to understand the hardware components of a computer. All kinds of computer components; some were in working order whilst others were not were brought to give participants an opportunity to “play” with these components before getting to know what they were and what purpose they serve. Each component was discussed thoroughly, and although this process took longer than was scheduled everybody enjoyed the task at hand. It was evident that participants had learned a lot and would retain this knowledge.

Once participants had mastered how to setup a computer, in groups, participants then had to establish whether assigned computers were working and then had to dismantle them. Safety precautions for both participants and the computer components were discussed as well as concepts such as disk partitioning, formatting, file system etc were discussed at length

which led discussions toward the successful installation of Operating Systems. Hardware drivers and device manager tools such as update, rollback & delete were also discussed. In particular, the installation of printer drivers was discussed at length; often many printer errors are related to drivers.

Participants were further taken through how to support networked computers. The demonstration and practice sessions helped participants appreciate the power of computer networking. The trainer provided troubleshooting tips for participants in order for them to be able to solve baseline computer problems at their schools. Participants eagerly asked questions and the trainer had to devise a number of scenarios to help participants understand explanations.

TRAINEE COMMENTS:

Below are all comments extracted from the participants' course evaluations:

- *“During the course of help I have gained confidence in removing and replacing the internal parts. I know all the parts in a computer and I am able to know the differences, e.g., software and hardware. I am confident in running the help desk myself.”*
- *“The training was so challenging to me because I never knew the components that are inside the computer. The training made me to know things that I thought are impossible. I can now identify each and every component inside the case and I am happy because I know how to fix computers that are not working. And I am going to make sure that a helpdesk at our school is perfect.”*
- *“My trainer taught me all the basics off the computer. Now I feel like when I go back to my community/school I feel like I want to teach them what Themba, my trainer taught me, I have never found someone who can teach like this guy. But anyway the training was fantastic. I think God he gave me a chance to be taught ICT. Now I can fix any problem that can come my way and thanks to SchoolNet for sending this guy to be my teacher and teach me all I deserved to know.”*
- *“The training was an eye opener to me, as an individual, since a lot of things which I considered problems are no longer problems. Help desks that we are going to set up will help a lot in maintaining our computers fully functional and schools money will be used where necessary. Preventive practices and maintenance tasks will help in this regard. Hopefully the schools that attended the training will coordinate and pass the knowledge gathered to other schools. As well as to maintain contact with SchoolNet for future projects.”*
- *“This workshop was generally informative and one able to acquire knowledge with regard to computer fixing, however time allocated for the training was not enough hopeful in the near future more time shall be allocated.”*
- *“During the course I gain knowledge and experience how to fix computers and to install the window XP and now I can able to fix the computer who a not working so I like to thank SchoolNet to inviting to the training of PC engineering or solving problems.”*
- *“Stating from beginning it was great what I learn I was not expecting in my life now I have done. Training of computer our teacher was good, every day we all having time to prove what we did is good”*
- *“I will strongly recommend that further workshops like this be developed in order to build helpdesk capacity. The workshop has managed to enlighten (especially) the youth to do courses on computers. I would be more happier if tests or any other assessments rather than exercise be given to helpdesk trainees. Just wishing you the best because the trainer managed to unlock may things which were very hidden to me, like concepts of BIOS and RAM to mention a few.”*
- *“This computer course it was good because it gain a lot of knowledge, skills how to operate their computer. And now I gain the technical advice to repair a computer. This comments it was so very nice because now I am a technical helpdesk.”*
- *“This workshop taught me a lot of things I thought I'll knew and I hope this knowledge I have gained will be useful to those who am going to share with the helpdesk and some of those who will need technical help through computers and*

if we had a lot of time we would have gained more than we have gained now and the trainer who was training had a good way of training us and I enjoyed every section we did because the trainer was giving us practical examples that even someone who is not computers literate would have understand.”

- *“During the course it was great for me I even enjoyed everything we did like I learned about networking, removing the parts. I was a great journey for me.”*
- *“The training was an amazing training that I have never experienced before and the trainer was very helpful when we needed his help and the other trainees were helpful too and I think it was not a waste of time to do the course and I think now I am ready to fix computers so I am very grateful the t trainer and SchoolNet.”*
- *“The time of training was not enough. We did a number of things within a short period of time. It is important for the Department of education(Nationally) to continue with this type of training because it will help the schools to fix their computers when having technical problems. Let this type of program be a continuity and roll for ever because they initiate this workshop and do not pursue them forward. I founded this technical workshop very much interesting and fascinating. The facilitator was also patient enough and very good when questions were asked. Lastly, I want to make an earnest appeal to the Department to appoint caterers who are not money mongers who want to reap the Government money without rendering service needed. “*
- *“At first it was a little bit confusing because I did not know anything about computer. The food was disgusting not enjoyable. The trainer was able t help us and answered all our questions. The training was not enough for doing all the practical work.”*
- *“The training was not enough to complete all the set work given for the training. The venue for the training was suitable and well arranged. The training course material was user-friendly and most of us can use this material for running and managing the helpdesk teams. The trainer has the potential and knowledge of ICT and all. The management of time well done.”*
- *“ICT course obliged me a lot because I never knew about the RAM, Floppy Disk, IP Address, etc. I was shocked the first time uncle Themba telling about these things. I was so clueless about fixing computers and ticket request thing. I experienced a lot about this course. Now I can fix the computer: Hardware and Software and installing database. Other things is about the safety to me and the safety to the component not be damaged by me. E.G. Use anti-static wrist strap/mat so that you cannot damage the component. Do not touch the power supply because it will shock you. Themba I really thank you a lot you are a star, I have learnt many things because of you.”*
- *“The course was very much interesting and come up with lots and lots of information that I didn’t know before. The course was fine I really enjoyed it very much, even the trainer was very much helpful and encouraging to work with, even though the food was bad but otherwise the course was very much exciting and it came with lot exciting information.”*
- *“I sincerely hope we were given more time for this course because we had a short period to attend this course. The food was terrible and the person who was in charge of catering was absolutely rude. But I am grateful for what SchoolNet has done for me and I’ll continue spreading the message.”*
- *“In general the course was highly enriching. To some of us, we never thought or dreamt of opening a P.C. in order to fix a problem, but after this training, we feel more energized to troubleshoot P.C.s and hope that our schools and communities in general will gain a lot from our experiences. The problem is that because of the constrains, we have not yet mastered the technology and the names of some hard and software, but with time, we think it will be sorted out. If only we could have received laptops for our schools, we would be even happier. Hoping that this kind of training will not be the last.”*

- *“I do not regret being here to be taught about the computer and how to dismantle it, and being helped with my computer problems. It has increased my knowledge in computer streaming and I am very happy because SchoolNet has made me realize the unknown objects in the computer.”*
- *“The workshop was inspiring and very interesting. The government must see to it that the programme is continuing. WE need a follow up workshop. At least for three months in-service-training. I am really grateful. I learnt many things about the computer which all along I use to think are very difficult.”*

REVIEW OF THE THIRD PHASE TRAINING

OVERVIEW OF THE TRAINING OF TRAINERS

The participants for this workshop were the 13 subject advisors who had participated in the ICT Skills and ICT Leadership train the trainers’ courses. This training was to prepare trainers to facilitate One Step Further training in the ten project schools.

COORDINATION AND LOGISTICS AROUND ONE STEP FURTHER WORKSHOPS

An emergency discussion meeting was held in Polokwane to discuss issues that arose after the phase two training. In attendance were representatives from the Department of Education, Inspire and SchoolNet SA. Ms Koketjo Magongoa, responsible for Information Technology matters within the Department of Education was asked to attend so that she could provide feedback on connectivity at Tivumbeni Education Centre and to assist with ensuring working computer centres for upcoming training. It was decided that schools whose attendance was poor would be combined to have viable training groups, schools with insufficient computers would “borrow” computers from neighbouring schools and Ms Magongoa was tasked with checking that all project schools have One Note Software, Encarta resources loaded and that computer equipment was functional before the training should commence.

TRAIN THE TRAINER – ONE STEP FURTHER

Training was scheduled for the 4th - 6th May 2010 at Hans Merensky High School. The venue was well equipped and provision was made for each participant to have network storage space and internet access, albeit slow. One Note and Encarta were both installed and the catering was excellent.

By 9:10 am, only five subject advisors from the total of 13 were present. These were Mafemana J Mnisi, Ruston Mhlongo, Laurence Nxumalo, Michael Ravele and Davis Mabunda. An email was forwarded to project stakeholders and it was revealed that there had been a planned Mopani District Continuous Assessment (CASS) moderation scheduled for these dates. Concern was raised that the Department of Education had not communicated this vital information before the training nor at the discussion meeting when the training could have been rescheduled.

By 10 am twelve subject advisors had arrived and training started. The need for punctuality was expressly mentioned by the trainer, Department of Education officials and representatives from Inspire. Despite this by the third day of training punctuality had hardly improved. Of the 13 subject advisors who were in attendance, two participants Elizabeth Mamabolo and Relebogile Motshoane did not attend all days of training.

Despite issues of punctuality, participants reportedly coped well with One Note as well as the first section on information gathering. They understood valid contexts for gathering information and found Encarta fascinating and useful. The second day of training focused on the Simple Research section and participants found it somewhat difficult to grasp the notion of a simple question that would give rise to a simple research process. The Learning objects section was handled well as participants were at that point at ease working with One Note.

The following trainers were recommended as trainers in the One Step Further Course:

Mafemana John Mnisi
Susan T. Shithlelana
Khaxane Felix Nomvela

The project plan had expected at least 10 qualified trainers and therefore having 3 trainers being appointed placed the implementation plan at risk as training in all 10 project schools was already scheduled for the 14th -15th May. The project schools experienced further problems in that not all computer labs were able to be made functional by the Department of Education nor was the relevant software available to be loaded for the training. It was decided that training in three project schools (DZJ Mtebule Secondary, Mafutsane Secondary School and the combined Mathlari/Khataza Secondary) would continue on the 14th and 15th with each of the approved trainers facilitating the course.

QUALITY ASSURANCE OF ONE STEP FURTHER TRAINING IN SCHOOLS

Mafemana John Mnisi facilitated training at Tivumbeni education Centre where a combined cluster of twenty teachers from Matlahari and Khataza Secondary schools were present. Three additional subject advisors were present at the training. All computers were functional however not all could connect to the Internet. The trainer connected to his laptop using his cell phone and modeled the process for teachers. The trainer reportedly displayed resourcefulness and was good at explaining new concepts as well as allowing teachers sufficient time to complete their tasks. Furthermore this trainer displayed understanding of the course design principles, just in time learning and was able to manage mixed ability groups to promote independent learning.

Susan T Shithlelana trained at Mafutsane Secondary school. Unfortunately the training did not get off to a good start with a power failure until 12:30 pm. The lab had 25 computers, however only six had Office 2007 installed; none of the computers had One Note installed. The trainer informed Mr. Davis Mabunda who then tried to get the Department of Education Technicians to come to the school to assist; this proved unsuccessful. The trainer started training on two laptops, which meant that seven teachers had to share two laptops. This created an environment where participants were not able to be independent learners or practice what they were learning to a suitable degree of competence. Despite these challenges the participants did display interest in the course material and were eager to learn about learning objects as tools for use in the classroom. The trainer was dynamic as a facilitator and was able to manage crises as they presented.

Khaxane Felix Nomvela facilitated training at DZI Mtebule Secondary school. The centre had 17 computers and 11 were working but virus messages kept popping up. Unfortunately only three teachers attended the training with an additional subject advisor. The trainer looked well prepared and was eager to facilitate the course. His efforts were concentrated on developing questions in order to complete a simple research process.

TRAIN THE TRAINER WEBQUESTS

This training took place at the Tivumbeni Education Centre on 11-13 may 2010. The computer centre was equipped with computers that were mostly functional. 3G modems were supplied and participants had varying degrees of success connecting to the Internet. The computers reportedly had out of date antivirus software and hence computers contained many viruses. The Partners in Learning CD did not arrive on time, so the trainer used course files from a flash disk and the training was able to proceed with no trouble. Catering was acceptable and on schedule. Thirteen subject advisors were in full attendance for the entire course.

Participants worked on the first two workshops and collaborated and engaged with the topic well. The second workshop went smoothly, however the final analysis showed that participants were not able to select the best WebQuest two out of three times. This indicated a general lack of pedagogical experience with this kind of learning process and with the use of WebQuests as a learning approach.

The offline version of the course was used in the absence of a stable internet connection. Participants worked silently and professionally with much dedication. However the senior Trainer, Mr. Gerald Roos, reportedly was disappointed with the lack of uptake of advice and guidelines prior to each section. The lack of the participants' exposure to project based approaches became more evident. The required task needed the participants to choose a topic in a real-world context; however some participants had difficulty in achieving this even with implemented feedback. In some instances it seemed that the feedback was not comprehended.

The ensuing activities involved learners adopting roles within the projects and the related orchestration of learning. Participants reportedly had difficulty in visualizing the kind of learner roles and the process of projects in the classroom. WebQuests were not completed to an extent where the trainer could recommend any of the course candidates be appointed as trainers.

Despite this the course had reached its intended purpose as is evident through the following comments by participants:

"I found WebQuests very complicated initially and now I see it more clearly."

"The benefits in learners working more collaboratively are clear"

"I realise that some project we do are not projects"

"One discovers that there is a difference between a project that demands factual coverage and one that involves processing of information. An educator can now determine what their outcomes are – ask questions that demand higher order thinking"

"I learned to distinguish between types of questions that one would set during projects"

"I like that we have to look at an issue from different perspectives"

"I am excited about the possibility of CAs collaborating to design one Webquest type project across several subject areas"

"Although this is an effective approach for organizing a project for learners it poses a serious challenge on ICT resources, networking and the internet. If it is very slow it can remove the confidence and challenge your intentions"

TRAINING OF TRAINERS IN PEER COACHING

Training of curriculum advisors took place at Tivumbeni Education Centre in two parts; firstly from 25-28 May and secondly from 8-9 June. The venue was unchanged from the previous WebQuest training; there were virus ridden computers with no network with unstable and slow internet connectivity.

The Peer Coach course is designed for school-based coaches and aims to develop a whole school collaborative staff development approach and requires Internet access. Much of the activities could not be completed as a result of poor connectivity. The course duration was shortened to 4 days, while the planned training time was shortened to 6 days with the remaining two days being used to facilitate Intel Teach Elements: Project –based approaches to consolidate learning from the WebQuest course.

Coaching skills and lesson improvement skills were the main focus. Participants familiarized themselves with the three pillars of peer coaching, but the lack of Internet made the ICT integration aspect less fully achievable. Online collaboration and reflection, an integral part of the course, was not possible.

Participants had the following to say when asked what they learned and how they would take it forward:

"I am able to use peer coaching as a means of conducting effective workshops for teachers not only for ICT, but for other subjects as well"

"I learned how to evaluate or design a good lesson plan that will engage learners and is linked to critical and learning outcomes... the true importance of integrating ICT in lesson to enhance teaching and learning, for example making the right choice of ICT for a specific lesson"

"The pillars of peer coaching set the tone for the workshop. I learned what it means to be a peer coach, the qualities and roles of a coach; that one has to make a take different roles at different times. The lesson design and lesson improvement process capacitated me a great deal. Being able to critique other people's lesson brought the realization of what was also overlooked in lesson plans and how I can help teachers improve this."

Most subject advisors were very receptive to the course and will be able to operate in a different way when working with teachers. They struggled with the lesson improvement process, but have enough resources and experienced enough to be able to look at lessons from an enhanced perspective, communicate better with teachers and promote better integration of ICT.

CONCLUSION AND RECOMMENDATIONS

As comments have shown, participants felt that these courses were provided at a time when most needed and they expressed that they had benefited immensely from this learning experience. One of the greatest successes was that some of the trainers grasped the essentials of the philosophy behind the instructional design and learning approach of the courses.

Although this project is successful in its broader objectives of developing capacity in District personnel and to provide professional development to teachers in project schools, there have been several factors that proved challenging:

Infrastructure: ill equipped centres; poor choice of project schools; lack of connectivity; non functioning networks; lack of required software

Selection of Candidates: Poor choice of Subject advisors as many lacked basic ICT skills and were not sufficiently interested in ICT to become champions.

Communication: It seems that district personnel are not fully aware of what is happening in the district e.g. CASS moderation arranged on the same dates as Training of Trainers.

Poor planning: Lack of advanced notice for trainers and teachers at project schools to attend training

Time frames: the tight time frames were not conducive to participants being able to grasp/ master sufficiently the skills that are needed to complete the learning pathway

SchoolNet SA was tasked with providing project administrative assistance to members of the provincial education department in order to support this project as well as monitoring its roll out. However, SchoolNet's operations manager was not expected to be involved in the preparation of the venues nor of the invitations and liaison with participants. On reflection it was felt that SchoolNet did have the expertise that was required in order to make the relevant preparations at venues and should have therefore been tasked to assist more practically with this aspect of the project. While it was the intention of the project to build local capacity and therefore local organizers were expected to be involved in the organization and scheduling of training, it was perhaps unreasonable to expect local personnel to be able to achieve this task without any prior experience.

Despite the many successes, communication and attendance remain a problem for continued training interventions. It is hoped that communication improves as this will assist both stakeholders as well as participants' understanding of the programme and how this project can be a catalyst for change in the teaching practice of teachers which will lead to improved ICT integration and ultimately to improved learning.

As with the infrastructure preparation, SchoolNet would have welcomed the opportunity to have worked more closely together with the INSPRE project manager in such processes as preparing venues, inviting participants to training sessions and arranging logistics.

One of the most critical success factors in the implementation of ICT projects in schools is to ensure that trainers are proficient. When training is cascaded, as in this case, the competence of trainers particularly those who are then tasked with training others is of vital importance. For this reason SchoolNet allocated their most experienced senior trainer to ensure that the quality of those trained as trainers was maintained at a high level. It is recommended that this principle be followed in the roll out of all future courses in order to ensure not only that implementation is effective but also to make certain that this intervention results in improved teaching and learning in the classroom.

Compiled by:
Omashani Naidoo
Operations Manager
SchoolNet SA

15 September 2010

www.schoolnet.org.za