Microsoft Partners in Learning South Africa Monitoring and Evaluation – Year 1

INTRODUCTION

Microsoft Partners in Learning (PiL) is a ground breaking ICT initiative that is expected to have a substantial impact across the world.

'The Partners in Learning Program provides government and education leaders with the local resources to deliver information and communication technology (ICT) skills training and curriculum leadership to primary and secondary teachers, school leaders, and students within their countries. The Partners in Learning initiative supports Microsoft's long-term vision for the education marketplace—to empower teachers and students to achieve their fullest potential by providing greater access to the latest computer technologies and training in how to use them.'[1]

The following evaluation report follows the report structure outlined in the *Guidelines for Evaluators* as set by Microsoft. The report documents the monitoring and evaluation process; including the underlying research questions as well as the methodology of the research process. A brief overview of South Africa's education context has also been incorporated to provide additional contextual background against which the evaluation findings should be interpreted. A description of the PiL programme and the way in which it has been adapted to suit the South African context has been included as well as the management and implementation of the PiL programme in schools across the country. Due to the fact that this is the first year of the evaluation the information gathered will be used to provide baseline indicators which will be used to measure the impact of the PiL programme on South African education in the future. As such, this year's evaluation has been largely formative in nature.

Note that the report has been divided into parts, the first part has presented a summary of the key findings, drawing on the case study research, survey research, interviews with departmental officials and course evaluation forms. Following this, detailed appendices present the full set of results for each element of the study. A table summarizing key metrics and indicators has been represented with baseline indicators for 2005 included. Each year, these indicators will be measured allowing for training of changes over time

RESEARCH QUESTIONS

The underlying questions guiding evaluation of all PiL programmes specified in the Evaluator Guidelines are:

- What is PiL trying to achieve?
- To what extent is PiL successful in achieving its objectives?
- What is the evidence – what data show the development of PiL and its perceived impact on policy and practice around ICT in schools?

Working from this basis, these underlying questions were extended to include the following research questions specific to the South African evaluation:

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[1] Microsoft Corporation (2003) *Partners in Learning Grants Program* Retrieved November 21, 2005 from http://download.microsoft.com/download/8/e/d/8ed7d958-7ca9-4a70-b6c0-af94cced0aa2/PartnersinLearningGrants.doc

1. How is PiL implemented in a range of South African schooling contexts?
2. To what extent are the PiL goals and objectives being achieved?
3. What factors support and hinder programme success?
4. What are the experiences (positive and negative) of participants, at all levels from education department to learners, in the programme?
5. What opportunities and pitfalls can be identified in the implementation of PiL?
6. Is there evidence of improved access to and use of computer technologies in participating schools?
7. Is there evidence of integration of technology at the classroom level after taking part in PiL programme?
8. Is there evidence that ICT supports changes in pedagogical practice?
9. Is there evidence that PiL has supported positive changes in ICT leadership at national, provincial, district and school levels?[2]

METHODOLOGY

A mixed-methods[3] approach for the monitoring and evaluation research was conducted. As such, both quantitative and qualitative research methods were used in order to build up a comprehensive understanding of the Partners in Learning programme.

The research design included the following three main elements:
- Quantitative surveys of all participating schools, teachers and a sample of learners at these schools;
- Case study research at ten schools in three provinces;
- Research visits and interviews at national and provincial education departments, including a review of how provincial help-desks are functioning; and
- An assessment of the impact of technical support training.

CONSOLIDATION AND REVIEW OF PIL PROGRAMME DOCUMENTATION

The evaluation began by collecting project documentation and information available and reviewing this to ensure a clear understanding of the details of the project.

The following information has been reviewed:
- Microsoft PiL Materials (CD);
- Microsoft PiL Website;
- Course evaluation forms – collected by SchoolNet South Africa following all training sessions;
- All available trainers reports; and
- Discussions with SchoolNet South Africa as programme implementers.

[2] It should be noted that it is premature to address all the questions at this point; questions 1-6 have been the focus in the year one evaluation.
[3] Tashakkori, A & Teddlie, C (1998). *Mixed Methodology. Combining Qualitative and Quantitative Approaches*. Applied Social Research Methods Series. Volume 46. London: Sage Publications.

RESEARCH PERMISSION

A research proposal, with draft research instruments for the baseline case study research was submitted to the National Department of Education Director General (DG) for permissions. The DG granted permission for the study. Each of the three provinces from which case study schools were to be selected (Free State, Limpopo, Gauteng) was approached individually for permission to conduct the case studies. All nine provinces were approached for permission to conduct the annual school surveys.

CASE STUDIES

Case studies were conducted at ten schools in three provinces as shown in the table below. For year one, the two two-day case study visits took the form of baseline (before training) and during training visits. A case study report for each of the schools in the sample is presented in Annexure B. Each write-up includes a methodology section showing how data was collected at each school, and noting any specific research challenges faced. A detailed description of the specific school context is provided to provide an indication of the range of schooling contexts in South Africa. Finally, each case study documents in detail how the Microsoft PiL programme has been implemented in the school, noting specific challenges, successes and lessons.

SCHOOL	PROVINCE	STATUS OF BASELINE VISIT	STATUS OF DURING TRAINING VISIT
School One	Free State	Completed	Completed
School Two	Free State	Completed	Completed
School Three	Free State	Completed	Completed
School Four	Gauteng	Completed	Completed
School Five	Gauteng	Completed	Completed
School Six	Gauteng	Completed	Completed
School Seven	Gauteng	Completed	Completed
School Eight	Limpopo	Completed	Completed
School Nine	Limpopo	Completed	Completed
School Ten	Limpopo	Completed	Cancelled due to computer problems and training cancellation

From all schools the following data was collected during the *baseline* visits:
- School Information Survey;
- Interview with school principal;
- Educators taking part in training completed pre-training questionnaire; and
- Focus groups with learners.

From all schools the following data was collected during the two-day *training* visits:
- Two days of training observation data;
- Focus group discussion with teachers taking part in training;
- Interview with the trainer; and

- Training evaluation forms.

DEPARTMENTAL INTERVIEWS

Face-to-face interviews have been conducted with two National DoE ICT representatives. Provincial departmental telephonic interviews have been conducted with ICT representatives from Western Cape, KwaZulu-Natal, North West, Limpopo, Northern Cape, Free State, Mpumalanga and Eastern Cape. An Interview was not conducted with a representative from Gauteng this year as it impossible to contact the relevant individual. Every attempt was made to set up a suitable time to conduct the telephone interview; numerous emails and telephone messages were left. A summary of the interviews can be found in Annexure D.

ANNUAL SURVEY

Three annual surveys (school, educator and learner surveys) were administered during September and October 2005. A total of 65 of the Dinaledi schools that had received training at the time of survey administration were included in the sample. All schools chose postal surveys rather than online completion as all reported having trouble with Internet, either related to speed or cost. Each school was asked to complete a school survey, all educators who took part in PiL training in the school were asked to complete an educator survey, each educator was asked to select two learners to complete the learner survey.

Surveys were posted in late September. Follow-up telephone calls were made to all participating schools to encourage response rate. Incentives (prizes for the first three schools to submit all their surveys) were provided, also to encourage response rate. An overview of the final numbers of schools, educators and learners from whom responses were received is provided in the table below – the overall response rate from schools was 35%, a good response rate for this type of survey.

SURVEY	NUMBER OF RESPONSES
• School Survey	• 23
• Educator Survey	• 196
• Learner Survey	• 414

The following reasons were given by schools for not submitting surveys (during follow up telephone call):

- Did not receive surveys: 9 schools (3 of the schools were uncertain if they did or did not);
- Did not do training and therefore will not be doing surveys: 5 schools;
- Reported posting surveys back but researchers did not receive them: 2 schools;
- Were going to try to complete surveys and return them: 3 schools;
- No time to complete surveys (too busy): 3 schools;
- One school's roof was ripped off during a recent storm and they could not locate the PiL surveys; and
- Unable to make follow-up contact (number does not exist or there was never an answer/ phone always engaged/contact person unavailable): 19 schools.

All survey data was captured and statistical analyses performed using the Statistical Package for the Social Sciences (SPSS). A detailed report on the survey findings has been included in the report see Annexure A.

OTHER DATA COLLECTION METHODS

All course evaluation forms collected by PiL trainers have been provided by SchoolNet South Africa. The data from these evaluation forms was captured and analyzed. Following data analysis, the findings from these course evaluations have been integrated into the evaluation report and can found in Annexure C. Provincial help desk training evaluation forms were collected at the North West training session. Since no other provinces have successfully completed help desk training, the data from NW will be held until 2006 when more help desk training should take place. [4]

BRIEF OVERVIEW OF SOUTH AFRICA'S EDUCATION CONTEXT (SCHOOLING LEVEL)

The South African education landscape is complex, with schools that differ widely with respect to resources, and management expertise, and educator capacity and commitment. Many of these differences are a legacy of the apartheid regime. In addition, provincial differences with respect to management capacity as well as financial status further complicate the situation. The extract below, taken from a report detailing the complexities of the South African situation, is important to consider when interpreting evaluation findings.

> South Africa is a unique country, even in the African context. It is widely, and accurately, regarded as the powerhouse of Africa, the wealthiest country in Sub-Saharan Africa, the most industrialized in Africa, and it produces some of Africa's, indeed the world's greatest innovations. Yet studies have exposed South African education's severe shortcomings, especially in Maths and Science teaching. The average South African educator is less qualified than those in many other African countries. The divisive political past of this country has resulted in the majority of the schools being badly under-resourced, under-supplied and over-crowded. Educators themselves have been disadvantaged through the lack of affordability of and accessibility to pre-service training. On the other hand, South Africa boasts of independent schools that rank amongst the finest in the world. Even in that sector the dichotomy continues, because some of the poorest schools in the country are also independent schools. Some of the finest, most creative teachers in the country will be found in under-resourced township schools – some decidedly ordinary teachers can be found in top independent schools. In essence, it is simply impossible to make assumptions about this educational environment. Similarly, it is simply not possible to reflect experiences of other Third World countries onto the South African context.[5]

Further, since 1994, the South African education system, at all levels, has been in a state of transformation. This transformation has involved all areas of the schooling system,[6] including for example, governance and management, curriculum development, and moves to outcomes-based education and learner-centred approaches. In the area of educator training, a range of

[4] It should be noted that all research instruments are included in Annexure F
[5] Roos, G (2003). Understanding the South African Programme context.
[6] See the 1996 South African Schools Act, No 84 of 1996.

policies and new structures has emerged to cover curriculum issues, norms and standards for educators, and the institutional base for educators.[7] However, while there has certainly been an improvement in some schools, many have yet to experience the benefits of new policies.

NEW CURRICULUM

In South Africa, revisions and reformulations of the school curriculum began in 1994 when the National Education and Training Forum began a review of the syllabus and rationalisation of subjects. Under the apartheid system there were 19 different education departments organized on the basis of race, geography and ideology. The task as of 1994 was to develop a single national core curriculum. In 1997 the National Curriculum was published, and a Revised National Curriculum was released in 2002. From 2006 a new curriculum for grades 10 to 12 (Further Education and Training, FET, level) will be implemented. The types of learners envisaged in this new curriculum are best described with a quotation from the Revised National Curriculum Statements for Grades R-9.

> The curriculum aims to develop the full potential of each learner as a citizen of a democratic South Africa. It seeks to create a lifelong learner who is confident and independent, literate, numerate and multi-skilled, compassionate, with a respect for the environment and the ability to participate in society as a critical and active citizen.[8]

With respect to educators, the following characteristics are envisaged:

> Educators at all levels are key contributors to the transformation of education in South Africa. Teachers have a particularly important role to play. The National Curriculum Statement envisions teachers who are qualified, competent, dedicated and caring and who will be able to fulfil the various roles outlined in the Norms and Standards for Educators of 2000 (Government Gazette No 20844). These see teachers as mediators of learning, interpreters and designers of Learning Programmes and materials, leaders, administrators and managers, scholars, researchers and lifelong learners, community members, citizens and pastors, assessors and learning area/phase specialists.[9]

In developing such learners and educators, an outcomes based approach to curriculum has been adopted. An outcomes based approach considers both the content and the *process* of learning as critical. Both the content and the process of learning are articulated by the formulation of specific learning outcomes that should be achieved by the end of the learning process for a given phase and subject area. In addition to specific subject-based outcomes, the following critical and developmental outcomes underlie the curricula developed for each learning area. The critical and developmental outcomes are underpinned by the values enshrined in the South African constitution.

The critical outcomes envisage learners who are able to:

- Identify and solve problems and make decisions using critical and creative thinking;
- Work effectively with others as members of a team, group, organization and community;
- Organize and manage themselves and their activities responsibly and effectively;
- Collect, analyze, organize, and critically evaluate information;
- Communicate effectively using visual, symbolic and/or language skills in various modes;

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[7] Lewin, K; Samuel, M & Sayed, Y (2002). Changing Patterns of Teacher Education in South Africa. Policy, practice and prospects. South Africa: Heinemann.

[8] Department of Education (2002). Revised National Curriculum Statements for Grades R-9 (Schools). Department of Education, Pretoria: South Africa, p. 8.

[9] Ibid, p.9.

- Use science and technology effectively and critically, showing responsibility towards the environment and the health of others; and
- Demonstrate an understanding of the world as a set of related systems by recognizing that problem solving contexts do not exist in isolation.

The developmental outcomes envisage learners who are also able to:
- Reflect on and explore a variety of strategies to learn more effectively;
- Participate as responsible citizens in the life of local, national, and global communities;
- Be culturally and aesthetically sensitive across a range of social contexts;
- Explore education and career opportunities; and
- Develop entrepreneurial opportunities.

INFRASTRUCTURE

The School Register of Needs Survey[10] of 2000 reported that, of the 27,148 schools in the country, 27.3% had no access to water, 42.9% to electricity, 9.2% to toilets, and 35.5% to telephones. In addition, the survey found an increase, compared to 1996 figures, in the number of schools that reported weak and very weak buildings. The country's learner-educator ratio was 32:1 and the learner-classroom ratio was 38:1. While there are wide variations from province to province, these national statistics provide an overview of the extent of the challenges facing the education sector.

In the area of ICTs, while significant divides still exist across provinces and schools, much progress has been made in the past few years. In August 2003, the South African Department of Education released the White Paper on e-Education.[11] This reflects the stated commitment of government to addressing the digital divide within the schooling sector and recognition of the valuable role that ICT can play, when used appropriately, to support teaching and learning as well as school administration and management. The table below provides a breakdown of computer availability in schools across the nine provinces.

PROVINCE	SCHOOLS WITH COMPUTERS	SCHOOLS WITH COMPUTERS FOR TEACHING AND LEARNING
Eastern Cape	8.80%	4.50%
Free State	25.60%	14.60%
Gauteng	90.50%	57.40%
KwaZulu-Natal	16.60%	11.40%
Mpumalanga	13.30%	4.90%
Northern Cape	24.90%	12.40%
Limpopo	30.50%	22.90%
North West	84.30%	49.30%
Western Cape	99.40%	61.80%
National	**43.77%**	**26.58%**

Source: National Department of Education, 2004 statistics on ICTs in Schools

[10] Report on the School Register of Needs 2000 Survey. Pretoria: Department of Education.
[11] Department of Education, 2003. Draft White Paper on e-Education. Transforming Learning and Teaching through Information and Communication Technologies.

These statistics highlight the diversity of the ICT context of schools across the country. Particularly notable is the low percentage of schools with computers for teaching and learning. A survey conducted in 2000 found that the principal factors preventing schools from using computers as a tool for teaching and learning included: insufficient funds; inadequate numbers of computers; lack of computer literacy among teachers; lack of subject teachers trained to integrate computers into different learning areas; and the absence of properly developed curriculum for teaching computer skills.[12]

While these statistics may seem to portray a bleak picture, it should be noted that the number of schools with computers for teaching and learning has increased by 12.3% between 1996 and 2002. Further, government has committed, in the White Paper, to the goal of ensuring that all schools have computers by 2013.

The concept of e-Education reflects much more than access to ICTs alone, 'e-Education revolves around use of ICTs to accelerate the achievement of national education goals'[13]. E-education implies that learners and educators are ICT-capable, rather than ICT literate only, and includes the abilities to:

- Apply ICT skills to access, analyse, evaluate, integrate, present and communicate information;
- Create knowledge and new information by adapting, applying, designing, inventing, and authoring information;
- Enhance teaching and learning through communication and collaboration by using ICTs; and
- Function in a knowledge society by using appropriate technology and mastering communication and collaboration skills.[14]

DEPARTMENTAL ICT PRIORITIES

According to the South African Department of Education as well as various Provincial Education Departments,[15] the following ICT priorities, to accelerate the achievement of national education goals, are being addressed:

- ICT professional development for management of teaching and learning;
- Electronic resource distribution;
- Access to ICT infrastructure;
- Connectivity;
- Community engagement;
- Research and development; and
- Overarching development is to use ICTs as an enabling tool to achieve educational goals.

The following progress has been made in achieving these strategic priorities:

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[12] Lundall, P & Howell, C (2000). Computers in Schools. A National Survey of Information and Communication Technology in South African Schools. Education Policy Unit, University of the Western Cape.

[13] Department of Education, (2003). White Paper on e-Education. Transforming Learning and Teaching through Information and Communication Technologies, p.7.

[14] Ibid, p.7.

[15] This information has been collected from the interviews conducted with various Departmental officials, see Annexure D.

- **ICT professional development for management of teaching and learning**
  - Creation of partnerships with various stakeholders such as Intel and Microsoft;
  - Development of guidelines for stakeholders to develop ICT programmes; and
  - Identification of ICT skills needed to use ICT in teaching and learning effectively.

- **Electronic resource distribution**
  - Development of *Thutong,* the National Education Portal as a means to deliver content.

- **Access to ICT infrastructure**
  - Development of provincial business plans in terms of rollout of infrastructure and funding; and
  - Development of norms and standards to provide provinces and schools with guidelines for procurement.

- **Connectivity**
  - Proposed implementation of 'e-rate'; and
  - Development of draft educational network framework through the Department of Communications.

- **Community engagement**
  - Development of guidelines for community engagement;
  - Establishment of strategies to help with aspects such as technical support; and
  - Implementation of structures to coordinate provincial government departments to ensure the implementation of e-education is synchronized.

- **Research and development**
  - Research projects such as Kanya and PiL;
  - Development of an e-school readiness tool '*Schools Assessment and Readiness Target Tool*'; and
  - The support of *Meraka Institute*[16] in the implementation of e-project in terms of research and development.

While these are laudable aims, an additional factor to lack of computers that will affect the achievement of the goal of educational improvement is that many educators were poorly trained in the past and as such do not have a good conceptual knowledge of the subjects that they teach nor of teaching methods.[17] Educator professional development is an essential aspect of educational transformation in the country and hence the PiL programme potentially has a very valuable role to play.

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[16] The Meraka Institute derives its mandate as a national strategic initiative from President Mbeki's 2002 State of the Nation Address. The major objective of the Meraka Institute is to facilitate national economic and social development through human capital development and needs-based research and innovation, leading to products and services based on Information and Communication Technology.

[17] See for example:
Adler J & Reed, Y (eds), (2002). Challenges of Teacher Development: An investigation of take-up in South Africa. Pretoria: Van Schaik Publishers.
Lewin, K; Samuel, M & Sayed, Y (2002). Changing Patterns of Teacher Education in South Africa. Policy, practice and prospects. South Africa: Heinemann.

OVERVIEW OF MICROSOFT PARTNERS IN LEARNING PROGRAMME

PURPOSE

Microsoft is partnering with experts in educator and curriculum development through an independent Education Leadership Forum. With representation from Government, Policy makers, Educators, and the IT Industry, its purpose is to deliver high-quality learning and development experiences for educators. It also aims to provide resources to support success in the classroom as well as providing colleague-networking opportunities. [18]

According to the PiL Project Manager

'I really think that Microsoft wants to make an impact in on the improvement of teaching and learning in South Africa because a lot of thought and effort has gone into the development of the materials and it's a worldwide effort which seems to have genuine interest.'

RATIONALE

The Microsoft PiL Programme facilitates progress in terms of the achievement of strategic priorities both at national and provincial level.

According to representatives from the South African Department of Education the PiL programme

'Supports priorities in terms of teachers development, hardware, software, research, monitoring and evaluation'

'Allows provincial departments achieve the strategic goals of the DOE white paper on e-Learning'

GOALS

Microsoft's goals for the Partners in Learning Programme are as follows:

- To empower schools to significantly raise the level of information communication technology (ICT) literacy amongst their staff;
- To support teachers and schools in developing an internal culture of innovation;
- To work with schools to prepare student for the digital work place.[19]

PIL PROGRAMME

Following on from initial negotiations between Microsoft South Africa's Partners in Learning Programme Director and the South African Department of Education; Microsoft has

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[18] Microsoft Corporation (2005) *Partners in Learning Grants Initiative* Retrieved December 2005 from http://www.microsoft.com/education/PartnersinLearning.mspx

[19] Microsoft Corporation (2005) *Partners in Learning* Retrieved December 2005 from http://www.school.za/atwork/pil.htm

partnered with Provincial Department's of Education (PDoE) to offer training within PDoE structures, to provide low-cost IT training and support to their schools.

Originally it was Microsoft South Africa's intention that the four modules of training include: Schools ICT Training, ICT Curriculum Integration, Basic Schools Helpdesk and Advanced Helpdesk.

SchoolNet South Africa (SNSA) is the organization responsible for the localization of the training materials. The strategy to address the localization of the content to the South African environment was to invite the best educational ICT teachers in each province to attend a workshop at a central venue. This was to achieve a number of objectives:-

1. To establish criteria for best practice for educator development in ICT materials
2. To evaluate the strengths of the Imagine Education materials
3. To design learner centred materials appropriate for an authentic African context
4. To promote the 'ownership' of the learning materials by senior trainers in each province.
5. To prepare the seniors for cascading the training to other trainers in their own provinces

The four modules of training have been localized to include: ICT Skills for Teachers Activities, Integrating ICT (Web Quest Lessons), ICT Leadership for Education Managers as well as Help Desk Training.[20]

ICT Skills for Educators

These activities are designed so that all educators can find something that interests them irrespective of their computer experience. There are a range of scenarios. At the end of each activity there are further scenarios related to the one just completed as well as links to skills at a higher level of difficulty.

Integrating ICT (Web Quest Lessons)

These themes each include a number of small projects. The projects have been written as WebQuests: collaborative group activities that make use of, but do not entirely depend on, Web resources. The projects are designed to be easily used by teachers and learners and should each take about five to six hours to complete.

ICT Leadership for Education Managers

The course is designed for school principals and will be applicable to provincial education management and school management personnel as well. Each module contains materials for several contact workshops which could vary in length from one to three hours. Course designers may combine any number of these workshops to make a course.

Helpdesk Training

The Helpdesk Training guide is designed to assist in teaching the material in the Student's Guide for *Deploying Student Technical Support Solutions*. The book introduces students to the basics of supporting Windows XP Professional, which each school receives through the Partners in Learning program. The materials are meant to be used in order; beginning with

[20] This information is available on SNSA's website at http://www.school.za/PILP/

Chapter one and progressing sequentially to Chapter nine. The number of class meetings, length of each class, number of students, and other factors affect how the course will be taught as these variables are specific to each school, and affect the pace at which progress is made.

All four modules outlined above are currently being implemented throughout South Africa to a greater of lesser degree. However substantial progress has been made in terms of the implementation of the ICT Skills for Educators module compared to the others.

STRATEGIES FOR FACILITATING LEARNING

Scenarios

As mentioned above SNSA invited the best teachers from each province to a workshop at the University of Johannesburg to brainstorm criteria for the most effective training materials. As a result the materials have been designed to allow for the maximum flexibility for learners. Thirty separate scenarios have been sketched, each describing a typical instance in which a South African educator will use ICT. The use of scenarios is an attempt to provide meaningful contexts to a wide range of teachers. The scenarios are deliberately brief and do not mention specific learning areas or tasks. The educator should use the scenarios and accompanying tasks and tip sheets to create documents that they will find useful in their work as educators. The full list of scenarios is available on SNSA's website at http://www.school.za/PILP/

Tip sheets

The just–in-time learning principle is catered for by the inclusion of hyperlinked tip sheets alongside each task on the scenario page. The 'how to' is provided at the time when the need is established. This follows instructional principles (*Figure 1*) along the following lines:

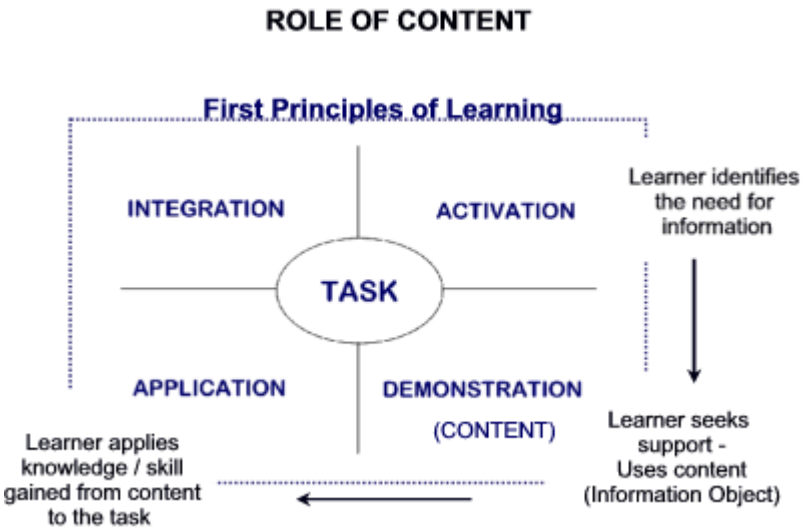


Figure 1 - Instructional cycle[21]

[21] Adapted from Merrill's *First Principles of Instruction*

- The learner is working on a ***task*** (the scenario)
- The learner could be required to do something (as suggested in the task list) that s/he cannot do. This is a stimulus or ***activation*** of a learning need
- The tip sheet provides a ***demonstration*** of how to do that particular process – just-in-time
- The learner ***applies*** what s/he learns from the demonstration to his/her task
- In so doing the learner will be ***integrating*** new skills into the project as a whole, gaining understanding of concepts and how they fit into the 'bigger picture'

This model of the instructional cycle shows that learning is activated by the learner. It is the learner who defines what s/he needs to know. It is therefore inappropriate for the facilitator/ trainer to teach ICT skills which he or she thinks are important. The facilitator/ trainer should be influenced by the learners' needs. It is possible that, at times, a group of learners need to know the same thing. At that stage you would make a strategic decision to teach something to a larger group.

LEADERSHIP AND MANAGEMENT

Initial negotiations were held between Microsoft South Africa's Partners in Learning Programme Director and the South African Department of Education. According to representatives from the South African Department of Education '…implementation and logistics are negotiated at provincial level.' The school selection process varies from province to provinces. According to representatives from PDoE's the following criteria were used to select schools to participate in the PiL training programme;

SELECTION CRITERIA	PROVINCE
• Schools that have computers	• Eastern Cape, KwaZula Natal
• Schools that were previously disadvantaged	• Western Cape, Northern Cape
• Schools that have proactive/supportive management	• Western Cape, Northern Cape
• District officials help decide	• Limpopo, Western Cape
• Schools that have good ICT facilities	• Limpopo
• Schools that have average facilities	• Limpopo
• Must have produced a technology/business plan	• North West
• Project specific: e.g. Intel training in schools that have had ICTs for at least three years or rural schools where urban/rural imbalances need to be addressed.	• Western Cape
• Dineledi Schools	• KwaZulu Natal
• FET schools, especially those that want to offer CAT and IT	• Free State

Similarly the following criteria were used to select educators to participate in the PiL training programme

SELECTION CRITERIA	PROVINCE
• All staff on installation of ICTs	• Free State, Western Cape and Limpopo
• Maths, Science and technology teachers	• Eastern Cape and Free State
• Schools themselves make these decisions	• Northern Cape, Western Cape
• Emphasis on all subject teachers not just CAT and IT	• North West Province
• Teachers from previously disadvantaged schools	• Northern Cape
• Those that show interest first	• Northern Cape
• Principal must have rudimentary skills	• KwaZulu Natal – (Principal's training only)

According to the PiL Project Manager; conceptualization and logistics planning for PiL is done between the Microsoft Academic Programs Manager and the PiL Project Manager. The process is normally one of meeting face to face to discuss forthcoming components of the project as proposed by Microsoft's Academic Programs Manager and guided by the international PiL program. Discussion is focused around the implementation of the forthcoming component of the PiL programme in a South African context and a decision is taken regarding whether or not localization of materials is required. A comprehensive proposal is then submitted by the Project Manager to Microsoft South Africa for approval.

ALIGNMENT: TRACKING IMPLEMENTATION

IMPLEMENTATION OF PIL TRAINING

SNSA has been appointed by Microsoft South Africa to project manage the implementation of the PiL Programme in Schools throughout South Africa. According to the PiL project manager The trainers are normally selected according to their geographic location. SNSA then liaises with the schools and/or venues to confirm the dates and times which training will take place. SNSA appoints and trains facilitators across the country to conduct the Partners in Learning training.

Trainer Training

According the SNSA 'The Basics in ICT methodology requires that trainers be oriented, particularly in the shaping and fading approach to facilitation. Training of senior provincial trainers, one per province took place in January 2005 at a central venue in Johannesburg; a further group of provincial trainers were trained for the Dinaledi and Nelson Mandela projects in March 2005, while training of further trainers for this particular project took place in each province during July 2005.

Trainers were selected according to their previous performances in other training interventions. All are educators or departmental officials who were previously educators. The number of trainers required per province was determined by the number of schools identified for training with a view to completing training in 120 schools across 5 provinces by June 2006. There were 39 trainers who had been trained in provinces up to June 2005 and a

further 31 trainers were trained for this project making a total of 70 trainers across all 9 provinces.'

ICT Skills for Educators Training

During 2005, the training was delivered in two sessions at each school, focusing on basic ICT skills for educators. The first session is a 3-day session during school holidays. In this session intensive guidance and support is provided by the facilitator/trainer. After the 3-day training session there should be a gap of at least one month. It is SNSA's expectation that during this time educators work towards gaining confidence and feeling that they are in control of the technology. This is followed up by a one and a half day session over a weekend. At this follow up session the facilitator/trainer is expected to be able to answer queries relating to specific problems that the educators encountered in the interim. The facilitator/trainer is also expected to allocate some time to talk about ICT in education.

QUALITY ASSURANCE

Following each training session PiL facilitators/trainers are required to submit the following information to Schoolnet South Africa:

- Trainer Reports – Facilitators/trainers are required to write a report after each course.
- Course Evaluation Forms – All educators who have participated in the initial training are required to complete course evaluation forms (see Annexure F)
- Follow-up Surveys – All educators are required to complete follow-up surveys at the end follow-up training session.

PROGRESS

As mentioned above substantial progress has been made in terms of ICT Skills training this is as follows.

Training in the principles and practice of the ICT Skills for Teachers course was provided to nine curriculum implementers of the Mpumalanga Department of Education.

The training focused on Basic ICT Skills for Teachers and ICT Integration (WebQuests) was provided to 16 master facilitators at the Free State Education Department.

According to a summary provided by SNSA as of end October 2005 the following ICT schools training had taken place:

Province	No. Of Schools	Total Educators Trained
• Gauteng	• 10	• 126
• Limpopo	• 42	• 339
• North West	• 7	• 70
• Mpumalanga	• 27	• 147
• Free State	• 6	• 78
• Eastern Cape	• 38	• 350
• KwaZulu-Natal	• 21	• 176
• **TOTAL**	• **151**	• **1286**

EFFECTIVENESS AND VALUE OF TRAINING

Comprehensive reports on the Surveys, Case Studies, Trainer Reports, Participant Course Evaluations and Follow-Up Surveys analysis can be found in the Annexures A, B, C. Together these information sources provide a wealth of information and detail regarding the PiL training which took place in schools across South Africa as well the effectiveness and value of the training.

Overall, trainers report that teachers found the scenarios, examples and tip sheets helpful. According to the trainers the model of training being used for this programme is seen as successful. The results presented in the course evaluation forms show a very positive response to the training approach and the PiL materials. Educators reported that they enjoyed working at their own pace (98.1%) and independently on projects that met their specific needs (98.1%). The tips sheets, advanced tip sheets and self assessment sheets were all positively rated. Educators reported that the trainers taught them to find their own solutions to problems (97.8%) and that they became more independent users of ICTs as a result of the training (94%).

The educator's confidence in using computers has increased following participation in the PiL training. Before the initial training we see that only 5.1% reported feeling 'very confident', compared to 31.7% after the initial training and 58.1% by the time the follow-up training began. Before the training 23.7% of educators reported having no confidence to use a computer, compared to no educators reported no confidence following the initial training session. These results support the self-report changes in ICT skills ratings found when analyzing the educator surveys.

IMPACT

Due to the nature of the educational research it is extremely difficult to measure the impact which the PiL programme has had in the South African education context as there are a number of other influences which have an affect on the evaluation. For example, PiL is one of many educator training programmes being offered in schools, schooling contexts differ widely, support of school management is not consistent across schools etc, each of which will influence any 'impact' or changes that might be observed at the school level. Being the first year of the PiL programme and the evaluation research it is premature to comment on the impact that the PiL programme. Baseline data has been collected during year one of the evaluation and attention will turn to assessing impact in subsequent years. However the data presented in Annexure E begins to highlight the effects of PiL (positive and negative).

It should be noted that the following section is structured using the research questions guiding the study.

WHAT ARE THE EXPERIENCES (POSITIVE AND NEGATIVE) OF PARTICIPANTS, AT ALL LEVELS?

The results presented show a very positive response to the training approach and the PiL materials. The schools, as well as the educators were very pleased with the Microsoft PiL training as shown by the following comments.

'Yes, the training was useful …. Since we started this training our skills have improved.'

'…we thought it would be basic computer literacy but have been exposed to more programmes and have learnt about integrating computers into teaching and learning.'

'…it provides the educators with something they can really use; touching on key issues such as timetabling, class lists, tests etc.'

'Useful because the scenarios can be applied. The pro-forma templates can be used and adapted.' 'Useful. I had previously had some basic knowledge of computers but this course allowed me to read up new skills…' 'I've never used computers before and liked that what we were doing was related to our work.'

Educators reported that they enjoyed working at their own pace and independently on projects that met their specific needs.

'The training is excellent we never expect to gain this much, the information is relevant for educators. The fact that you can do this at your own pace give you lot of confidence. We didn't know anything but now, we can do our own reports using computers.'

'…one thing I noticed as I was walking around was that some of the teachers were able to work at their own pace – I noticed that one teacher was trying to do something that the other educators would know how to do so they were able to work together and help each other.'

The tips sheets, advanced tip sheets and self assessment sheets were all positively rated in the surveys. Educators reported that the trainers taught them to find their own solutions to problems and that they became more independent users of ICTs as a result of the training. However a number of negative comments were made about the tip sheets during educator focus group discussions and as a result of interviews with trainers during case study visits.

'…the tip sheets don't stay on top and the users keep loosing them. Beginners who have no experience struggle with accessing the tip sheets.'

'The tip sheets are only good for competent users. New users struggle to make use of the resources and tip sheets.'

Other than requesting that the training be longer and more often, which demonstrates a need and desire for computer training rather than being a result of negative feelings, the comments surrounding the training were mostly positive.

'This is the first time I have used a computer, I feel we need more time.'

'This has been good but we need more time.'

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
	Before the course				
1	I am a confident computer user	10.5%	31.0%	40.9%	17,6%

		Strongly Disagree	Disagree	Agree	Strongly Agree
	During the course				
2	I found the scenarios useful to my needs as an educator	0%	0.2%	39.3%	60.3%
3	I read the outcomes	0.1%	3.9%	66.5%	29.5%
4	I found the outcomes descriptions useful	0.4%	3.7%	50.6%	45.1%
5	I needed the help of the example document	0.5%	4.0%	56.9%	38.3%
6	I found the example documents useful	0%	1.0%	46.2%	52.8%
7	The task list was a useful guide for completing the document	0.1%	2.6%	52.1%	45.2%
8	The tip sheets in the resource list helped me to complete the task	0.4%	3.9%	51.9%	43.9%
9	The trainer supported me when I needed help	0.3%	0.4%	25.1%	74.2%
10	The trainer taught me to find solutions to problems that I experienced	0.4%	1.8%	34.8%	63.0%
11	My colleagues were able to help me when I needed help	1.1%	3.3%	48.0%	47.6%
12	I found the related scenarios useful in guiding me to my next project	0.6%	1.9%	50.5%	47.0%
13	I used the self-assessment sheet	2.2%	12.5%	53.9%	31.4%
14	I found the self-assessment sheet useful	2.3%	12.5%	51.2%	33.9%
15	I used the advanced tips	4.5%	11.6%	57.1%	26.7%
16	I found the advanced tips useful	4.7%	10.5%	52.4%	32.4%
17	I enjoyed working at my own pace	0.6%	1.4%	41.3%	56.8%
18	I enjoyed being able to work independently on projects that suited my needs	0.4%	1.5%	42.3%	55.8%
19	I became a more independent learner of ICT	0.7%	5.3%	49.9%	44.1%
20	I found the pair and share session useful	1.1%	2.8%	45.9%	50.2%
	After the course				
21	I feel that my computer skills have improved	0.3%	1.2%	37.0%	61.5%
22	I enjoyed this approach to training	0.4%	0.9%	34.4%	64.3%
23	I will revisit these materials and work further on them soon	0.3%	0.4%	29.8%	69.5%

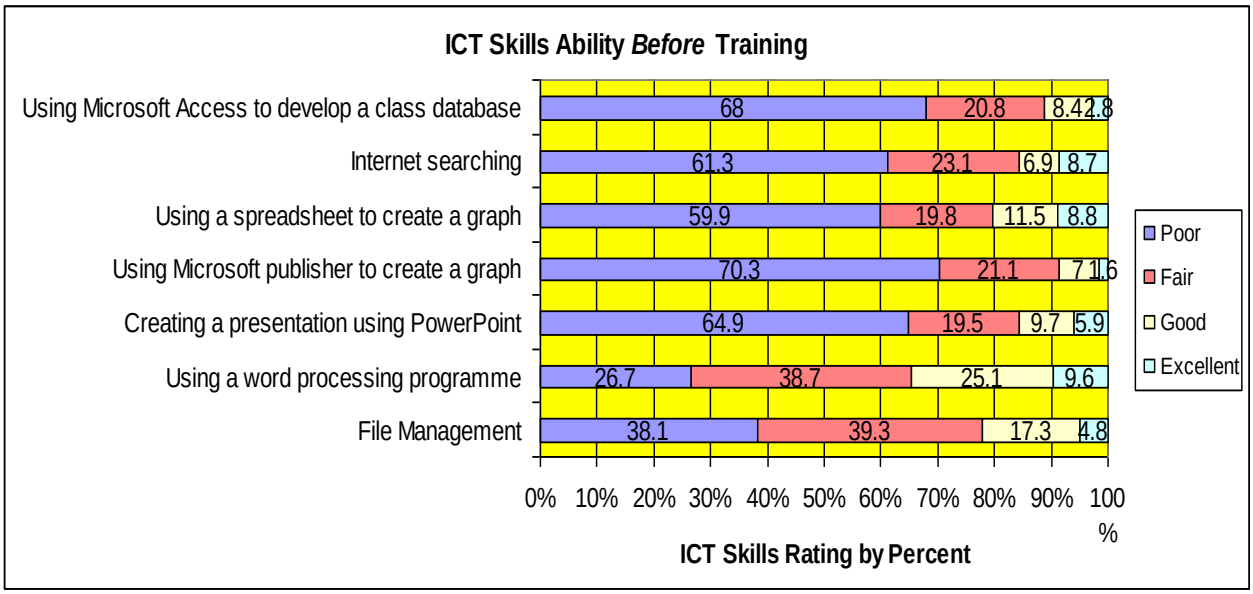
Based on the course evaluation forms, we see that 58.5% of educators rated themselves as confident computer users prior to the PiL training. This is a relatively high percentage and seems to contradict the educator self reported skills ratings in the educator surveys and also in the follow-up survey. However, we do find that 98.5% of participants reported that their computer skills had improved following participating in the training. Overall, most participants enjoyed the approach to training (98.7%) and most reported that they would work further on their PiL materials soon (99.3%).

The results presented in the table above show a very positive response to the training approach and the PiL materials with the majority of responses falling in to the 'agree' and 'strongly agree' categories. Educators reported that they enjoyed working at their own pace (98.1%) and independently on projects that met their specific needs (98.1%). The tips sheets, advanced tip sheets and self assessment sheets were all positively rated. Educators reported that the trainers taught them to find their own solutions to problems (97.8%) and that they became more independent users of ICTs as a result of the training (94%).

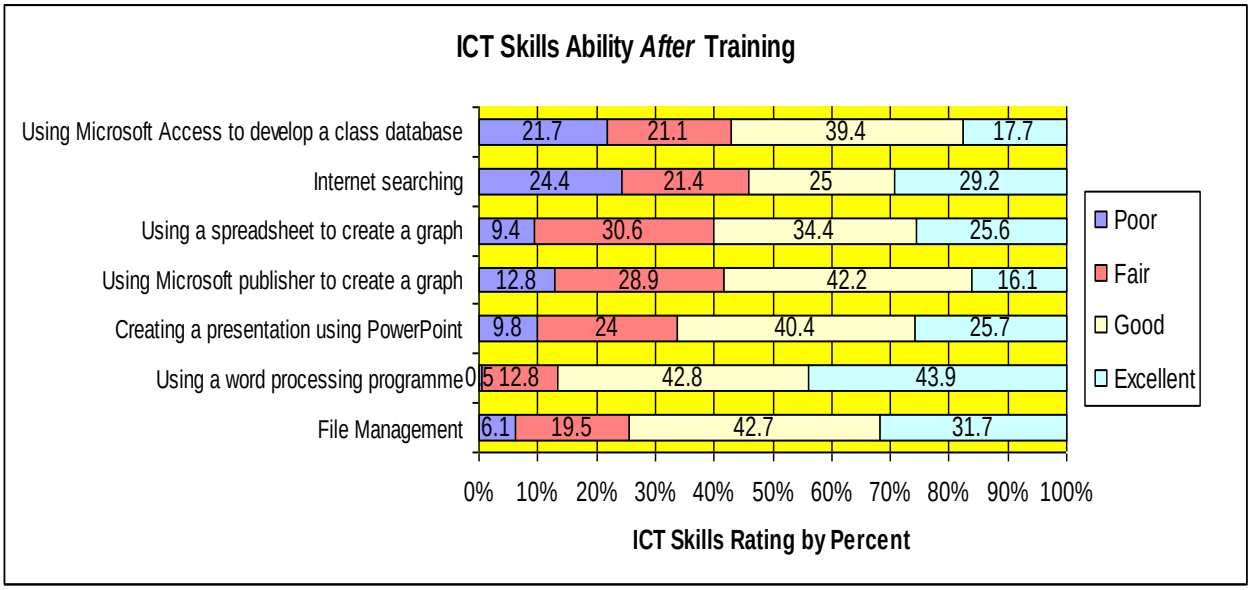
TO WHAT EXTENT ARE THE PIL GOALS AND OBJECTIVES BEING ACHIEVED?

As mentioned above the specific goals of the PiL programme are as follows:

- **To empower schools to significantly raise the level of information communication technology (ICT) literacy amongst their staff** - The before and after skills ratings provided by educators show a dramatic increase in self reported skills ratings following training.



Overall we see that educators generally rated their ICT skills as poor prior to training. These ratings can be compared to the after ratings shown in the figure below.



Here we see a marked difference in ICT skills ratings following training. The majority of educators rate their skills as either good or excellent, with poor ratings having dropped substantially across all ICT skills areas. For example, 0.5% rated their Word Processing skills as poor following training, compared to 26.7% who rated their word processing skills as poor before training. It thus seems clear the PiL training is indeed supporting the development of educator's ICT skills.

> 'Most of the things I didn't know now I do. Now I can use the computer.'

- **To support teachers and schools in developing an internal culture of innovation** - Most of the principals (95.2%) completing the school survey noted that educators made use of ICTs in new ways following the training. The following quotations provide examples of this favourable response.

  > 'More teachers are using PowerPoint for their lessons. More teachers are giving learners assignments to work in the computer lab. The quality of mark schedules submitted by teachers has improved.'
  >
  > 'The training by Microsoft Partners in Learning Programme, has laid a solid foundation for the introduction of information technology.'
  >
  > 'The program is so interested and challenging. Educators were motivated after being trained and they were more confident in using computers. I would also say that our school was so blessed to be chosen as the first one for educators to be trained. We really feel honoured by this. We would recommend that such programmes be given to educators at least once every year, in order to motivate them and to update them with any new programmes which are available.'
  >
  > 'The training we received is so practical and enriching. The training software is so useful and user-friendly. We hope the partnership will exist for quite some time to the benefit of educators and the entire community.'

- **To work with schools to prepare student for the digital work place** - Although there was a reported improvement in the way that educators use ICTs for teaching, the changes reported to have occurred in the ways that learners are making use of ICTs is not as high.

Schools reported that 52.4% of learners showed changes in the way ICTs have been used since the educators training. Examples of how learners use computers included,

> 'Learners who have access to computers under the supervision of trained educators seem better able to apply operation on the computer. They seem very self assured.'
>
> 'Learners were more interested in coming to computer lab; they even come & check for previous years question papers from the Internet.'
>
> 'Their skills are improving. Their portfolios are divided with computer typed divisors. They do assignments and projects through the computers.'
>
> 'Learners learn on their own by the help of Microsoft partners in learning'
>
> 'Learners can type on their own. Learners can make posters and cards.'

WHAT FACTORS SUPPORT AND HINDER PROGRAM SUCCESS?

The main factors that supported the success of the PiL training are the enthusiasm expressed by school management and educators and the presentation of the training by the trainers. The practical orientation of the training which focuses on specific scenarios faced by educators is also a supporting factor. A desire to move into the era of technology also supports the integration of ICT. One such supportive comment that reflects the views of the majority of educators' states:

> 'Thanks for the training. It offered a lot of information and has helped in self confidence building amongst our staff. It has raised the level of inquisitiveness and has called for teachers and student alike to continually use the computers particularly the internet (the level of usage has been very low before the lessons). Work processing and excel programs are now also more used than before (typing of tests, class lists, and analysis of results in different subjects).'

Some of the factors that hindered the PiL training included the challenge of scheduling training around examinations and school holidays, the busy schedules of educators and the fact that many schools did not have access to specific computer programs or the Internet. In many cases during the case study visits there was not full participation at the training due to the scheduling of the training sessions and a few of the schools also had to push the training back due to technical problems.

> 'I think time constraints, we don't a lot of time to do the training, we can only use holidays and weekends, that's the biggest problem.'
>
> 'The main challenges I have faced at this specific training are all in regard to the lack of facilities.'

In some instances the length of the training was also noted as a hindering factor. One such comment reflecting the negative aspect of the training states,

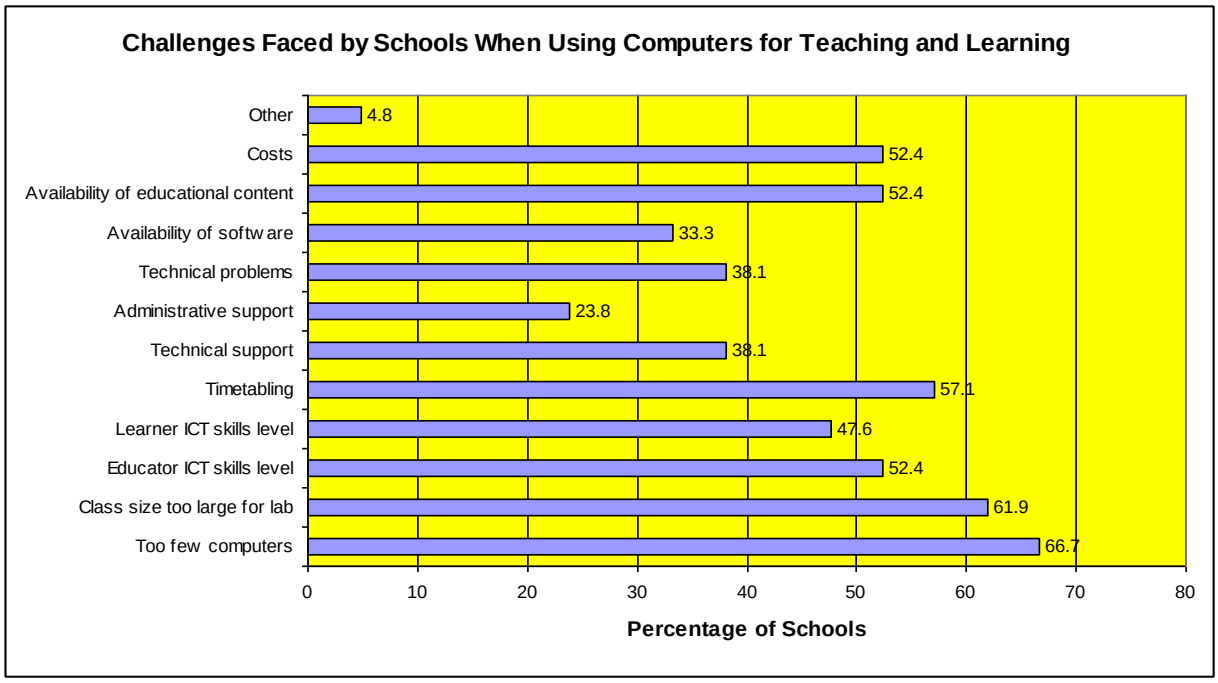
> 'The training was not successfully done because to my opinion, we have dealt with many aspects in the very short time of which some of us did not have a computer skill. We need to do a full training to have confidence on how to use a computer. We needed a manual to read and study the information on how to use a computer.'

There was some negative feedback regarding the length of time between the first and second training visits by some facilitators.

> 'The educators loose enthusiasm and most do nothing or very little between sessions. There is no follow up activity required from them and the second visit only acts as a feedback session.'

> 'the fact that educators don't use scenarios after 3 days of training until you come back again.'

Most schools felt that having too few computers (66.7%), class sizes being too large for the computer lab (61.9%), and the ability to adequately make timetabling possible (57.1%) were the top challenges faced. Other challenges that were important were computer related costs (52.4%), the availability of educational content (52.4%) and software (33.3%), and the educators' ICT skills level (52.4%).



WHAT OPPORTUNITIES AND PITFALLS CAN BE IDENTIFIED IN THE IMPLEMENTATION OF PiL?

Opportunities which arose from the Microsoft PiL training were the introduction of computers to many of the educators some of whom had never used computers before. Due to this, some stated that their confidence level has been increased and they now feel comfortable using computers for lesson planning as well as part of a lesson.

> 'The training was good, and I was very confident on my first day of training.'

> 'I have learnt a lot of things. Things like how to present a lesson on the computer, and how to do things like mark sheets.'

The training provided an opportunity for schools and educators to assess their own computer abilities and encourage them to think about the importance of computers in an

educational context on a deeper level. It also provided schools and educators with an opportunity to voice concerns surrounding computer usage at the schools and the necessity for the building up of the current computer skills level of the school as a whole. The results supported the fact that many rural and township schools continue to face challenges related to ICT access. The main pitfalls voiced were the necessity for more computers and more training in order to level the playing field in the ICT world.

Interviews with representatives from both National and Provincial departments of Education yielded the following strengths of the PiL programme;

- The adult learning approach, the ability for teachers to be able to train themselves;
- The concept of contextual/situational learning;
- The fact that PiL is compliant with Outcomes Based Education (OBE);
- The fact that the PiL materials are readily available;
- The high quality of the PiL materials;
- The ease of use of the CD and Tip Sheets;
- The fact that the PiL programme caters for all abilities;

Similarly the following weaknesses of the PiL programme were reported by representatives from the both National and Provincial departments of Education.

- Individuals with no/low level of ICT competency get lost;
- The fact that there are no specific time frames, educators should be provided with deadlines;
- Educators do not have access to computers after formal training;
- The fact that training takes place on weekends which results in poor attendance;
- The needs to be some form of formal recognition for doing the course that tie with the National Qualifications Framework.
- There is a shortage of good trainers.
- The quality of computer laboratories is poor which in turn leads to technical difficulties.

When asked how the Microsoft PiL Programme fits in with the ICT Agenda of each Province the overall response was the same. The most significant contribution of the PiL programme was said to be the way in which it provides educator professional development and training.

IS THERE EVIDENCE OF IMPROVED ACCESS TO AND USE OF COMPUTER TECHNOLOGIES IN PARTICIPATING SCHOOLS?

Being the first year of the PiL programme and the evaluation research, it is too early to make statements about the extent to which access to and use of ICTs has improved. However, it is important to note that ICT access was commonly noted as a challenge during this year one research. Schools, educators and learners commented on the fact that there are not enough computers at the school making it challenging to integrate ICT into the classroom. Below are comments reflecting the need for more computers. The first is by a principal, the second by an educator and the third is by a learner. These comments represent the general consensus of all involved. The case study data also pointed to access as a common challenge.

> 'I realized that the computer lab is too small and we need more computers because we have only 20 computers that we use for teaching and learning and each class is almost having +/- 70

> learners and the learners do not benefit them all because you find out that each computer will be used by +/- 6 learners which is not good. So in this case one holds a mouse, another one a key board for typing then others will just take a look.
>
> We need more computers for both learners and teachers to use because the computer lab we are having is not enough for both learners and teachers.
>
> I would like to sit alone and work on my own computer so just because there are not enough computers to accommodate each and every one of us I get to work with someone. That's the only concern that I have on working with computers at my school.'

As the research continues in 2006, 2007, and 2008, assessments will made about the extent to which access to ICTs has improved.

CONCLUSION

Substantial progress has been made both in terms of monitoring and evaluation and the implementation of the PiL ICT skills training in schools throughout South Africa. The overall response to the PiL programme at the end of the first year has been overwhelmingly positive. Microsoft's goals for the Partners in Learning Programme are well on their way to being met. Various key issues have emerged during the course of the first year of the evaluation. A main factor that supports the success of the PiL training is the level of enthusiasm expressed by school management and educators. Another factor is the presentation and delivery of the training by the trainers as well as the facilities available at the school. Schools, educators and learners commented on the fact that there are insufficient computers at school making it challenging to integrate ICT into the classroom. A lack of time was noted as a key issue, both in terms of being able to take part in the PiL training as well as the ability to practice and develop skills subsequent to the PiL training. During the first year of implementation the PiL programme has had a positive impact on educators ICT skills and has, in some instances, improved educator's level of ICT competency and confidence.

The following challenges have been faced during the course of the first year of the evaluation. Several schools could not be contacted for an initial introduction to the survey research and a slightly greater number of schools could not be reached during follow-up telephone calls. Thus 23% of the schools were inaccessible telephonically for an introduction to the study and follow-up but surveys were still sent to all schools. A second challenge was with the actual mailing addresses of the schools. Some of the addresses were out-dated or not available. A third challenge existed in the fact that many schools initially reported that they were unfamiliar with the Microsoft PiL training or seemed to be confused about which computer training was being referred to. A forth challenge was the fact that during telephone follow-ups many of the school principals reported that it was examination time and many of the teachers were over burdened with obligations therefore, not committing to completion of the surveys. The surveys will be administered earlier in the third school term during 2006 in order to overcome this limitation. A fifth challenge was related to the case study research. Due to technical difficulties at one of the case study schools, a researcher was unable to carry out a second visit to the school during the PiL training. Mechanisms will be put in place, where possible, in 2006 to minimize the impact of such challenges on the outcome of the research. As this is the first year of the evaluation the information gathered will be used to provide baseline indicators which will be used to measure the impact of the PiL programme in South African education as the research continues in 2006, 2007 and 2008.

During the course of 2006 there will be ongoing assessment of the key research questions in the first year of the evaluation:

1. How is PiL implemented in a range of South African schooling contexts?
2. To what extent are the PiL goals and objectives being achieved?
3. What factors support and hinder programme success?
4. What are the experiences (positive and negative) of participants, at all levels from education department to learners, in the programme?
5. What opportunities and pitfalls can be identified in the implementation of PiL?
6. Is there evidence of improved access to and use of computer technologies in participating schools?

However the focus of the research will shift slightly to address the following additional research questions:

7. Is there evidence of integration of technology at the classroom level after taking part in PiL programme?
8. Is there evidence that ICT supports changes in pedagogical practice?
9. Is there evidence that PiL has supported positive changes in ICT leadership at national, provincial, district and school levels?

Annexures

Annexure A - Annual Survey Research Report

INTRODUCTION

This report focuses on the presentation of detailed results of the three annual surveys administered as part of the Microsoft Partners in Learning (PiL) evaluation research in South Africa. The report begins with an overview of the research design and methodology, followed by detailed results from each of the three surveys. In conclusion, the report reflects on the implications of these findings for answering the key year one research questions.

RESEARCH DESIGN

AIMS OF THE SURVEY RESEARCH

The aims of the survey research were to understand how effective the Microsoft Partners in Learning training has been and gage how educators are utilizing the skills and programmes learned through the training. The data from year one provides a base line understanding of usage of ICTs in and out of the classroom, and for lesson preparation. In addition, as noted in the research plan and proposal, the survey research provides a means of gathering data across the indicator categories defined by Microsoft. Using the same surveys annually will allow for tracking of implementation over time.

Three surveys were administered. Each is briefly described below.

SCHOOL SURVEYS

The school surveys were designed to gain general information from participating schools, such as:

- Type of school;
- Location of school (province);
- Number of teachers, learners, and administrative staff; and
- Monthly school fees.

Specific questions were asked regarding ICT access and use such as:

- Number of computers, availability, and internet access;
- Available software and technological resources;
- Location of computers and student accessibility; and
- Challenges faced when using computers.

There were also various questions surrounding the actual training such as:

- Date and number of educators who partook in training;

- Selection of educators for training;
- Educator's response to training;
- Changes due to ICT training in both educators and learners; and
- If educators have taken part in any other ICT training or professional development.

EDUCATOR SURVEYS

The educator surveys were designed to gain general information from the educators such as:
- Gender, age, and number of years teaching;
- Type of educator;
- Location of school;
- Computer access at home, and
- Date partook in training.

Specific questions were asked regarding ICT access and use such as:
- Usage of ICTs in lesson planning, part of a lesson, and learner's usage;
- If use of ICT is done more, the same, or less since training;
- Accessibility to computer lab;
- Specific activities ICT is used for teaching and for learner's own use in support of lessons;
- To describe most successful ICT-based lessons; and
- Challenges faced while implementing ICT-based lessons.

There were also various questions surrounding the actual training such as:
- To rate ICT skills before and after training;
- How often the Microsoft PiL materials are being used, and
- If the educator has taken part in any other ICT training or professional development.

LEARNER SURVEYS

The learner surveys were designed to gain general information from the learners such as:
- School enrolled in;
- Gender, age, and grade of learner; and
- If they have computer access at home.

Specific questions were asked regarding ICT access and use at school such as:
- Usage of ICT as part of a lesson
- What kinds of things learner uses computer for and how often, and
- Whether or not computers help learners to learn and why or why not.

SURVEY TARGET AUDIENCE

The target audience for the survey research comprises of the Dinaledi schools that partook in the Microsoft Partners in Learner training during 2005. It focuses on the principals or the school managers of those schools, the educators that partook in the Microsoft PiL training, and learners who are taught by those educators.

RESEARCH METHODOLOGY

A mixed-method approach has been used to answer the range of evaluation research questions. In this section we focus on the methodology followed in the administration of the annual surveys. Three questionnaires were used, one for schools, one for educators and one for learners (See Appendix x for questionnaires). The surveys were administered in September and October 2005, after training had taken place at schools.

All the Dinaledi schools (102 schools) in the nine provinces were due to have been trained during 2005. The researchers reviewed the list of Dinaledi schools with a SchoolNet South Africa (SNSA) representative and only schools that had been trained were included in the sample. At the time of survey administration schools in three provinces had not been trained and hence were not included in the sample. A final total of 65 schools took part in the survey. The table below shows the provincial distribution of the sample schools.

PROVINCE	NUMBER OF SCHOOLS
• Eastern Cape	• 16
• Free State	• 6
• Gauteng	• 6
• Limpopo	• 23
• Mpumalanaga	• 7
• North West	• 7
• **TOTAL**	• **65**

An attempt was made to contact all of these schools by telephone to inform them of the survey and to enquire whether the surveys could be completed online or should rather be posted. Researchers were unable to telephonically contact fifteen of the schools as many of the phone numbers were unreliable. Of these, two of the numbers did not exist; there was no answer at five of the schools, numerous messages where left on four of the schools' answering machines, and two of the schools' answering machines were consistently full. Surveys were still posted to the full list of schools.

Each school principal was asked to respond to the school survey; ten of the educators who took part in the Microsoft PiL training at the school were asked to respond to the educator survey; and 20 learners who are taught by participating educators were asked to fill out the learner survey. The ten educators participating in the study were asked to select two learners each, making sure that they had not been selected by another teacher in order to eliminate any duplication of learners. They were asked to preferably select one boy learner and one girl learner and to carefully consider their selection so that a representative sample of learners was included. The intent of this was to make sure that not only top students were selected, that not only students with computer experience were selected, or any other distinguishing qualifications were selected but a well-rounded selection of learners was sought. Other than one all girls' school included in the sample most schools were able to make this selection of students successfully and roughly even numbers of boys and girls took part.

In order to encourage participation and motivate the timely return of the surveys, an incentive was offered for the first three schools that returned all their surveys. The first school to submit their surveys was eligible to receive free T-shirts for all its participating educators while the second and third schools to send in their surveys would receive pens and rulers.

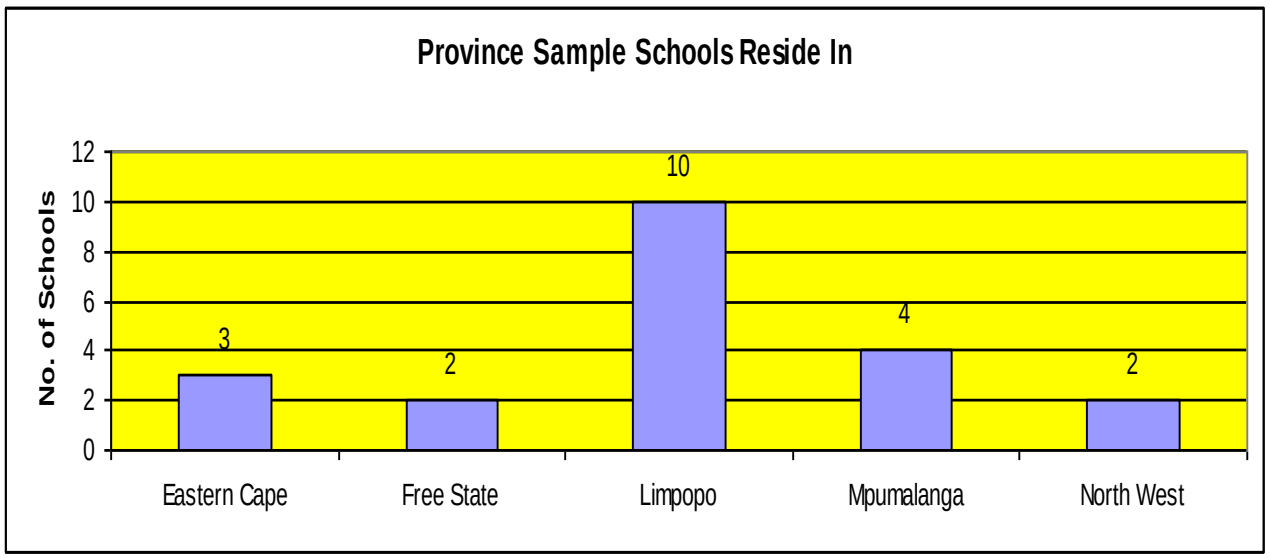
It was planned that the surveys would be e-mailed to each school, however, after making initial phone contact with the schools, all noted that their access to the internet was unreliable and it would be preferable to have paper copies mailed. In early September, 2005 the surveys were sent out with a cover letter to refresh the memories of the principals with regards to the study that they were participating in. Schools were requested to return the surveys by the end of September 2005. A self addressed and stamped envelop was provided for survey returns.

However, no surveys were returned by the due date. One of the reasons for this lack of response is likely to be due to the fact that there was a school holiday from the 22nd/23rd of September, 2005 to the 3rd of October, 2005. Schools were therefore telephoned from October 4th, 2005 to October 14th, 2005 and reminded that the return of surveys were greatly needed and appreciated. At this time a few of the schools did make it known that the surveys were mailed back. Schools who had not submitted their surveys were requested to complete and return the PiL surveys by the 21st of October 2005. In the following section a breakdown of survey responses is provided.

MICROSOFT PARTNERS IN LEARNING SURVEY RESPONSES

The final number of schools included in the sample was 65. The total number of schools to complete and return the surveys was 23 and the total number of schools that did not return the surveys was 42. Three surveys were received after the due date and could not be included in the sample since data capture was completed and data analysis already in process. One schools' surveys were returned to sender. Thus, the overall response rate was 22.5%.

The schools that submitted responses were located in the following provinces. No responses were received from schools in Gauteng province.



As shown by the response rates above, there were many schools that did not return the surveys sent. During a telephone follow up the following reasons were given for not submitting the surveys.

REASON PROVIDED FOR NOT SUBMITTING SURVEY	NUMBER OF SCHOOLS
• School roof ripped off - could not locate material due to disaster	• 1
• Said they posted surveys but NBA did not receive them •	• 2
• Said they will try to do surveys and return them	• 3
• Said they had no time to do surveys (too busy)	• 3
• Said they did not do training and therefore will not be doing surveys	• 5
• Said they did not receive surveys (three of the schools were uncertain if they did)	• 9
• Contact was unsuccessful (either- telephone number does not exist/ there was never an answer/ phone always engaged/contact person unavailable) •	• 19

LIMITATIONS OF THE SURVEY RESEARCH

The main research limitation was related to contacting participating schools. As noted above, several schools could not be contacted for an initial introduction to the survey research and a slightly greater number of schools could not be reached during follow-up telephone calls. Analysis of the school surveys showed that many of the schools did not have administrative staff or the number of staff was insufficient. This made it very difficult to talk with school principals or the person responsible for Microsoft PiL at the school. Two of the phone numbers went straight to fax numbers. Thus 23% of the schools were inaccessible telephonically for an introduction to the study and follow-up but surveys were still sent to all schools.

A second limitation was with the actual mailing addresses of the schools. Some of the addresses were out-dated or not available. After some effort all but three of the addresses were finally found. This was achieved via the Department of Education's website. The three schools not found were non-existent and belonged to schools whose phone numbers were also unavailable.

A third limitation existed in the fact that many schools initially reported that they were unfamiliar with the Microsoft Partners in Learning training or seemed to be confused about which computer training was being referred to. This could be partially due to language barrier, accent of the caller, or poor connection of the telephone making communication difficult. Schools also take part in various training initiatives and sometimes do not clearly distinguish between them. This may also explain why many of the surveys were not returned.

During telephone follow-ups in early October many of the school principals reported that it was examination time and many of the teachers were over burdened with obligations therefore, not committing to completion of the surveys. The surveys will be administered earlier in the third school term during 2006 in order to overcome this limitation.

Within the survey itself, it appeared that some of the questions may not have been clearly understood as some of the written responses demonstrated. An example of this in the educator survey is question 12 which asks, "since completing Microsoft PiL training, do you use computers in your teaching: *more often*, *about the same as before*, or *less often*." Some of the educators that responded less often would then explain their answer as follows,

> No software's are available to support my teaching in my subject area.
>
> I don't have a computer period as I have many periods teaching other subjects.
>
> We don't have computer class in our school.

These comments most likely show that computer usage is about the same as before, not necessarily less. If an educator did not use the computers before the training and still did not use computers after the training then the answer would be the same. It is likely that the educators would like to use computers more than they currently are, especially since having the PiL training and answered the question accordingly.

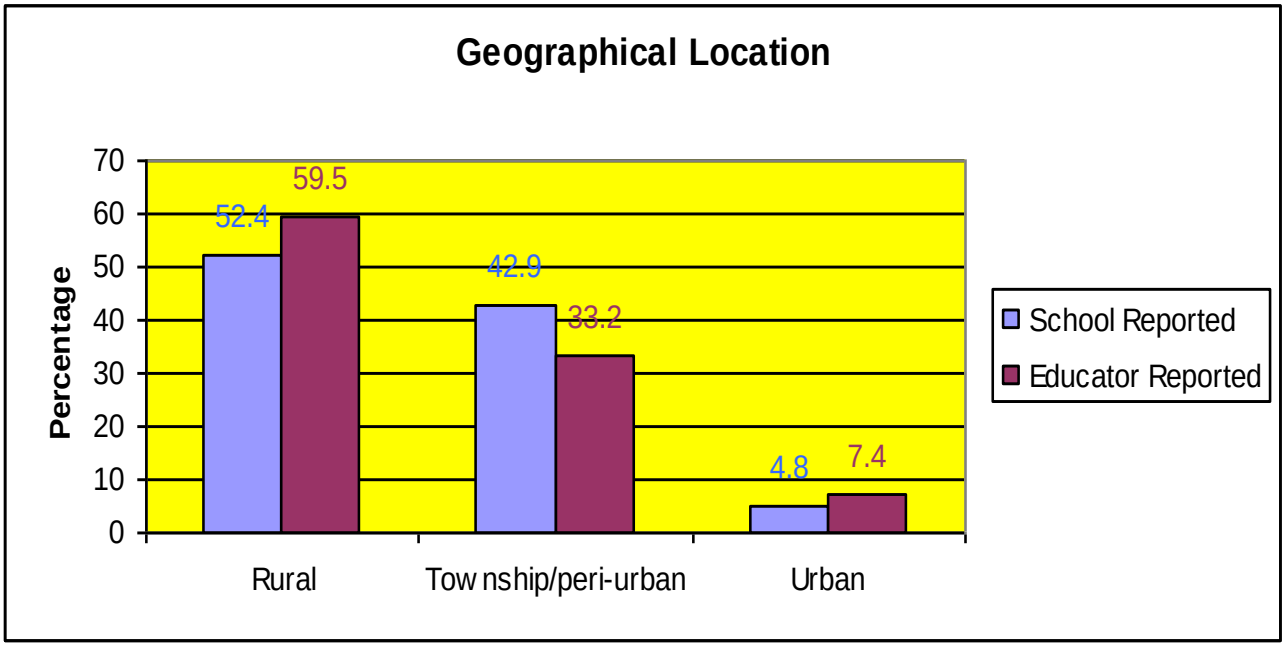
SURVEY RESULTS

The research limitations noted above not withstanding, the three annual surveys provided a wealth of valuable data. Detailed results, at school, educator and learner levels are presented in this section.

SAMPLE DESCRIPTION

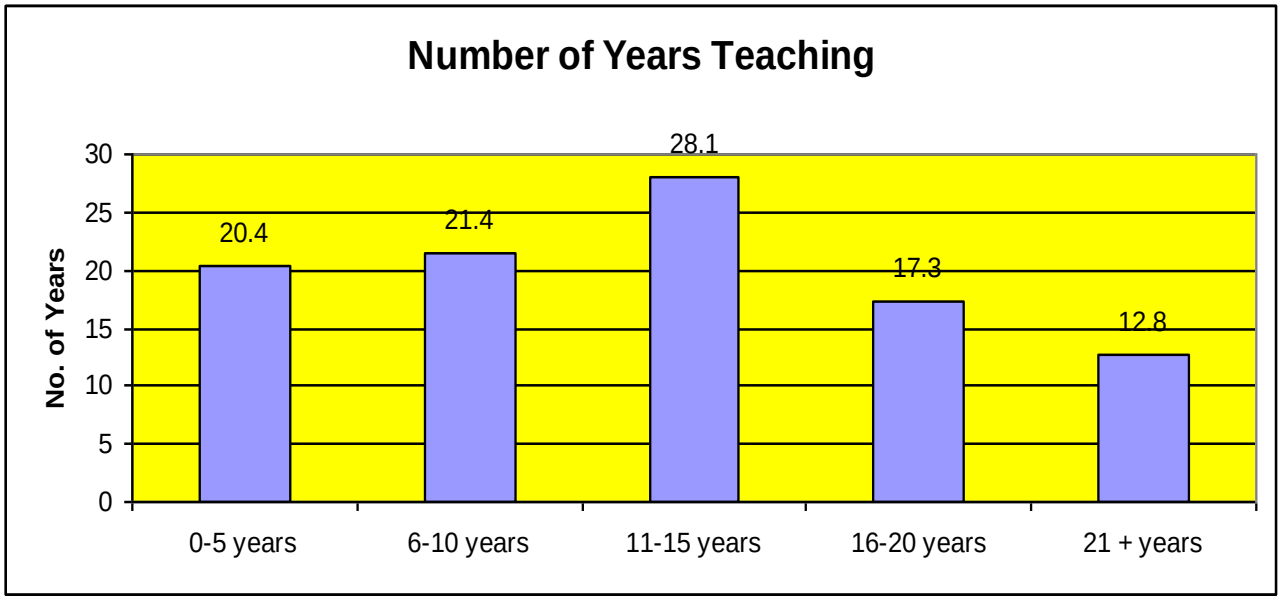
Schools

The sample of schools was made up of 20 secondary schools and one combined school. Within the sample, 52.4% categorized themselves as being located in rural areas, 42.9% as townships/peri-urban and 4.8% as being in urban areas. The figure below reflects the reported geographical location of the schools by principals as well as by educators. There is a slight discrepancy between the percentages due to the fact that two of the schools did not submit a school survey response while the educator responses were all submitted. Also, within some of the schools the educators were unclear on whether they would be considered rural or township. Thus, some educators elected to not answer that particular question. Overall, the sample was made up of predominantly rural and township schools as reflected in the figure below.

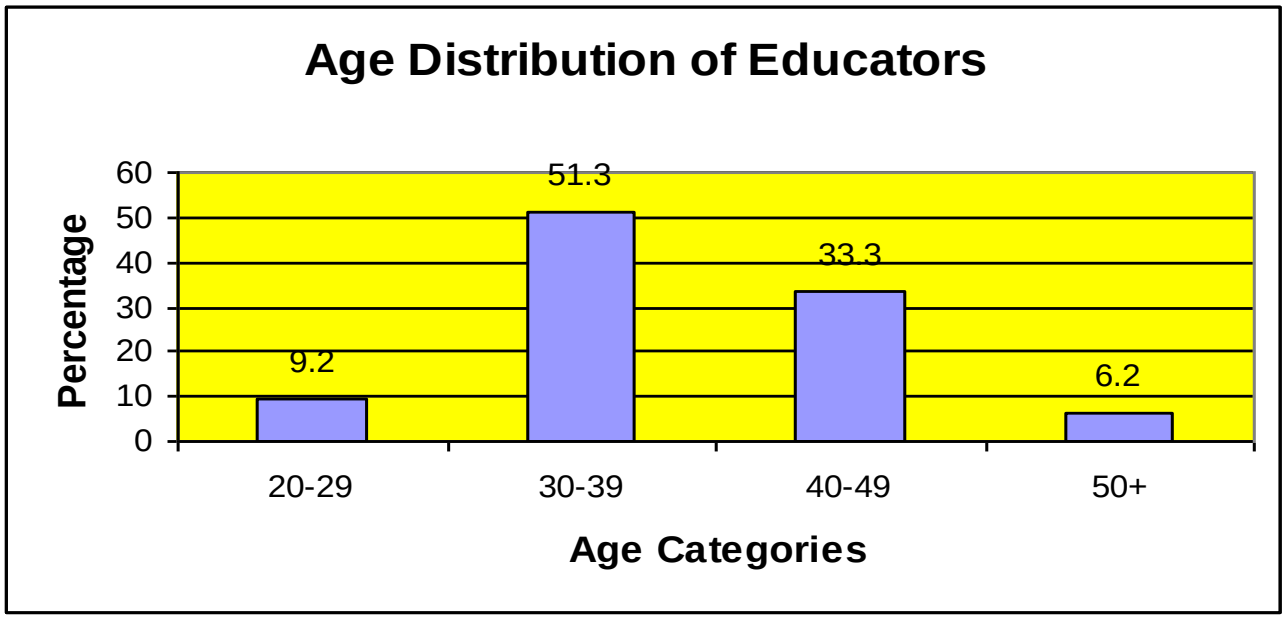


Educators

The total number of educators in the sample was 196. The sample of educators was 50.3% female and 49.7% male. 56.1% of the sample were Further Education and Training (FET) educators, 21.4% were General Education and Training (GET) educators, 17.1% were both, 3.7% were other types of educators, while 1.5% were all three; FET, GET, and other. The other category included, for example, school counsellors, learners support staff, and teacher educators. The figures below show the age distribution and number of years teaching experience of the sample.



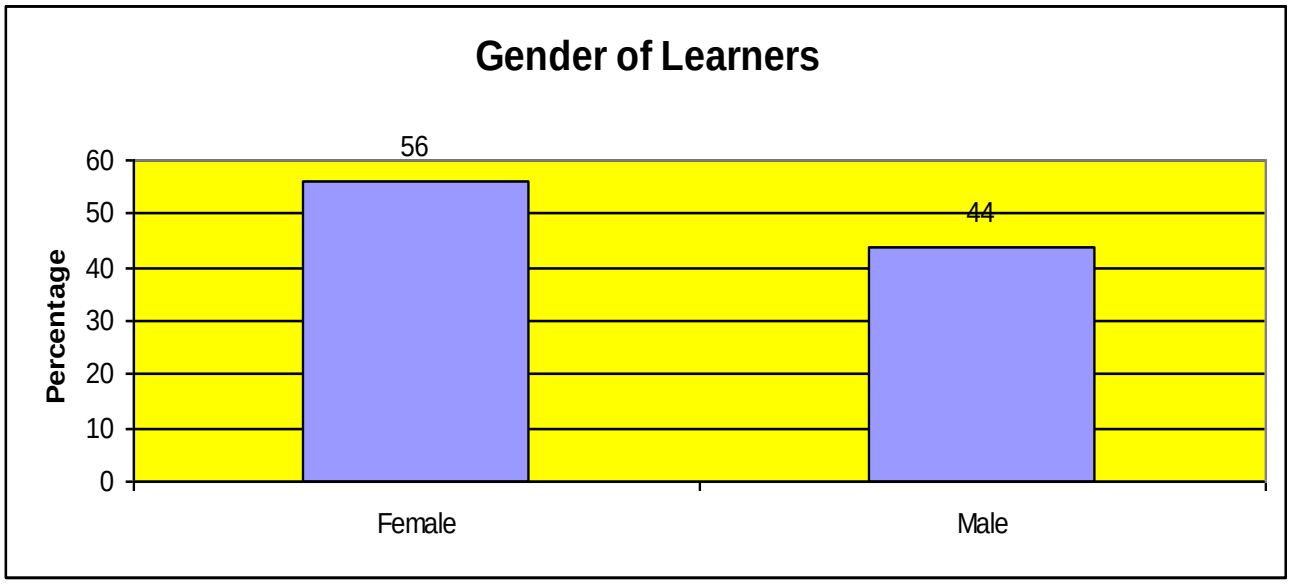
Educators participating in PiL training appear to have a wide range of experience levels. The most common for this sample being 11-15 years, but with little difference across the various categories.

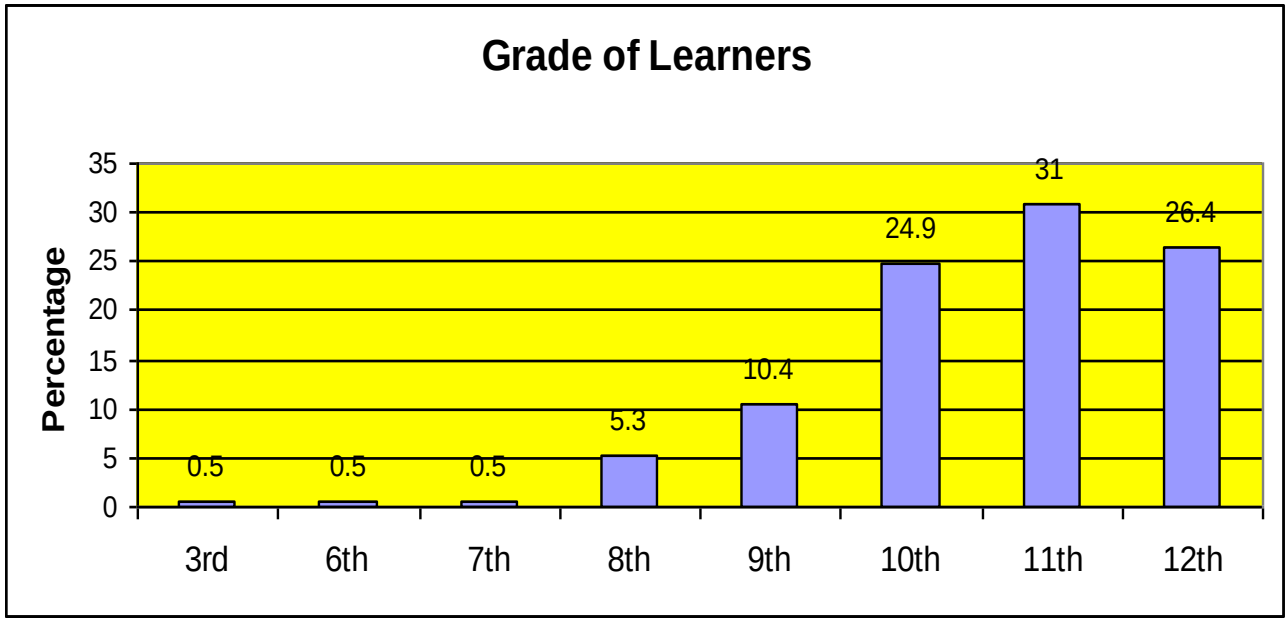


The 30 to 39 years age category was the most common at 51.3%. It is interesting that very few young educators and very few over 50 years of age educators are included in the sample. This might be a function of how the school principal selected the 20 educators to take part in the survey at the school. This is a finding that would benefit from further research, and will be compared with the educator sample in the year two survey.

Learners

The total number of learners in the sample is 414. The sample of learners consisted of 56% females and 44% males (see figure below). The youngest among the respondents was age eight and the oldest was age 23 years. The average age of the respondents was 16.9 years.





Most of the Dinaledi schools are High Schools, and this is shown by the grade distribution of the learner sample. The small percentage of learners in grades three, six and seven came from the one combined school included in the sample.

SCHOOL SURVEY RESULTS

The table below shows the average number of computers for administration, for teaching and learning, and with internet access at the schools taking part in this survey.

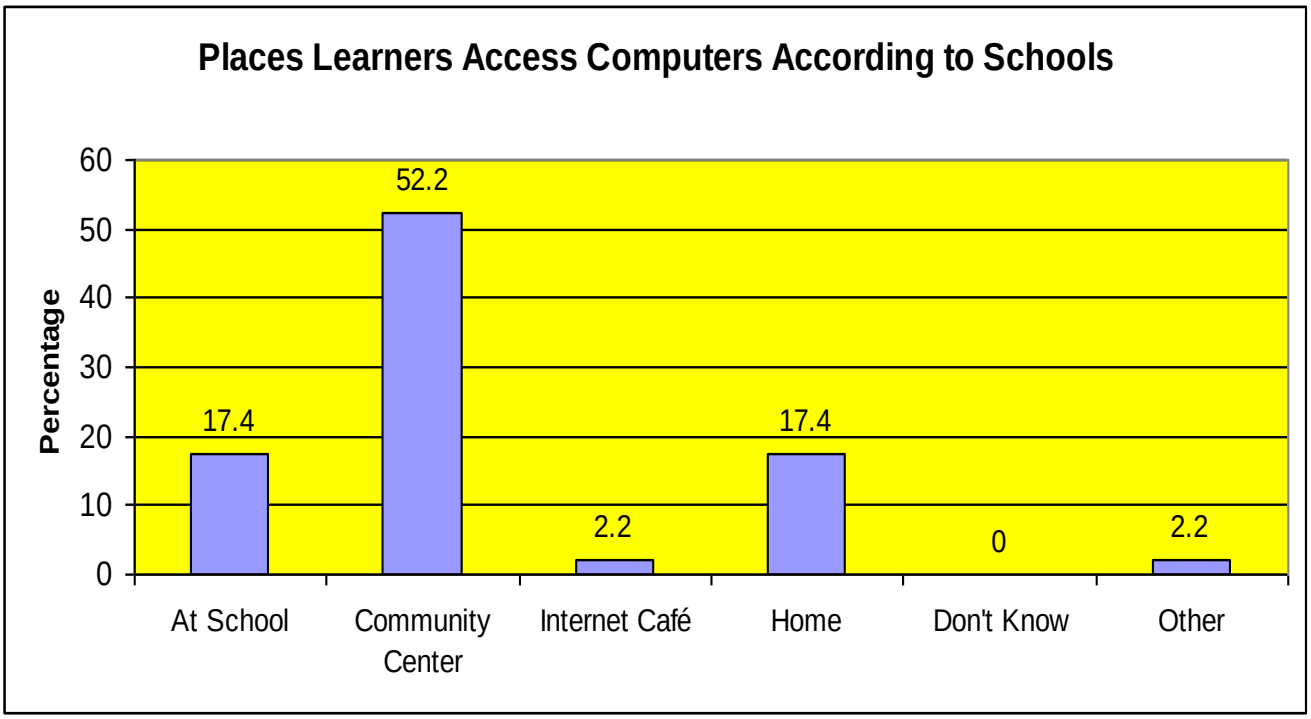
• TYPE OF COMPUTER USE	• AVERAGE NUMBER OF COMPUTERS
• Computers for administration	• 29 (Range from: 6-66)
• Computers for teaching and learning	• 17 (Range from: 0-21)
• Computers with internet access	• 17 (Range from: 6-25)

Most schools, 78.9%, reported not having a technology plan in place. The account of this may stem from the fact that most schools also reported not having proper administrative assistance, ICT equipment, or that the ICT equipment owned is faulty or in some cases not working at all. The majority of schools reported having either a dial-up connection, ISDN connection or Satellite connection. When asked what software was available at the school, the most common responses included Microsoft Office 2000 and XP. This shows a confusion on the part of schools between software and operating systems. Overall, most schools seemed to have an XP operating system. Software included Microsoft office for most schools and a few schools also made reference to Adobe Acrobat, Encarta, and Internet Explorer. Most schools reported a great need for more computers and the time and support to effectively administer computer classes for the learners. One school reported that

> Only grade 12 learners have access to a structured program of computer literacy. Staff constraints & maintenance issues does not allow for all learners to have access to the computers lab.

Many learners use the computer lab only once a week as many of the schools have too many learners and not enough computers to make the computer lab accessible more often throughout the week.

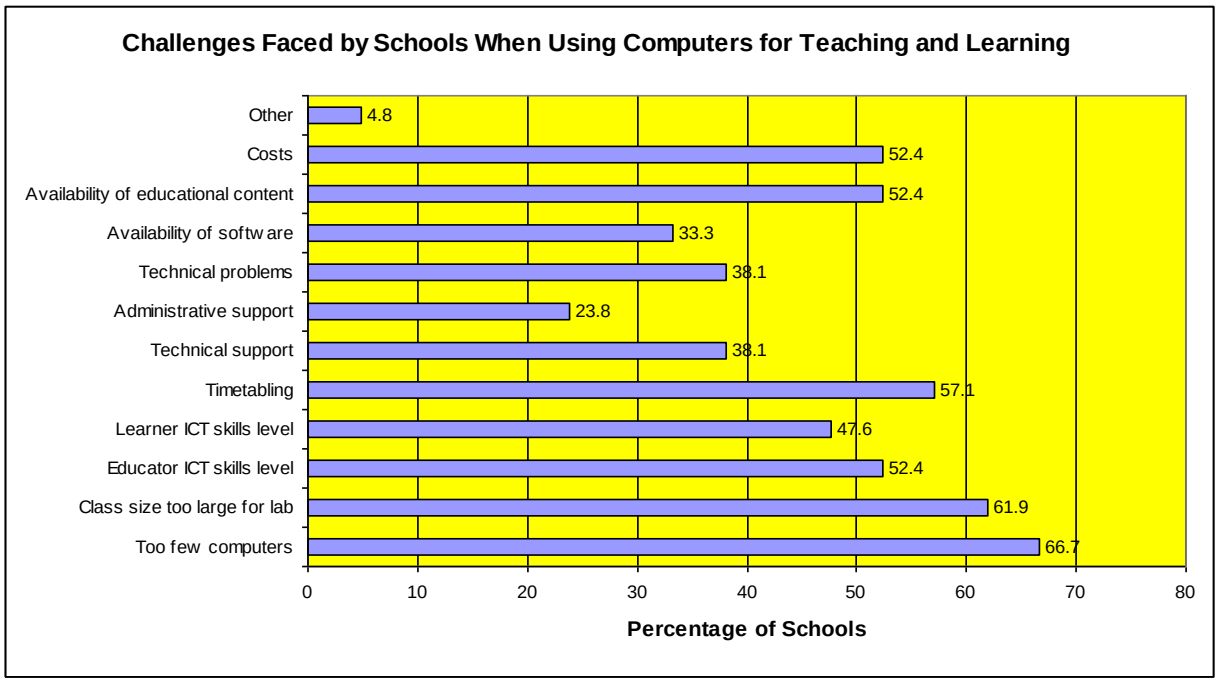
Of the schools in the sample, 61.9% reported that learners have access to computers after school and that more than half or 57.1% of learners make use of computers after school. The use of community centres, the school, and home provided the main places for computer usage to occur as shown in the figure below.



Schools were asked to reflect on the challenges they face when making computers accessible for teaching and learning. The top three challenges noted were:

- Too few computers (12.6%);
- Classes being too large to fit into the computer lab (11.7%); and
- Timetabling to include all learners (10.8%).

The figure below gives a description of the challenges faced by the schools. Percentages add up to more than 100% as more than one option could be selected. Most schools felt that having too few computers (66.7%), class sizes being too large for the computer lab (61.9%), and the ability to adequately make timetabling possible (57.1%) were the top challenges faced. Other challenges that were important were computer related costs (52.4%), the availability of educational content (52.4%) and software (33.3%), and the educators' ICT skills level (52.4%).



In reference to the Microsoft Partners in Learning training most schools responded favorably. Most of the principals (95.2%) completing the school survey noted that educators made use of ICTs in new ways following the training. The following quotations provide examples of this favourable response.

> More teachers are using PowerPoint for their lessons. More teachers are giving learners assignments to work in the computer lab. The quality of mark schedules submitted by teachers has improved.

> The training by Microsoft Partners in Learning Programme, has laid a solid foundation for the introduction of information technology.

> The program is so interested and challenging. Educators were motivated after being trained and they were more confident in using computers. I would also say that our school was so blessed to be chosen as the first one for educators to be trained. We really feel honoured by this. We would recommend that such programmes be given to educators at least once every year, in order to motivate them and to update them with any new programmes which are available.

> The training we received is so practical and enriching. The training software is so useful and user-friendly. We hope the partnership will exist for quite some time to the benefit of educators and the entire community.

Although there was a reported improvement in the way that educators use ICTs for teaching, the changes reported to have occurred in the ways that learners are making use of ICTs is not as high. Schools reported that 52.4% of learners showed changes in the way ICTs have been used since the educators training. Examples of how learners use computers included,

> Learners who have access to computers under the supervision of trained educators seem better able to apply operation on the computer. They seem very self assured.
>
> Learners were more interested in coming to computer lab; they even come & check for previous years question papers from the internet.
>
> Their skills are improving. Their portfolios are divided with computer typed divisors. They do assignments and projects through the computers.
>
> Learners learn on their own by the help of Microsoft partners in learning
>
> Learners can type on their own. Learners can make posters and cards.

Most educators participated in the Microsoft PiL training on a voluntarily basis while some schools encouraged the educators to partake. Since some of the training was done over the school holidays educators attended if time permitted. Schools were asked to reflect on the response of educators to the PiL training.

> The response was positive as 90% of educators attended the course/training. They were keen to learn and there was a realization/discovery of the importance of ICT.
>
> It was very positive because they learnt a lot of things which they did not know and understand.
>
> They were very happy, and looking forward to utilize the knowledge gained.

Although most schools were excited about the training, many commented that the training was too short and that more training sessions should be provided. For example,

> The programme is conducted over too short of a period. It needs to be ongoing and taking the level of skills of educators in mind.

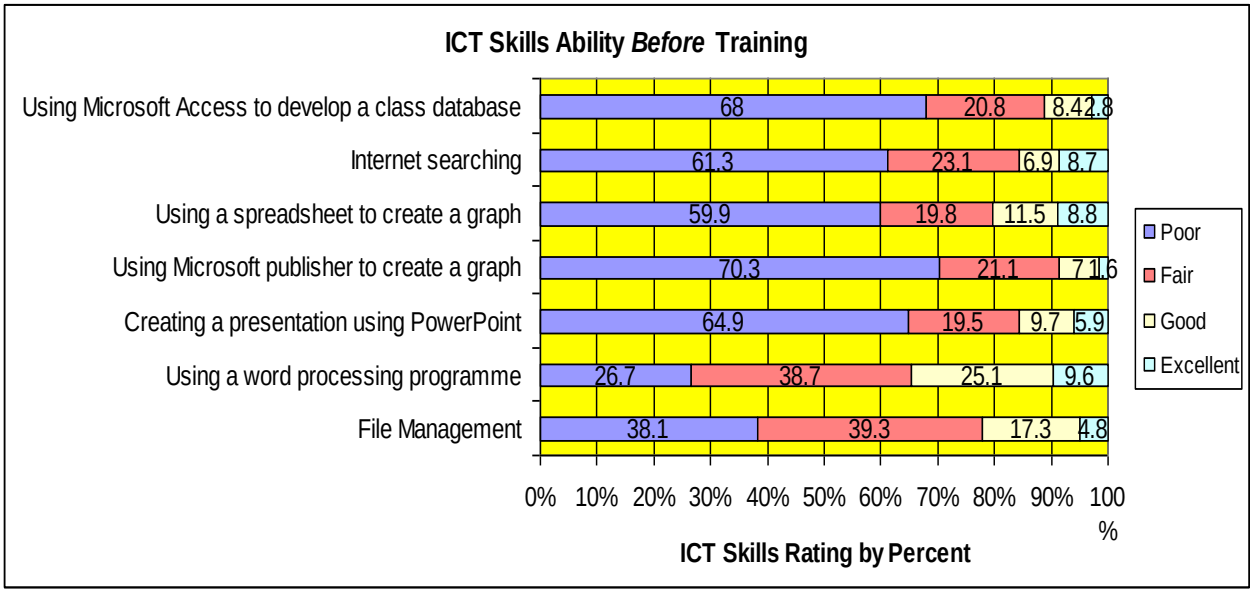
Schools reported that 50% of the educators had taken part in other ICT training in addition to PiL training. It is not noted whether these trainings took place before or after the Microsoft PiL. Overall school management appear pleased with the steps taken in making a progression in the world of ICT usage for teaching and learning. The practical value of the training provided was evident as summed up in the following quotations.

> If such training is made available to educators on a continuous basis it would really make them improve their computer skills. What I liked also about the training was that educators were trained on something that they use on a daily basis.
>
> It is a very useful programme and it is exciting to work with it.
>
> The course was relevant to the school and beneficial to educators. MS PiL should keep it up.

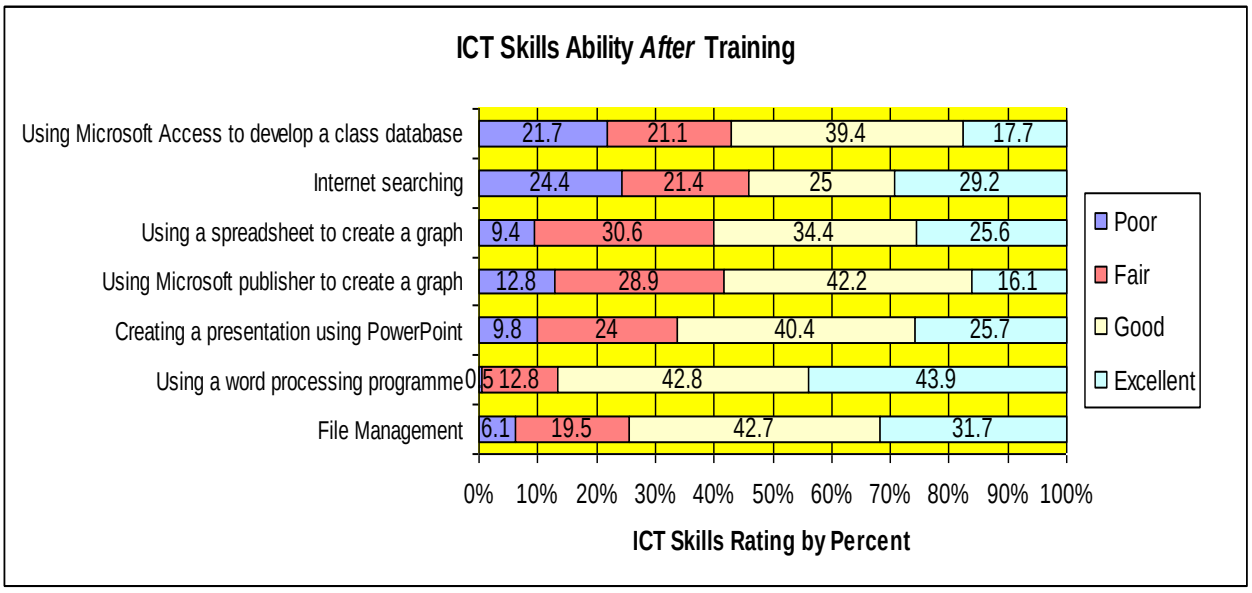
EDUCATOR SURVEY RESULTS

Educator ICT Skills

Educators were asked to rate their ICT skills before and after taking part in the PiL training. The results show dramatic changes in before and after ratings as shown by the figures below.

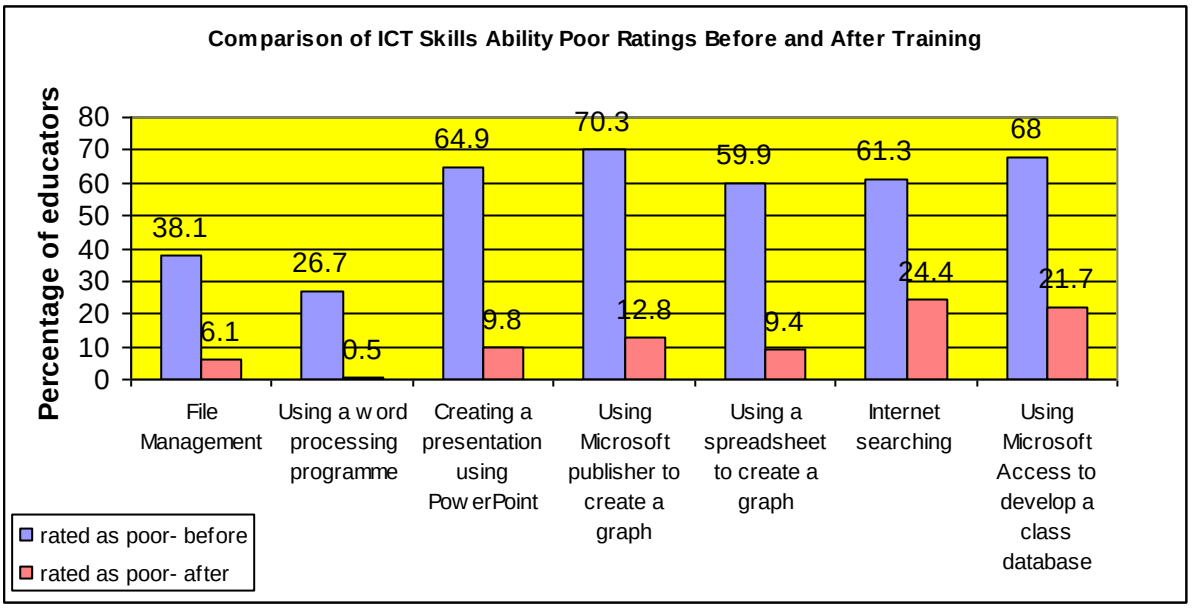


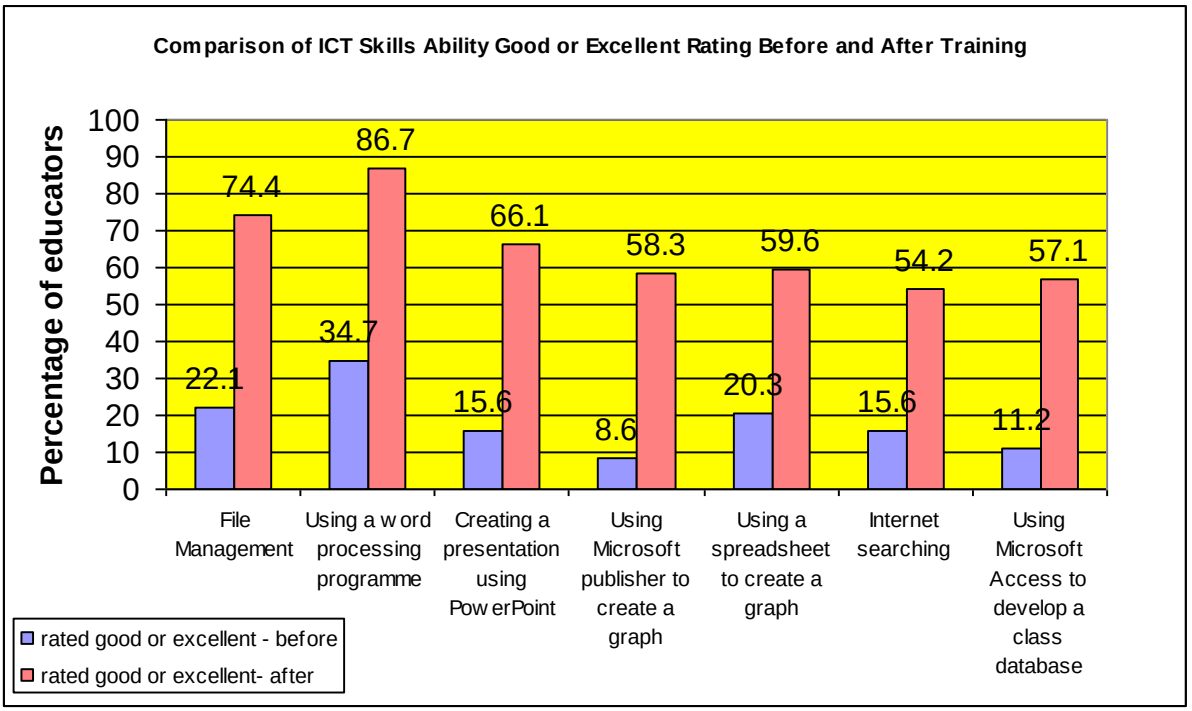
Overall we see that educators generally rated their ICT skills as poor prior to training. These ratings can be compared to the after ratings shown in the figure below.



Here we see a marked difference in ICT skills ratings following training. The majority of educators rate their skills as either good or excellent, with poor ratings having dropped substantially across all ICT skills areas. For example, 0.5% rated their Word Processing skills as poor following training, compared to 26.7% who rated their word processing skills as poor before training.

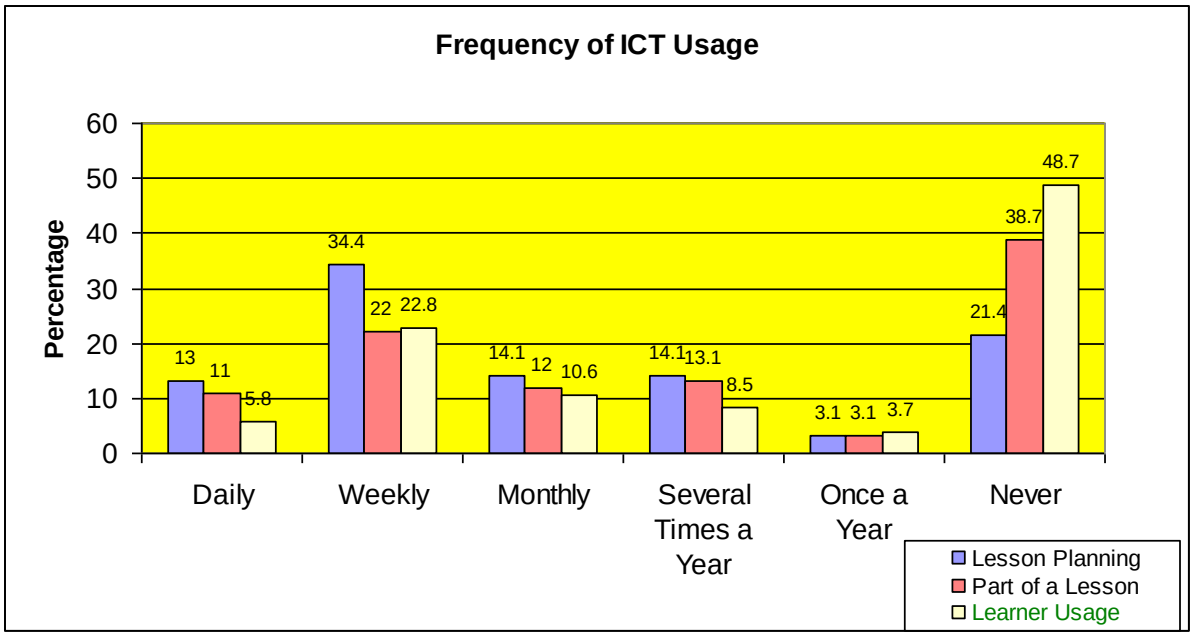
The following two figures show the change in ratings of 'poor' and ratings of 'good' or 'excellent' before and after taking part in training, further highlighting the self report improvements in ICT skills following training.





Educators' use of ICTs

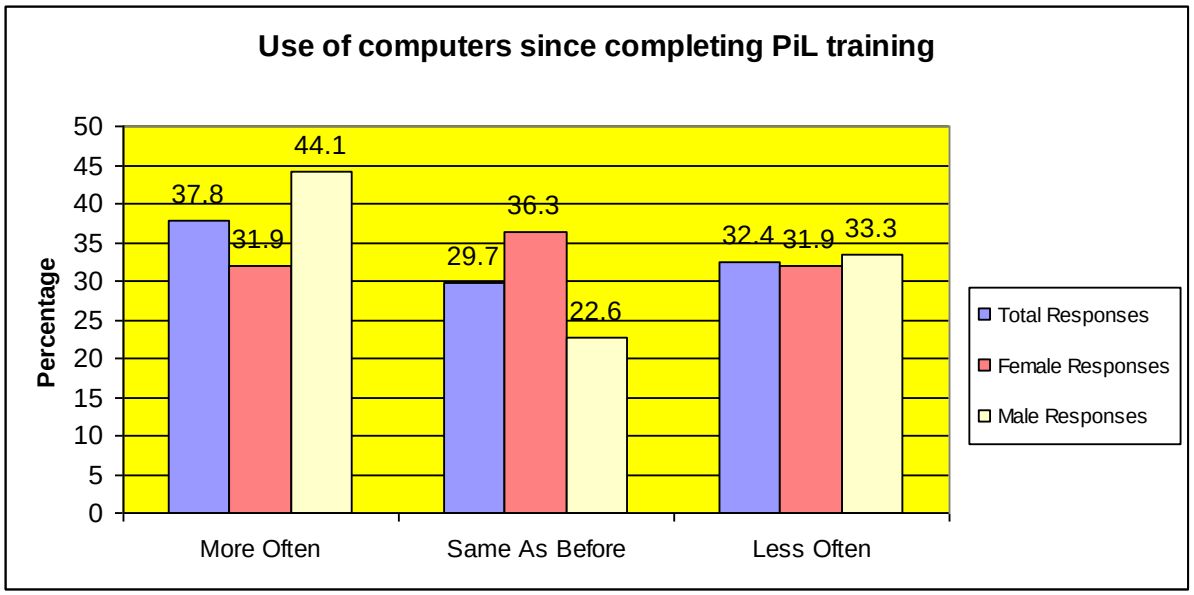
The figure below shows the frequency of computer usage for lesson planning, during lessons and by learners. Since this is the first year in which this evaluation research is being conducted we cannot conclude whether there has been any change in use of ICTs following training. However, this 2005 data provides a baseline from which to assess changes in ICT use in subsequent years.



The figure above shows that weekly use of computers for lesson planning is currently the most common use of ICTs. For those who do use computers as part of a lesson, and who have learners make use of computers, we see that this is most often a weekly occurrence. However, a high percentage of educators still never use computers as part of lessons (38.7%) or get their learners to use computers (48.7%). This would be expected since many of the schools reported not being able to access the computer lab regularly. It will be interesting to compare these 2005 statistics with ICT use in 2006 and beyond.

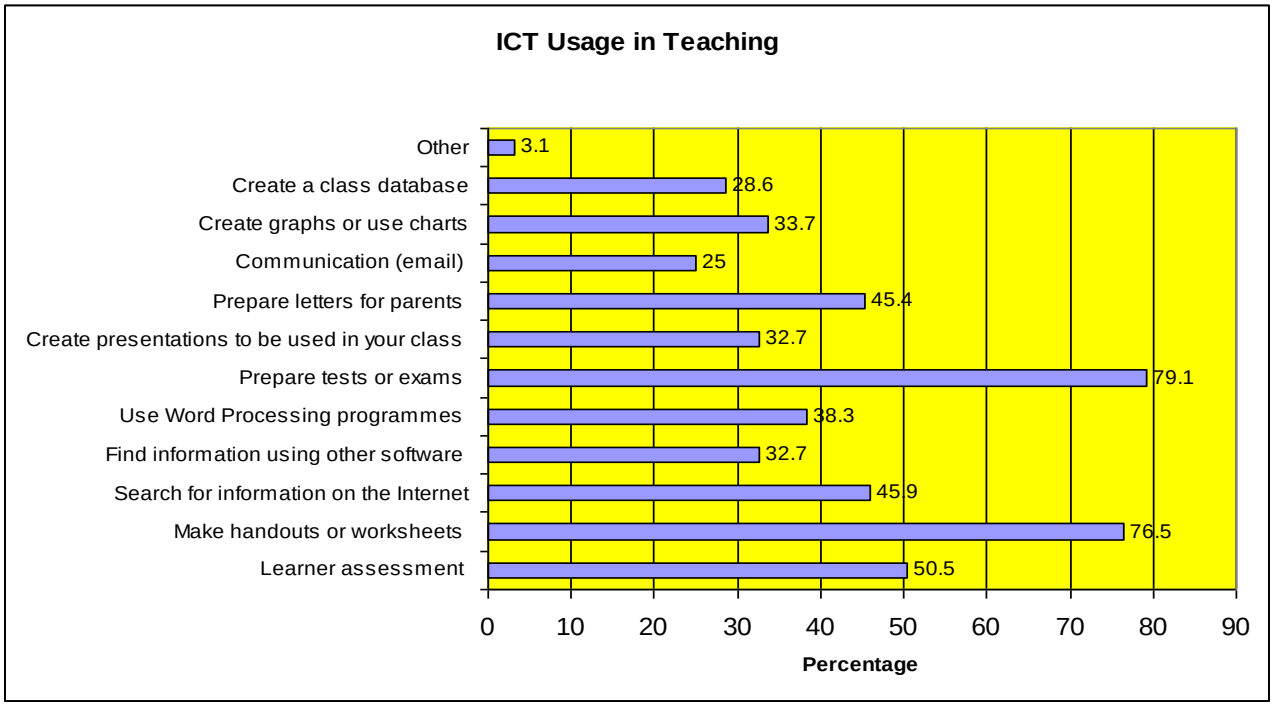
Of the educators, 53.6% reported not having a computer at home while 46.4% do have computers at home. The relationship between having a computer at home and not having a computer at home was compared to the percentage of ICT usage for lesson planning, using ICT as part of a lesson, and allowing learners to use ICTs in class. There was not a marked difference between the educators that have a computer at home with those that do not when it comes to how often an educator is using ICT as part of lessons.

Educators were asked to indicate whether they used computers more often, the same as before or less often following the PiL training. The figure below shows responses for the whole sample, as well as comparisons between men and women educators. The figure below shows that most educators reported using computers more often (37.8%) following training. However, little difference was noted across categories. Comparisons between men and women educators did not reveal substantial differences, although men (44.1%) did report a slightly higher response of ‘more often’ than women did (31.9%).



Thus, although some increase in the regularity of computer use following PiL training does appear to have occurred (37.8%), overall there does not seem to been a great influence on the extent to which educators make use of ICTs during the first year of the programme. This is likely to be related to access to ICTs, as training is but one factor required for educators to integrate ICTs into their teaching and learning. When asked about the accessibility of the computer laboratory, 56% noted that it was difficult or very difficult to schedule time to use the computer laboratory, 28.8% that it was easy or very easy to schedule time for the computer lab, and 15.2% had not opinion.

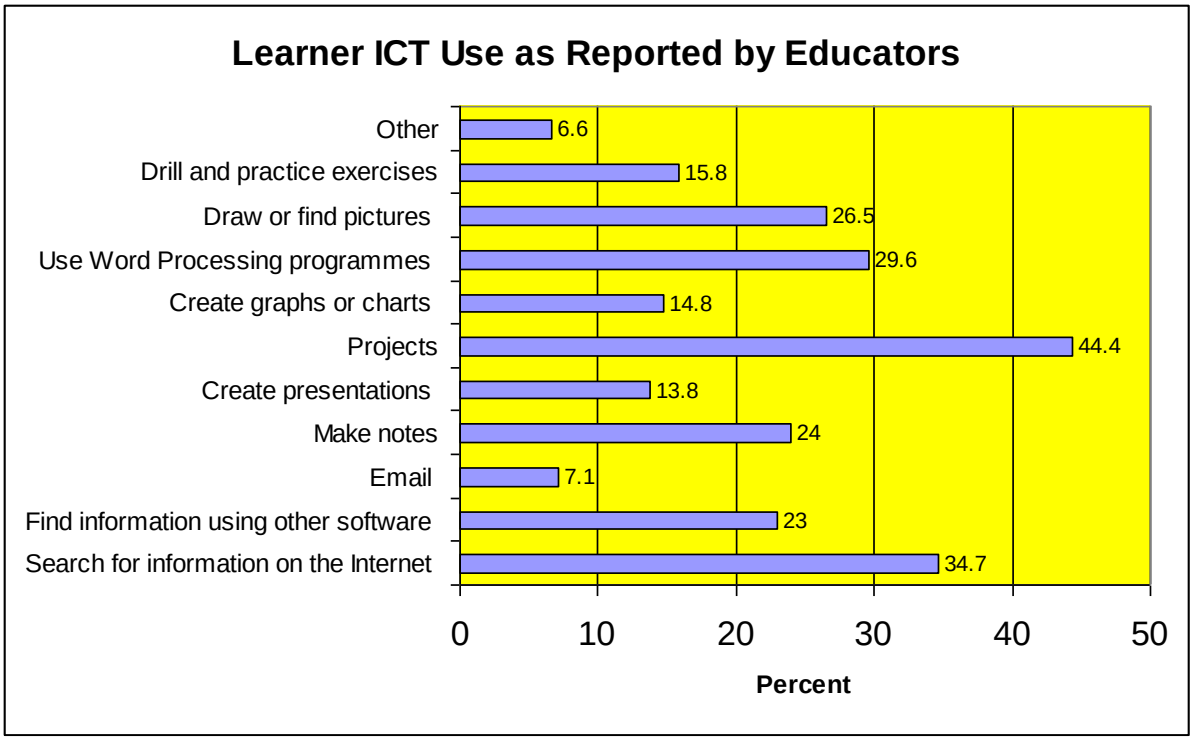
In order to better understand the ways in which education make use of computers, respondents were given a list of potential uses of ICTs for teaching and learning and were asked to indicate which of the ICT related activities they currently performed. The figure below shows which of the ICT-related activities are mostly commonly done by educators. Note that percentages add up to more than 100% since more than one option could be selected.



Thus, the top five reported usages of ICTs out of the list provided were:

- Preparing tests and examinations (79.1%);
- Making handouts or worksheets (76.5%);
- Learner assessment (50.5%);
- Searching for information on the internet (45.9%), and
- Preparing letters for parents (45.4%).

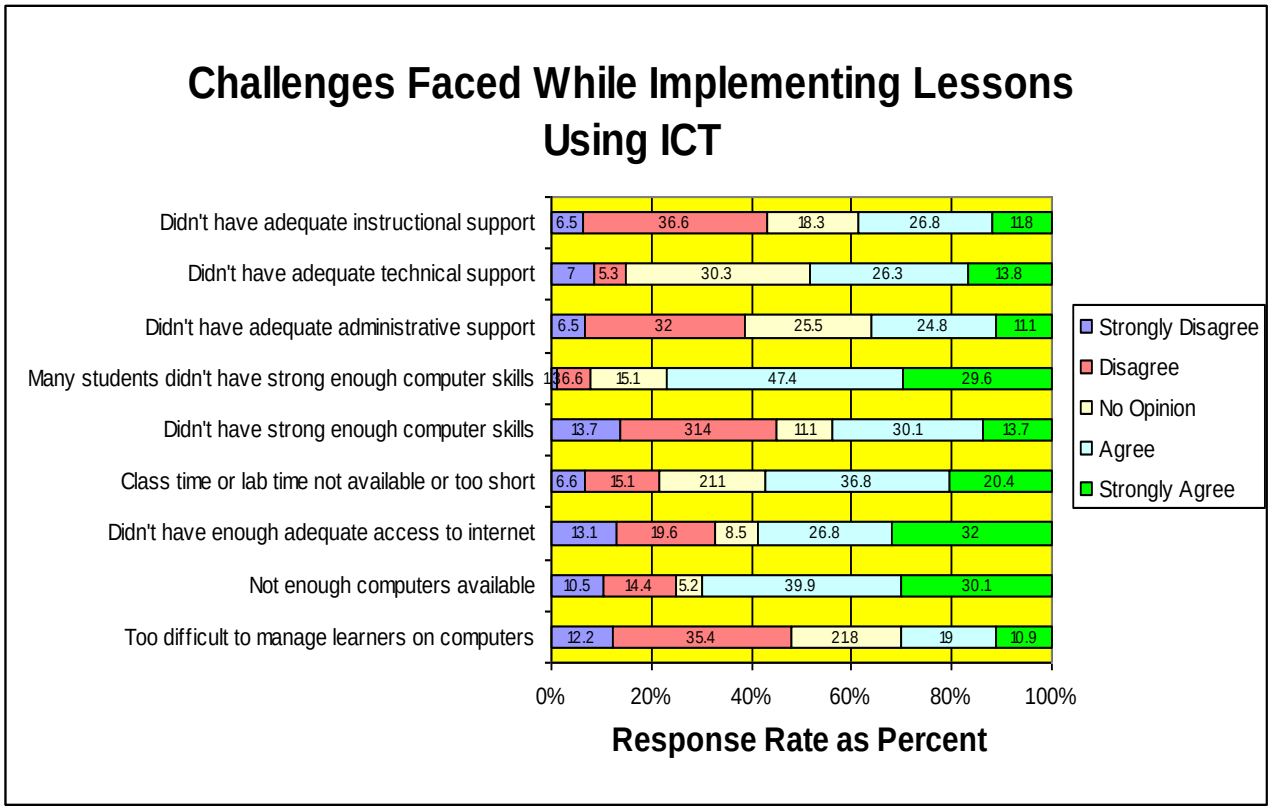
The figure below represents the activities that educators reported having learners use ICTs for while in school.



The five most common activities educators had learners perform on computers were:

- Projects (44.4%);
- Searching for information on the internet (34.7%);
- Using word processing programmes (29.6%);
- Drawing or finding pictures (26.5%), and
- Making notes (24%).

A series of statements describing potential challenges that educators might face when implementing lessons using ICTs were listed in the questionnaire. Educators were asked to indicate the extent to which they agreed or disagreed with each statement. The results are presented in the figure below.



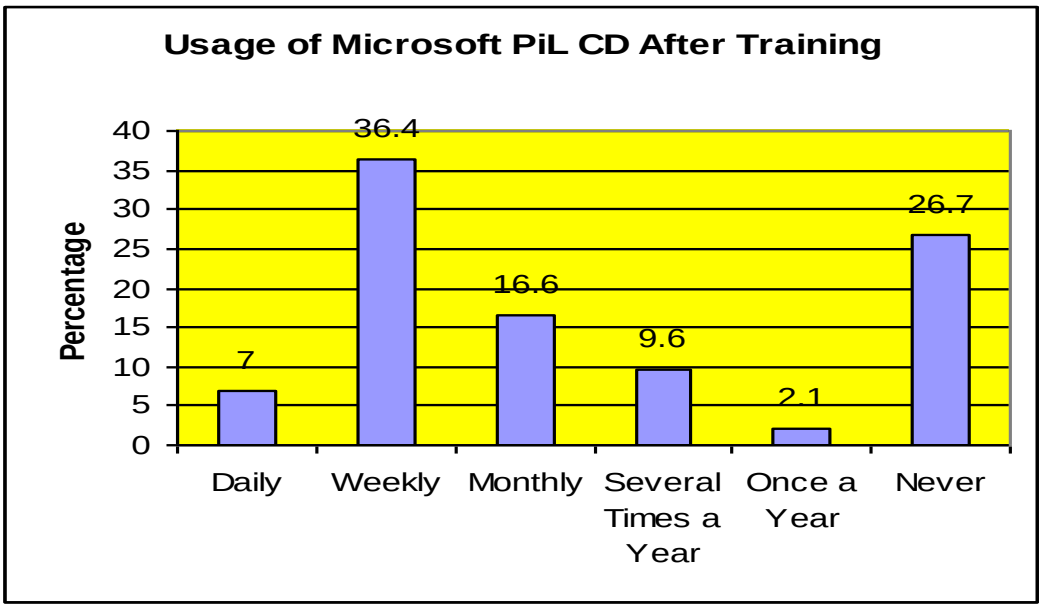
The top four challenges faced by educators as reflected by rating as either ‘agree’ or ‘strongly agree’ were:

- Many students did not have strong enough computer skills (77%);
- Not enough computers available (70%);
- Didn’t have adequate access to internet (58.8%); and
- Class time or lab time available was too short (57.2).

These ratings of these potential challenges supports findings above in which it was noted that access to computers continues to impact on the extent to which educators are able to make use of computers.

Use of Microsoft Partners in Learning CD

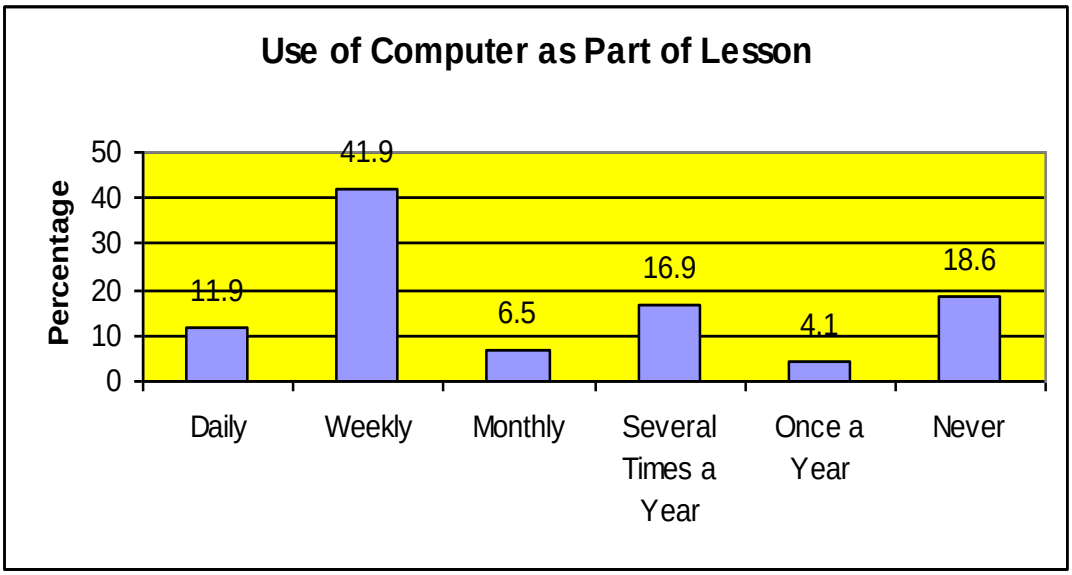
Since completing the Microsoft PiL training 43.4% of educators reported that they have been using the Microsoft PiL software (CD) at least once a week. The figure below shows how often educators reported using the PiL CD following training.



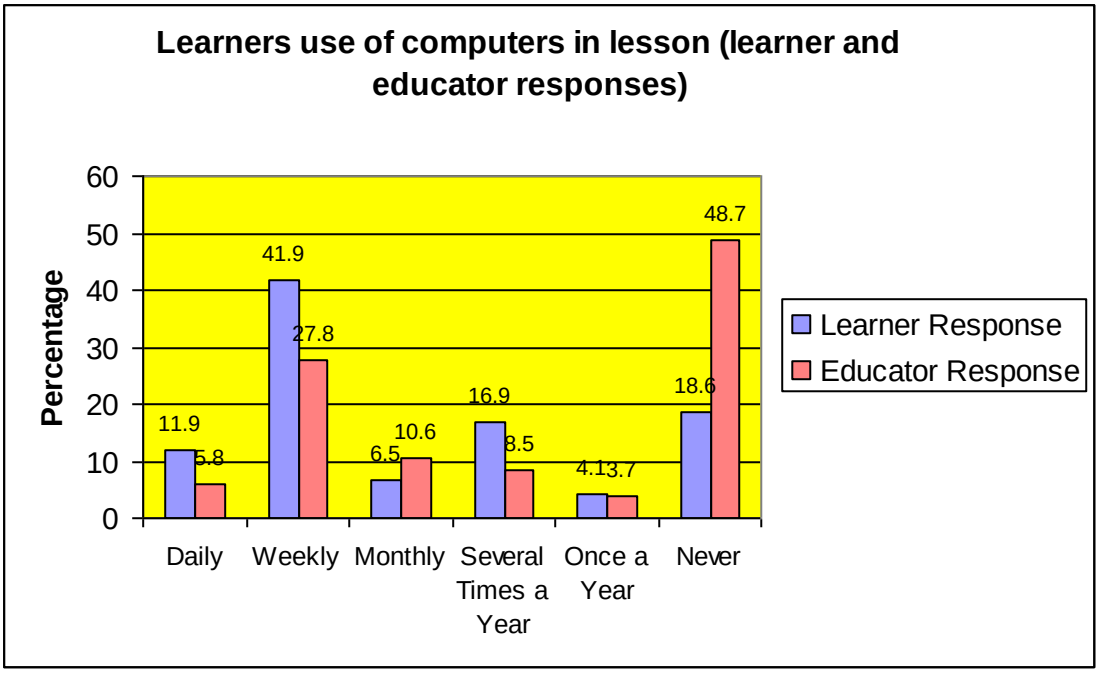
While 26.7% of respondent have not used their CD since completing training, the majority of respondents report making use of the CD. It was the aim of the programme that the CD become a reference resource that educators could refer to as needed to continue developing their ICT skills following training. The survey data shows that this is indeed the case during year one of the programme.

LEARNER SURVEY RESULTS

The figure below shows how regularly learners report using computers as part of a lesson

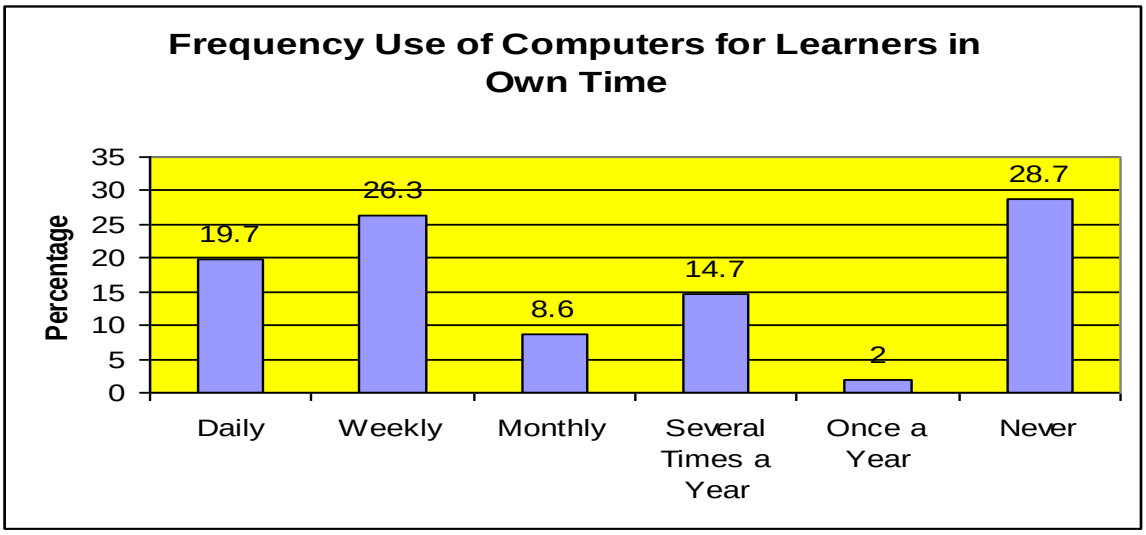


Most learners reported using computes as part of a lesson each week (41.9%). Interestingly, educators reported much lower levels of learners use of computers in lessons than learners did. The figure below presents reports of learner computer use in lessons of educators and of learners.



The figure above highlights this discrepancy in the data. We see that overall learners report much higher levels of computer use in lessons than educators do. Understanding this discrepancy would require further research.

When asked about frequency of computer use in their own time such as during break or after school, 19.7% of learners report using computers on a daily basis, 26.3% on a weekly basis, while 28.7% report not using computers in their own time. The figure below demonstrates this.



Most learners, 78.7%, reported that they do not have a computer at home. Thus it is likely that computer use in their own time still occurs at school, or perhaps in a community centre. However, many learners reported that they do not have sufficient time in school to use computers. Some comments supporting this follow below.

> Using computers at school is sometimes a problem, seeing that the centre is closed because the teacher is abscent or the matrics are writing their examinations.

> At school we do computer but not that much. The time that they gave us is not that enough, but if you play with that little time they have been given you, you will never learn a thing. We need more time on computer to learn more.

> Yes, I learn word processing programmes & make projects especially at school. But the problem is that we sit in two's & we have very little time.

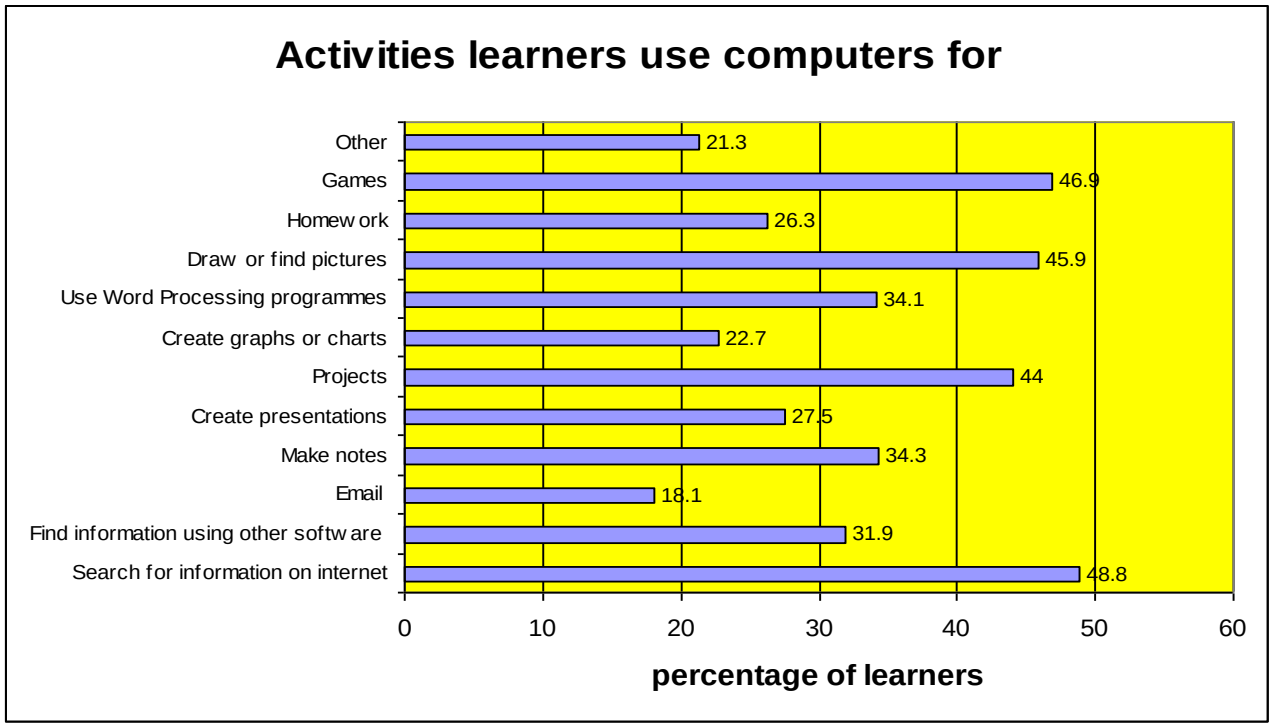
A total of 97.5% of the learner sample reported that computers help them learn. Some of the main reasons learners felt that computers help them learn are:

- helping to learn how to type;
- improving communication skills via e-mail;
- finding information of the internet, info that educators can not provide for them, and
- it is faster than using a library and quicker and thus you have more access to information.

In the words of a learner:

> Computers have changed people's life style. They have access to vital information, and it is faster and easier to look for and find information, unlike going to the library. Computers prepare you for future occupations because there days most jobs require computer literacy. And again, computers can crack hard mathematical equations and problems, with the right software. With simple computer literacy you could become the next Bill Gates.

When asked about the types of activities engaged in using computers the following responses were received. Like in the educator survey, learners were provided with a list of possible computer uses and asked to indicate which of these activities they engaged in. More than one option could be selected, so percentages add up to more than 100%.



When using computers, the top six purposes learners use computers for were:

- Searching the internet (48.8%)

- Games (46.9%)
- Drawing or finding pictures (45.9%)
- Projects (44.0%)
- Making notes (34.3%), and
- Using word processing programmes (34.1%)

Other things that learners reported using computers for was for making or listening to music CD's, or writing CV's.

Learners were asked for any further comments they had on using computers at school. The majority of learners reported that they think computers are essential to being successful in today's world and having the opportunity to work on them more is definitely a benefit for them and for future employers.

> We live in the 21st Century and everything around us is build on technology, so yes I do think computers help us to learn. A few lessons can make you want to learn more about computers and there are plenty of jobs out there involving computers as the more you learn the better chances of you getting a job somewhere. Through computers you can surf the net and get any information you require create your own folders, play games and all the interesting stuff computers offer.
>
> Computers are a great medium of educating learners and also helping them to enjoy studying outside the class and without the common book teaching methods. This is a refreshing manner of being able to learn something without sitting in front of a chalkboard or opening a book in other cases.
>
> Using computers at school has been a wonderful experience for most us who do not have easy access to computers on a daily basis. I have been able to learn the most important components and uses of a computer. The school has made it a mission, to see that we learn and are exposed to this so we may not struggle to be informed and become familiar with this. They have gave us light and shown us direction in many different ways. now some of us know how to make a presentations by means of a computer, and we know more information on careers we would like to pursue as we have more information as a result of computers.
>
> Using computers is fun. It helps or boost up your ability to think, be creative. It entertains you with all the games. I just think computers are intelligent boxes you have the whole world in a box.
>
> It is very much important to have computers at school because it do help us in part of our subjects. And we develop ideas. Teachers may be able to teach us if there is a lesson on computers. If there is computers at school we can discuss about technology.
>
> computers at school mostly help disadvantaged pupils to know more about computers, computers at school gives us what should be done in life for learning. Computers at school also helps us to find it easy to study at tertiary institution.

DISCUSSION

Having presented the survey results above, in this final section we relate these findings back to the research questions guiding this study.

What are the Experiences (positive and negative) of Participants, at All Levels?

The results presented in this survey report are by and large positive. The schools, as well as the educators were very pleased with the Microsoft PiL training. Other than requesting that the training be longer and more often, which demonstrates a need and desire for computer training rather than being a result of negative feelings, the comments surrounding the training were mostly positive.

To What Extent are the PiL Goals and Objectives Being Achieved?

One of the key objectives of the PiL training is the development of educator's ICT skills such that ICTs can be used to support education. The before and after skills ratings provided by educators show a dramatic increase in self reported skills ratings following training. it thus seems clear the PiL training is indeed supporting the development of educator's ICT skills. Although computers are not being used as much as one would like this is largely due to ICT access issues, hence not something that can be changed through training alone. It was noted that educators report using computers more since training, but that this is a relatively small percentage. Use regular of the PiL CD following training shows that the materials are useful and provide an ongoing resource for educators to use. As numerous comments reflect most learners understand the importance of using a computer to aid in daily schools activities and the necessity of gaining computer skills in order to compete in today's world.

What Factors Support and Hinder Program Success?

The main factors that supported the success of the PiL training are the enthusiasm expressed by school management and educators and the presentation of the training by the trainers. The practical orientation of the training which focuses on specific scenarios faced by educators is also a supporting factor. A desire to move into the era of technology also supports the integration of ICT. One such supportive comment that reflects the views of the majority of educators' states:

> Thanks for the training. It offered a lot of information and has helped in self confidence building amongst our staff. It has raised the level of inquisitiveness and has called for teachers and student alike to continually use the computers particularly the internet (the level of usage has been very low before the lessons). Work processing and excel programs are now also more used than before (typing of tests, class lists, and analysis of results in different subjects).

Some of the factors that hindered the PiL training included the challenge of scheduling training around examinations and school holidays, the busy schedules of educators and the fact that many schools did not have access to specific computer programs or the internet. A few of the schools also had to push the training back due to technical problems. In some instances the length of the training was also noted as a hindering factor. One such comment reflecting the negative aspect of the training states,

> The training was not successfully done because to my opinion, we have dealt with many aspects in the very short time of which some of us did not have a computer skill. We need to do a full training to have confidence on how to use a computer. We needed a manual to read and study the information on how to use a computer.

What Opportunities and Pitfalls Can Be Identified in the Implementation of PiL?

Opportunities which arose from the Microsoft PiL training were the introduction of computers to many of the educators some of whom had never used computers before. Due to this, some stated that their confidence level has been increased and they now feel

comfortable using computers for lesson planning as well as part of a lesson. The training provided an opportunity for schools and educators to assess their own computer abilities and encourage them to think about the importance of computers in an educational context on a deeper level. It also provided schools and educators with an opportunity to voice concerns surrounding computer usage at the schools and the necessity for the building up of the current computer skills level of the school as a whole. The results supported the fact that many rural and township schools continue to face challenges related to ICT access. The main pitfalls voiced were the necessity for more computers and more training in order to level the playing field in the ICT world.

Is There Evidence of Improved Access To and Use of Computer Technologies in Participating Schools?

Being the first year of the PiL programme and the evaluation research, it is too early to make statements about the extent to which access to and use of ICTs has improved. However, it is important to note that ICT access was commonly noted as a challenge during this year one survey research. Schools, educators and learners commented on the fact that there are not enough computers at the school making it challenging to integrate ICT into the classroom. Below are comments reflecting the need for more computers. The first is by a principal, the second by an educator and the third is by a learner. These comments represent the general consensus of all involved.

> I realized that the computer lab is too small and we need more computers because we have only 20 computers that we use for teaching and learning and each class is almost having +/- 70 learners and the learners do not benefit them all because you find out that each computer will be used by +/- 6 learners which is not good. So in this case one holds a mouse, another one a key board for typing then others will just take a look.

> We need more computers for both learners and teachers to use because the computer lab we are having is not enough for both learners and teachers.

> I would like to sit alone and work on my own computer so just because there are not enough computers to accommodate each and every one of us I get to work with someone. That's the only concern that I have on working with computers at my school.

As the research continues in 2006, 2007, and 2008, assessments will made about the extent to which access to ICTs has improved.

Annexure B - Case Studies

As noted in the methodology section of the report, ten case studies were conducted in order to understand the contextual factors affecting the Microsoft Partners in Learning (PiL) programme. Schools were selected from three provinces, namely Gauteng, Free State and Limpopo. The schools were selected in consultation with representatives from Provincial Education Departments, to ensure that Microsoft PiL training was being implemented at each school. The schools have been numbered as some schools specifically requested to remain anonymous.

In general the response to the Microsoft PiL programme was very positive at all the schools which took part in the case study research. Both trainers and educators emphasised the benefits of the PiL programme and indicated that they found the training to be useful and worthwhile. A number of educators mentioned that the course had helped them to develop their ICT skills. Educator's level of ICT proficiency was raised an issue as both trainers and educators believe that the diverse range of scenarios provides the opportunity for all types of users to attend the training from basic to advanced computer users. ICT proficiency was also emphasised as a draw back as certain trainers believe that the tip sheets and resources can only be used and accessed by competent users. A lack of facilities was highlighted as an issue which hinders the success of the implementation of the PiL training. Some of the educators found the time available to be too short and indicated access to computers as a limiting factor as they don't have sufficient time to practice their skills. The significance of teaching educators how to access materials from the CD was emphasised as on one occasion a facilitator was demonstrating each scenario which meant that the lesson could only advance at the rate of the slowest person and did not provide the educators with an opportunity to select scenarios which were appropriate to their skills and experience levels this proved to be frustrating for certain educators.

SCHOOL ONE

INTRODUCTION AND METHODOLOGY

School One is a co-educational Secondary School in a rural township in the Free State. One researcher visited the school in June 2005. The researcher spent an entire day at the school in order to collect necessary baseline information. Upon arrival at the school the researcher was introduced to the principal who was extremely accommodating and gathered all the educators together in order to complete the pre-training questionnaire. The researcher interviewed the principal and carried out two focus group discussions with learners from classes with teachers who would be taking part in the PiL training.

The second school visit took place in August 2005. This was exceptionally short as the visit took place during the first day of the follow-up training sessions. The facilitator was so confident that the teachers had received sufficient training that he ended the training session

after only 1 hour. Detailed observation of the training session was carried out in order to record the way in which the training actually happened. A focus group discussion was held with the educators who had participated in the training and an interview was conducted with the trainer once the training was complete.

SCHOOL CONTEXT

School One is a township school situated approximately 50 kilometres outside Bethlehem in the town of Phuthaditjhaba. The school has water, electricity, sanitation facilities as well as a telephone line. This is a co-educational school, which caters for learners from grades 8 to 12. At the time of the visit there were a total of 610 learners of which 277 were boys and 333 girls. The educator to learner ratio was approximately 1:27 as there were 22 educators. The school had seven non-teaching staff members, one administration clerk and six support staff who maintained the school grounds.

The school is fenced and secure. There is a tarred parking area surrounded by neat gardens at the entrance and the school buildings are neat and mostly in good condition. The school seems to be well organized. There are display cabinets in the reception area with various teaching awards and certificates of excellence. There are 14 classrooms and all are currently in use. The average class size was noted to be approximately 44 learners. Specialist rooms include: staff room, safe/strong room, library, Science/Biology laboratory, separate administration offices and a computer laboratory. The school is equipped with a total of 76 computers, 10 of which are equipped with an Internet connection.

Technological Resources

Type Of Resource	Number Available	Number In Use	Number Unusable
Tape Recorders	0	1	0
OHP	0	0	4
Computers	76	76	0
Computers with Internet Connections	10	10	0
Printers	7	5	2
Data Projector	1	1	0
Television Sets	2	2	0
Photocopiers	1	1	0
Fax Machine	2	2	0
Type Writer	1	1	0
Other – Rizograph	2	2	

ICT skills and use

According to the principal the computers are mainly used for administration purposes, such as for preparing tests, examinations and worksheets. He said that the computer centre is available to educators 24 hours a day, 7 days a week provided that they make a booking with the deputy principal. 21 Educators completed pre-training questionnaires as part of the case study research. Of these educators, only 8 indicated that they made use of ICTs for teaching and learning or lesson planning despite the fact that the school is equipped with so many computers and that the educators are reported to have unlimited access to the computer laboratory. These educators indicated that they made use of the computers to prepare tests, examinations and notes for learners as well as to access resources as part of planning and lesson preparation. However the learner's, who participated in the focus group discussion, reported that they were making use of computers at school approximately twice a week. These learners mentioned that they were using computers to type up CV's, create tables, create Mind Maps, play games they also indicated that they had been learning to touch type.

Educators' self-reported ICT skills pre-training

ICT Skills	Number Answering Yes (N=21)	Percentage Answering Yes
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	17	81%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	12	57%
3. Insert a table into a document in a Word Processing programme	14	67%
4. Insert page numbers into a document	15	71%
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	10	48%

ICT SKILLS	NUMBER ANSWERING YES (N=21)	PERCENTAGE ANSWERING YES
6. Activate the Internet and search the Worldwide Web for information	5	24%
7. Send an email message	5	24%
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	6	29%
9. Attach a document to an email message	3	14%
10. Design your own learning materials on the computer	9	43%
11. Create overhead transparencies	2	10%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels. Skills to use email and internet prior to training seem to be low. Interestingly, nearly half the educators reported being able to use computer to design their own learning materials which suggests some degree of applied computer competencies.

MICROSOFT PARTNERS IN LEARNING PROGRAMME

The initial three day Microsoft PiL training session took place in mid July 2005. The follow up training took place in October 2005. The visit took place on the first day of the follow up session. The follow up training session began on Friday afternoon at 13h00 in the schools computer room. There seemed to be a varied response from the educators during the training session. Some educators seemed bored whilst others were interested and enthusiastic. The facilitator was confident and comfortable in delivery of the materials. The facilitator who is a second language English speaker struggled a little with English. However this had no impact on the quality of the training. The educators and trainer seem to relate well with one another. It should be noted that the facilitator has been working with the educators for other training sessions such as the Intel Teach to the Future and has developed a good relationship with the educators.

Of the 21 educators who originally intended to complete the training there were only seven educators present at the time of the visit. During the focus group discussion the educators who did complete the training said they believe that there wasn't full participation as the training took place during the holidays and recommended that training takes place over weekends. The educators who did participate in the training reported to be positive and enthusiastic about the programme. They mentioned that they intend to put what they had learnt into practice. One educator mentioned that she had already started recoding her learner's marks digitally. The educators mentioned that the Microsoft Partners in Learning CD is simple and easy to use and that the instructions provided are straight forward. The educators reported that the programme exceeded their expectations,

'…we thought it would be basic computer literacy but have been exposed to more programmes and have learnt about integrating computers into teaching and learning.'

The educators mentioned that it would be nice to receive a certificate at the end of the training.[22] The facilitator reported that the training he had received had prepared him well to

[22] It should be noted that certificates are provided to those educators who attend all 5 days of the training – if any days are missed they do not get a certificate.

deliver the programme. He was extremely enthusiastic about the programme and mentioned that

'…it provides the educators with something they can really use; touching on key issues such as timetabling, class lists, tests etc.'

The facilitator reported that time is always a problem for educators,

'the biggest drawback is that they don't have computers of their own at home to work.'

In general the response to the Microsoft Partners in Learning programme was very positive at this school.

SCHOOL TWO

INTRODUCTION AND METHODOLOGY

School Two is a Secondary School situated in a factory suburb in the Free State. One researcher visited the school in June 2005. The researcher spent a day at the school in order to collect necessary baseline information. Upon arrival at the school the researcher was introduced to the principal. The researcher interviewed the principal, carried out two focus group discussions with learners from the classes of teachers who would be taking part in the Partners in Learning training programme and ensured that the pre-training questionnaires had been completed.

The second school visit took place in August 2005. Detailed observation of the training session was carried out in order to record the way in which the training actually happened. A focus group discussion was held with the educators who had participated in the training to find out their perceptions of the training and an interview was conducted with the trainer on completion of the follow-up training session.

SCHOOL CONTEXT

School Two is a township school situated in a factory suburb near Lethabo Powerstation in Viljoendrif. The school has water, electricity, sanitation facilities as well as a telephone line. This is a co-educational school, which caters for learners from grades 8 to 12. At the time of the visit there were a total of 922 learners of which 428 were boys and 494 girls. The educator to learner ratio was approximately 1:30 as there were 30 educators. The surrounding community was subsidising the payment of the computer teacher's salary who was contracted to the school. The school had two non-teaching staff members, one administration clerk and one cleaner who maintained the school facilities.

The school appeared to be well resourced with 25 classrooms, all of which in use at the time of the visit. Specialist rooms include: staff room, safe/strong room, Science/Biology laboratory, separate administration offices as well as two computer laboratories. The school was equipped with a total of 38 computers, 20 of which are able to connect to the Internet.

Technological Resources

TYPE OF RESOURCE	NUMBER AVAILABLE	NUMBER IN USE	NUMBER UNUSABLE
Tape Recorders	0	0	0
OHP	4	3	1
Computers	38	38	0
Computers with Internet Connections	20	20	0
Printers	4	3	1
Data Projector	1	1	0
Television Sets	3	2	1
Photocopiers	1	1	0
Fax Machine	1	1	0
Type Writer	1	1	0
Other - Hi Fi, 2 VCR's and a projecting calculator			

ICT skills and use

According to the principle the computers were predominantly used for administration purposes, however 20% of the time the computer were dedicated to be used for teaching and learning purposes. 19 Educators completed pre-training questionnaires as part of the case study research. These educators reported to have limited knowledge and expertise in the use of ICT. Only 2 educators indicated that they made use of the computer as part of planning and lesson preparation and to design their own teaching and learning materials. The learner's, who participated in the focus group discussions, reported that they were making use of computers at school approximately once or twice a week. These learners mentioned that they were making use of the computer to learn basic ICT skills; that they were using computer-based reading programmes, typing tutors as well as other programmes which offer Mathematics revision.

Educators' self-reported ICT skills pre-training

ICT SKILLS	NUMBER ANSWERING YES (N=19)	PERCENTAGE ANSWERING YES
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	9	47%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	5	26%
3. Insert a table into a document in a Word Processing programme	5	26%
4. Insert page numbers into a document	7	37%
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	5	26%
6. Activate the Internet and search the Worldwide Web for information	3	16%
7. Send an email message	3	16%

ICT SKILLS	NUMBER ANSWERING YES (N=19)	PERCENTAGE ANSWERING YES
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	3	16%
9. Attach a document to an email message	3	16%
10. Design your own learning materials on the computer	3	16%
11. Create overhead transparencies	2	11%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels. Skills to use email and internet prior to training seem to be low. Also a very low percentage of educators 16% indicated that they design their own learning materials on the computer.

MICROSOFT PARTNERS IN LEARNING PROGRAMME

The initial three day Microsoft PiL training session took place in mid July 2005. The follow up training took place in August 2005. The visit took place on the first day of the follow up session. The training took place in the schools computer room and of the 20 terminals only 17 were working. The server was not connecting to all the terminals and consequently the educators could not share files fully or make use of printing and Internet services.

During the training session most of the educators were working on their own computer but as a result of 3 broken machines some educators were required to share. The educators were generally keen and appeared to be interested. Three ICT proficient colleagues attended the training to help the less proficient educators. It later became apparent that the principal had made it compulsory for those teachers who committed to the training to be in attendance and that absenteeism would result in a charge to the individual.

The facilitator and educators related fairly well to one another. Educators mostly worked alone but did ask each other for help when necessary. Chatting was common throughout the training. The educators didn't make strategies for solving their own problems. The facilitator tried to attend to all of the educators' problems rather than putting strategies in place for the group to solve problems. A CD based lesson was virtually impossible. The facilitator was demonstrating rather than teaching the educators how to access materials from the CD. This meant that the lesson could only advance at the rate of the slowest person. There was also no opportunity for educators to select scenarios that are appropriate to their skill and experience levels.

During the focus group discussion the educators who completed the training reported to have found the training useful and worthwhile. Some of the educators found the time available to be too short and the fact that they don't have computers at home will be limiting as they won't have sufficient time to practice their skills. One educator suggested that the educators be divided into groups according to their ability level he found the slow pace of the session to be rather frustrating. A number of educators mentioned that the course had helped them to develop their ICT skills 'basic skills are now sound.'

The facilitator reported that the training he had received had prepared him adequately to deliver the programme. He had a positive impression of the programme. He reported a downfall of the programme to be that

'…the way the materials have been organized they only work when I'm present. The educators like the demonstrations rather than working independently.'

The facilitator suggested that it would be useful if principals were included in the training. He believes by developing principals knowledge of computers would motivate them to more actively encourage their staff to acquire ICT skills.

In general the response to the Microsoft Partners in Learning programme was quite positive at this school.

SCHOOL THREE

INTRODUCTION AND METHODOLOGY

School Three is a Secondary School situated in a rural setting in the Free State. One researcher visited the school in June 2005. The researcher spent a day at the school in order to collect necessary baseline information. Upon arrival at the school the researcher was introduced to the principal. The researcher interviewed the principal, carried out three focus group discussions with learners from the classes of teachers who would be taking part in the Partners in Learning training programme and ensured that the pre-training questionnaires had been completed by the 11 educators who would be taking part in the training.

The second school visit took place in July 2005. Detailed observation of the training session was carried out in order to record the way in which the training actually happened. Three focus group discussions were held with the educators who had participated in the training to find out their perceptions of the training and an interview was conducted with the trainer on completion of the 3rd day of the initial training session.

SCHOOL CONTEXT

School Three is a rural school situated in Bloemfontein South. The school has water, electricity, sanitation facilities as well as a telephone line. This is a co-educational school, which caters for learners from grades 8 to 12. At the time of the visit there were a total of 329 learners of which 155 were boys and 174 girls. The educator to learner ratio was varied and ranged from 1:30 to 1:70 as there were only 12 educators. The school had two non-teaching staff members, one administration clerk and one cleaner who maintained the school facilities.

The school has only 10 classrooms, all of which were in use at the time of the visit. Specialist rooms include: a staff room, Science/Biology laboratory, two separate administration offices, a computer laboratory as well as an audio visual room. In future the audio visual room will contain a TV, VCR and well as 20 computers which will be moved from the current computer room. The school is equipped with a total of 20 computers, at the time of the visit none of the computers were able to connect to the Internet as the line had been moved to the audio visual room as a permanent arrangement.

Technological Resources

TYPE OF RESOURCE	NUMBER AVAILABLE	NUMBER IN USE	NUMBER UNUSABLE
Tape Recorders	0	0	0
OHP	3	3	0
Computers	20	20	0
Computers with Internet Connections	0	0	0
Printers	2	2	0
Data Projector	1	1	0
Television Sets	1	1	0
Photocopiers	2	2	0
Fax Machine	1	1	0
Type Writer	20	0 (phased out typing)	0
Other			

ICT skills and use

The school's principal reported that the computers are predominantly used for administration purposes, such for lesson preparation and creation of tests. 11 Educators completed pre-training questionnaires as part of the case study research. The educators knowledge and expertise in the use of ICT was quite low as less than 25% of the educators reported to being computer literate. Only 1 educator was making use of the computer for teaching and learning purposes, and 2 educators reported to be making use of computers as part of lesson preparation as well as to design their own materials. A number of learners who participated in the focus group discussions mentioned that they were not making use of the computer but would like to be able to make use of the Internet to send email, listen to music, play games and chat to other people online. Only Computing learners in grades 10 to 12 were allowed to make use of the computers at the school, these learners were also permitted to play Solitaire and Pinball during their free time.

Educators' self-reported ICT skills pre-training

ICT SKILLS	NUMBER ANSWERING YES (N=11)	PERCENTAGE ANSWERING YES
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	5	45%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	2	18%
3. Insert a table into a document in a Word Processing programme	1	0.1%
4. Insert page numbers into a document	1	0.1%
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	3	27%
6. Activate the Internet and search the Worldwide Web for information	2	18%
7. Send an email message	3	27%

ICT Skills	Number Answering Yes (n=11)	Percentage Answering Yes
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	3	27%
9. Attach a document to an email message	2	18%
10. Design your own learning materials on the computer	2	18%
11. Create overhead transparencies	11	100%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels, 45%. The educators were however unable to perform specific functions in Microsoft Word such as inserting tables and pages numbers. Also a very low percentage of educators, 18%, indicated that they design their own learning materials on the computer.

Microsoft Partners in Learning Programme

The initial three day Microsoft PiL training session took place in mid July 2005. The follow up training took place in early August 2005. The visit took place on the third day of the initial training session. 10 Educators from the school took part in the training; as well as an additional 6 individuals were also invited to attend. This included 3 educators from a primary school nearby, 1 member of the school's governing body and 2 administration clerks. The training took place in the schools computer room and of the 20 terminals only 12 are networked. The CD content was copied to a shared drive allowing the educators to access the materials with ease.

It should be noted that there was a vast difference in the educator's levels of ICT proficiency. This resulted in educators will low ICT proficiency being left behind.

'Beginners flag behind despite support on the CD. They are still trying to use a mouse and are not ready to learn about navigation.'

The educators were generally keen and appeared to be interested.

The trainer was very confident he had a caring and approachable manner. The trainer had in depth knowledge and experience of the materials and provided clear instructions to educators throughout the training session. The trainer and educators seemed to relate exceptionally well to one another. There was an upbeat atmosphere throughout the training session.

All of the educators who participated in the focus group discussion reported their experience of the training to be positive.

'Useful because the scenarios can be applied. The pro-forma templates can be used and adapted.' 'Useful. I had previously had some basic knowledge of computers but this course allowed me to read up new skills…' 'I've never used computers before and liked that what we were doing was related to our work.'

The educators did mention that they would have preferred more time to develop their new skills, especially those who had limited ICT literacy.

'This is the first time I have used a computer, I feel we need more time.'

One educator gave the thumbs up gesture 'This has been good but we need more time.'

The facilitator reported that the training he had received had provided him with excellent preparation to deliver the programme. He had a positive impression of the programme but believes that there are short comings

'…the tip sheets don't stay on top and the users keep loosing them. Beginners who have no experience struggle with accessing the tip sheets.'

The trainer mentioned another short coming of the PiL programme to be that there was too much time in between the first and second visits 'The educators were reported to lose enthusiasm and most did nothing or very little between sessions. There is no follow up activity required from them and the second visit only acts as a feedback session.

In general the response to the Microsoft Partners in Learning programme was exceptionally positive at this school.

SCHOOL FOUR

INTRODUCTION AND METHODOLOGY

School Four is a Secondary School situated in a township in the Gauteng province. One researcher visited the school in June 2005. The researcher spent a day at the school in order to collect necessary baseline information. The researcher interviewed the principal, carried out a focus group discussion with learners from the classes of teachers who would be taking part in the Partners in Learning training programme and ensured that the pre-training questionnaires had been completed.

The second school visit took place in July 2005 the fieldworker was only present for one day due to technical problems, these are described in detailed below. Detailed observation of the training session was carried out in order to record the way in which the training actually happened. Due to the limited programme that was presented at the training session, many of the questions designed to facilitate the focus group discussions were inappropriate or inapplicable. The information gleaned from two short informal focus group discussions, as well as other discussions throughout the day. An interview was also conducted with the trainer.

SCHOOL CONTEXT

School Four is a township school situated in Thokoza on the West Eastrand. The school has water, electricity, poor sanitation facilities as well as a telephone line. This is a co-educational school, which caters for learners from grades 8 to 12. At the time of the visit there were a total of 1770 learners of which 847 were boys and 923 girls. The educator to learner ratio was 1:40 as there was a total of 44 educators. The school had 9 non-teaching staff members, 3 administrators, 3 grounds men, 1 cleaner as well as 2 night watchmen.

The school has a total of 39 classrooms, all of which were in use at the time of the visit. Specialist rooms include: a library/media centre, 4 Science/Biology laboratories, 2 computer laboratories, 2 separate administration offices, a staff room, 2 strong rooms as well as a sick room. The school is equipped with a total of 45 computers at the time of the visit 25 were unusable. The remaining 20 computers were all able to connect to the Internet.

Technological Resources

TYPE OF RESOURCE	NUMBER AVAILABLE	NUMBER IN USE	NUMBER UNUSABLE
Tape Recorders	0	0	0
OHP	3	3	0
Computers	45	20	25
Computers with Internet Connections	20	20	0
Printers	1	1	0
Data Projector	0	0	0
Television Sets	3	3	0
Photocopiers	3	3	0
Fax Machine	1	1	0
Type Writer	0	0	0
Other			

ICT skills and use

The principal reported that 'very few educators at the school make use of the computers as they are not computer literate' despite the fact that 10 educators reported to have received basic computer literacy training. Of the 34 Educators who completed pre-training questionnaires as part of the case study research only 2 educators indicated that they made use of computers for teaching and learning purposes. These educators mainly use the computers for administration purposes but also use programmes such as Microsoft Encarta to teach learners about research. Most of the learners who participated in the focus group discussion indicated that they use the computer lab, once or twice a week. The sessions are usually for life orientation and science lessons. All those learners who do not have science in their curricula do not get exposed to the computer lab and hence many of them have never seen computers.

Educators' self-reported ICT skills pre-training

ICT SKILLS	NUMBER ANSWERING YES (N=34)	PERCENTAGE ANSWERING YES
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	17	50%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	8	24%
3. Insert a table into a document in a Word Processing programme	8	24%

ICT SKILLS	NUMBER ANSWERING YES (N=34)	PERCENTAGE ANSWERING YES
4. Insert page numbers into a document	9	26%
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	8	24%
6. Activate the Internet and search the Worldwide Web for information	4	12%
7. Send an email message	5	15%
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	4	12%
9. Attach a document to an email message	2	6%
10. Design your own learning materials on the computer	5	15%
11. Create overhead transparencies	1	3%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels, 50%. Also a very low percentage of educators indicated that they were proficient in using the WWW and email. A low percentage of educators, 15%, indicated that they design their own learning materials on the computer.

MICROSOFT PARTNERS IN LEARNING PROGRAMME

The initial three day Microsoft PiL training session took place in early July 2005. The follow up training took place later the same month. The visit took place on the first day of the initial training session. Of the 34 educators who completed the initial pre-training questionnaire only 21 educators took part in the actual training session. The training took place in the schools computer room. This training session was not carried out as planned by the trainer due to the lack of facilities and services. Upon the trainer's arrival at the school she discovered that the school's computer lab had no Internet access, no Microsoft Publisher, and no Office media. In addition to this, 6 computers were not working, the printer was not working, and the system installed was a lock-down system with a remote server. Due to the above-mentioned lack of facilities, the trainer reduced the training session to 2 days.

Despite this the educators were excited and extremely eager and motivated to learn the skills presented to them in the programme. They were determined, persistent, and resistant to leave the computer lab at break times. The educators were pleased once they had completed a task successfully. They did however become extremely frustrated by the lack of Internet. The trainer was friendly and confident. She engaged well with the educators. She provided each educator individual attention and called them by name. The trainer will leave her trainees with an improved sense of self-esteem, mastery, and competence.

The educators reported that they enjoyed all of the activities, and that none were 'bad'. It was said that the 'creating tables' activity was going to be most useful to them as they could make use of this skill on a daily basis, to create timetables, marking sheets, and class lists. One educator told of how difficult it has been for her to draw up class lists by hand, as there are so many learners in a class, and that this resulted in her having 'so many papers'. PowerPoint was said to be more enjoyable as it is more 'fun' and exciting, but less practical.

The trainer emphasized her support of the programme in terms of the content and the approach to learning and teaching, she did however mention the lack of facilities to be an issue.

'…but there are many other factors that also influence the programme. The main challenges I have faced at this specific training are all in regard to the lack of facilities.'

Due to the technical difficulties experienced the general the response to the Microsoft Partners in Learning programme at this school was not as positive as it has been at other schools.

SCHOOL FIVE

INTRODUCTION AND METHODOLOGY

School Five is a Secondary School situated in a township setting in the Gauteng province. One researcher visited the school in June 2005. The researcher spent a day at the school in order to collect necessary baseline information. The researcher interviewed the principal, carried out a focus group discussion with learners from the classes of teachers who would be taking part in the Partners in Learning training programme and ensured that the pre-training questionnaires had been completed by the educators who would be taking part in the training.

The second school visit took place in July 2005. Detailed observation of the training session was carried out in order to record the way in which the training actually happened. A focus group discussion was held with the educators who had participated in the training to find out their perceptions of the training and an interview was conducted with the trainer on completion of the 3rd day of the follow up training session.

SCHOOL CONTEXT

School Five is a township school situated in District 9 in Alexandra just outside Johannesburg. The school has water, electricity, sanitation facilities as well as a telephone line. This is a co-educational school, which caters for learners from grades 8 to 12. At the time of the visit there were a total of 1612 learners of which 820 were boys and 792 girls. The educator to learner ratio was approximately 1:40 as there was a total of 41 educators. The school had 10 non-teaching staff members, 3 administrators and 7 supportive staff.

The school has a total of 37 classrooms, all of which were in use at the time of the visit. Specialist rooms include: 2 Science/Biology laboratories, two computer laboratories, a separate administration office, 2 safe/strong rooms as well as a photocopy centre. The school is equipped with a total of 46 computers at the time of the visit 7 of the computers were not in working order. None of the computers were able to connect to the Internet.

Technological Resources

TYPE OF RESOURCE	NUMBER AVAILABLE	NUMBER IN USE	NUMBER UNUSABLE
Tape Recorders	0	0	0
OHP	0	0	0
Computers	46	39	7
Computers with Internet Connections	0	0	0
Printers	1	0	1
Data Projector	1	0	1
Television Sets	1	1	0
Photocopiers	3	3	0
Fax Machine	1	1	0
Type Writer		0	0
Other			

ICT skills and use

The principal reported that the computers were predominantly used for administration purposes, such as for typing up question papers, keeping students records and generating letters for parents. She said that 'the computers are never used to teach the curriculum.'

19 Educators completed pre-training questionnaires as part of the case study research. The educators' knowledge and expertise in the use of ICT was quite low as less than 10% of the educators reported to being computer literate. Only 2 educators reported to be making use of computers as part of lesson preparation as well as to design their own materials. According to the learners, many computers in the computer lab are not in good condition. If on the day of the weekly computer lesson, an educator is not present, the lesson is cancelled. There is no specific computer teacher for computer lessons. The learners can only make use the lab with the assistance and in the presence of a teacher. They indicated that they would like to have a dedicated computer teacher at the school but that they haven't approached the teachers or principal with this request at the time of the visit.

Educators' self-reported ICT skills pre-training

ICT SKILLS	NUMBER ANSWERING YES (N=19)	PERCENTAGE ANSWERING YES
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	9	47%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	4	21%
3. Insert a table into a document in a Word Processing programme	2	11%
4. Insert page numbers into a document	4	21%
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	2	11%

ICT SKILLS	NUMBER ANSWERING YES (N=19)	PERCENTAGE ANSWERING YES
6. Activate the Internet and search the Worldwide Web for information	2	11%
7. Send an email message	3	16%
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	2	11%
9. Attach a document to an email message	0	0%
10. Design your own learning materials on the computer	2	11%
11. Create overhead transparencies	1	5%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels, 47%. Also a very low percentage of educators indicated that they were proficient in using the WWW and email. A low percentage of educators, 11%, indicated that they design their own learning materials on the computer.

MICROSOFT PARTNERS IN LEARNING PROGRAMME

The initial three day Microsoft PiL training session took place in mid July 2005. The follow up training took place later that same month. The visit took place on the second and third day of the initial training session. 12 Educators from the school took part in the training. The training session took place in the school's computer centre, which is also used as a library. The educators seemed to be interested and excited. They started to collaborate from the very beginning of the training session by helping each other open the CD. The ICT proficiency levels of the educators was varied and for some educators this was the first computer training they had every received. The educators needed to be shown how to do things over and over again. The trainer was very patient and always succeeded in helping the educators when they experienced difficulty.

All of the educators who participated in the focus group discussion reported their experience of the training to be positive.

'The training is excellent we never expect to gain this much, the information is relevant for educators. The fact that you can do this at your own pace give you lot of confidence. We didn't know anything but now, we can do our own reports using computers.'

The facilitator reported that the training he had received had provided him with excellent preparation to deliver the programme.

'The training was good, and I was very confident on my first day of training.'

He had a positive impression of the programme but he believes that there are short comings

'The tip sheets are only good for competent users. New users struggle to make use of the resources and tip sheets.'

In general the response to the Microsoft Partners in Learning programme was exceptionally positive at this school.

SCHOOL SIX

INTRODUCTION AND METHODOLOGY

School Six is a Secondary township school situated in the Gauteng province. One researcher visited the school in June 2005. The researcher spent a day at the school in order to collect necessary baseline information. The researcher interviewed the principal, carried out a focus group discussion with learners from the classes of teachers who would be taking part in the Partners in Learning training programme and ensured that the pre-training questionnaires had been completed by the educators who would be taking part in the training.

The second school visit took place in July 2005. Detailed observation of the training session was carried out in order to record the way in which the training actually happened. A focus group discussion was held with the educators who had participated in the training to find out their perceptions of the training and an interview was conducted with the trainer on completion of the 3rd day of the follow up training session.

SCHOOL CONTEXT

School Six is a township school situated in Meadowlands, Soweto on the West Rand of Johannesburg. The school has water, electricity, sanitation facilities as well as a telephone line. This is a girls school, which caters for learners from grades 8 to 12. At the time of the visit there were a total of 865 girls attending the school. The educator to learner ratio was approximately 1:30 as there was a total of 27 educators. The school had 7 non-teaching staff members, 3 administration assistants, 3 general assistants and a librarian.

The school has a total of 31 classrooms, of which only 25 were in use at the time of the visit. Specialist rooms include: 1 library/media centre, 3 Science/Biology laboratories, 3 computer laboratories, 4 separate administration offices, a staff room, 2 safe/strong rooms as well as two music rooms. The school exceptionally well resourced and is equipped with a total of 60 computers, at the time of the visit 10 of these computers were not in working order. 50 computers at the school were equipped with access to the Internet.

Technological Resources

Type Of Resource	Number Available	Number In Use	Number Unusable
Tape Recorders	1	1	0
OHP	2	2	0
Computers	60	50	10
Computers with Internet Connections	50	50	0
Printers	2	2	0
Data Projector	0	0	0
Television Sets	2	2	0
Photocopiers	2	2	0
Fax Machine	1	1	0
Type Writer		0	0
Other			

ICT skills and use

In June 2005 the principal reported that the computers at the school were used for a variety of purposes. He reported that members of the administration team were using computers to type documents, prepare school statistical information as well as to keep in touch with the schools collaborators and international partners via email. The principal also reported that 10 of the 'computer literate' educators at the school help to train others to type up their own question papers as well as to compile a schedule of their learners marks etc. According to the principle 20% of learners at the schools are making use of computers. Due to lack of manpower the school does not offer proper computer classes but grade 12 learners are allowed to make use of the computers for school work, researching information for debates, making portfolios etc. 11 Educators completed pre-training questionnaires as part of the case study research. The educators knowledge and expertise in the use of ICT was exceptionally high as no less than 60% of the educators reported to being computer literate. Despite this high level of ICT competency only 3 educators reported to be making use of computers as part of lesson preparation as well as to design their own materials. The learners who participated in the focus group discussion reported that grade 12 learners have weekly computer lessons and are able to use the computer laboratory. Other learners are also allowed to use computers with principal's permission but usually have to look for an educator to accompany them, unless a particular learner has a reputation for being good on the computers. The school has access to the Internet, learners are encouraged to communicate with international sister schools (e.g. in Germany), to do research for class projects, in preparation for debating competitions, and at times, to download music. The computers are also used for the Blue IQ project.

Educators' self-reported ICT skills pre-training

ICT Skills	Number Answering Yes (n=11)	Percentage Answering Yes

ICT SKILLS	NUMBER ANSWERING YES (N=11)	PERCENTAGE ANSWERING YES
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	11	100%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	8	73%
3. Insert a table into a document in a Word Processing programme	10	91%
4. Insert page numbers into a document	8	73%
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	8	73%
6. Activate the Internet and search the Worldwide Web for information	7	64%
7. Send an email message	7	64%
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	8	73%
9. Attach a document to an email message	2	18%
10. Design your own learning materials on the computer	3	38%
11. Create overhead transparencies	1	1%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels, 100%. Also a very high percentage of educators indicated that they were proficient in using the WWW with 67% of educators being able to send email. A moderate percentage of educators, 38%, indicated that they design their own learning materials on the computer.

MICROSOFT PARTNERS IN LEARNING PROGRAMME

The initial three day Microsoft PiL training session took place in mid June 2005. The follow up training took place July 2005. The visit took place during the follow up training sessions. 24 Educators from the school took part in the training. The training session took place in the schools spacious computer centre. The educators remained eager and willing throughout the training session. Some of the educators preferred to work independently whilst others were working together with other educators seated next to them. The trainer was well posed, audible and approachable.

All of the educators who participated in the focus group discussion reported their experience of the training to be positive. The educators believe that they have gained experience in the following areas; using Power Point, graphs, saving, creating mark sheets. etc. They feel that they can now integrate this in their day to day lessons in the classroom. The educators recommended that the training not take place at month end or during the holidays, they would also like to receive a certificate at the end of the programme.

The trainer reported that the training she had received had provided her with adequate preparation to deliver the programme.

'The facilitator was efficient and it took us 3 days to complete the training and we had all the information we needed.'

The trainer mentioned a positive component of the training to be 'the fact that the programmes provides 30 scenarios, which are all different from basic to advanced. It is free so everyone can attend.'

The trainer reported a problem 'the fact that educators don't use scenarios after 3 days of training until you come back again.' as well as the fact that some educators join the follow up when they have not attended the initial training. 'This delays the process as you have to start all over again.'
In general the response to the Microsoft Partners in Learning programme was quite positive at this school.

SCHOOL SEVEN

INTRODUCTION AND METHODOLOGY

School Seven is a Secondary township school situated in the Gauteng province. One researcher visited the school in June 2005. The researcher spent a day at the school in order to collect necessary baseline information. The researcher interviewed the principal, carried out a focus group discussion with learners from one of the classes of teachers who would be taking part in the Partners in Learning training programme and ensured that the pre-training questionnaires had been completed by the educators who would be taking part in the training.

The second school visit took place in July 2005. Detailed observation of the training session was carried out in order to record the way in which the training actually happened. A focus group discussion was held with the educators who had participated in the training to find out their perceptions of the training and an interview was conducted with the trainer on completion of the last day of the initial training session.

SCHOOL CONTEXT

School Seven is a township school situated in Mamelodi, Tshwane South just outside Pretoria. The school has water, electricity, sanitation facilities as well as a telephone line. This school caters for learners from grades 8 to 12. At the time of the visit there were a total of 1580 learners attending the school. The educator to learner ratio was approximately 1:35 as there was a total of 45 educators. The school had 6 non-teaching staff members, 1 secretary, 3 administrators as well as 2 photocopier personnel.

The school is exceptionally well resourced with a total of 32 classrooms, all of which were in use at the time of the visit. Specialist rooms include: 1 library/media centre, 3 Science/Biology laboratories, 2 computer laboratories, a staff room, a safe/strong rooms, a sick room. The development of sports grounds was currently underway at the time of the visit. The school is equipped with a total of 46 computers, at the time of the visit all of which were in working order. 20 computers at the school were equipped with access to the Internet.

Technological Resources

TYPE OF RESOURCE	NUMBER AVAILABLE	NUMBER IN USE	NUMBER UNUSABLE
Tape Recorders	1	1	0
OHP	6	1	5
Computers	46	46	0
Computers with Internet Connections	20	20	0
Printers	3	3	0
Data Projector	2	2	0
Television Sets	1	1	0
Photocopiers	3	3	0
Fax Machine	1	1	0
Type Writer	1	0	0
Other 3 * Satellite dishes Smart board			

ICT skills and use

In June 2005 the principal reported that the computers at the school were used for administration purposes such as to compile class tests, worksheets as well as other class activities. The principal reported that there was no scheduled time for educators or learners to make use of the computers as they had yet to be trained. 15 Educators completed pre-training questionnaires as part of the case study research. The educators knowledge and expertise in the use of ICT was exceptionally low as less than 20% of the educators reported to be computer literate. Due to the lack of ICT competency at the schools only 1 educator reported to be making use of computers as part of lesson preparation as well as to design their own materials. The learners who participated in the focus group discussion reported that they do make use of the computers at school. There is no permanent computer teacher in the school and as a result only science learners get access to the computers and only during science lessons.

Educators' self-reported ICT skills pre-training

ICT SKILLS	NUMBER ANSWERING YES (N=15	PERCENTAGE ANSWERING YES
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	11	80%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	4	27%
3. Insert a table into a document in a Word Processing programme	3	20%
4. Insert page numbers into a document	3	20%

ICT Skills	Number Answering Yes (N=15	Percentage Answering Yes
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	4	27%
6. Activate the Internet and search the Worldwide Web for information	3	20%
7. Send an email message	2	13%
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	2	13%
9. Attach a document to an email message	1	1%
10. Design your own learning materials on the computer	2	13%
11. Create overhead transparencies	1	1%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels, 80%. Despite the high level of connectivity a very low percentage of educators indicated that they were proficient in using the WWW, 13%, and able to send email, 1%. Also a low percentage of educators, 13%, indicated that they design their own learning materials on the computer.

Microsoft Partners in Learning Programme

The initial three day Microsoft PiL training session took place in July 2005. The follow up training took place later that same month. The visit took place during the initial training sessions. Only 12 out of 15 educators who completed the pre-training questionnaire took part in the training. The training session took place in the schools computer centre. There were 20 computers in the centre as well as a smart board at the front of the room for demonstration purposes. All educators participating in the training were able to work on their own computer. The educators seemed motivated and focused. The educators worked mostly independently but ask questions now and then. The trainer was relaxed and easy going. The training session has a strong emphasis on self discovering; the trainer gives the educators some direction and helps them when she feels necessary or when upon their request.

The majority of the educators who participated in the focus group discussion reported their experience of the training to be positive.

'I have learnt a lot of things. Things like how to present a lesson on the computer, and how to do things like mark sheets.'

Another educator said 'Most of the things I didn't know now I do. Now I can use the computer.'

The educators commented on the importance of being able to work at their own pace

'…one thing I noticed as I was walking around was that some of the teachers were able to work at their own pace – I noticed that one teacher was trying to do something that the other educators would know how to do so they were able to work together and help each other.'

One educator mentioned their disappointment in the programme 'I expected something like to be taught what I don't know. It has not really met my expectations as I thought I would learn more.'

The facilitator reported that the training she had received had provided her with excellent preparation to deliver the programme.

'The training was excellent and the facilitator who trained us was excellent. I think I do have all the skills that are needed for the Pil training.'

The trainer mentioned a positive component of the training to be

'..the fact that teachers do different things to what they normally do in the classroom, especially the PowerPoint presentations, they love it.'

The trainer reported a key challenge to be that,

'…educators want you to explain everything, they don't explore the CD' as well as the fact that some educators join the follow up when they have not attended the initial training. This delays the process as you have to start all over again.' 'Some teachers only come once and don't come back when they find out that there are no certificates.'

The general response to the Microsoft Partners in Learning programme was fairly positive at this school.

SCHOOL EIGHT

INTRODUCTION AND METHODOLOGY

School Eight is a combined urban school situated in the Limpopo province. One researcher visited the school in June 2005. The researcher spent a day at the school in order to collect necessary baseline information. The researcher interviewed the principal, carried out 2 focus group discussions with learners from the classes of teachers who would be taking part in the Partners in Learning training programme and ensured that the pre-training questionnaires had been completed by the educators who would be taking part in the training.

The second school visit took place in July 2005. Detailed observation of the training session was carried out in order to record the way in which the training actually happened. A focus group discussion was held with the 10 educators and 2 administration staff who had participated in the training to find out their perceptions of the training. An interview was conducted with the trainer on completion of the last day of the follow up training session.

SCHOOL CONTEXT

School Eight is an urban school situated in Nirvana, Pietersburg in the Limpopo province. The school has water, electricity, sanitation facilities as well as a telephone line. This is a combined coeducational school. At the time of the visit there were a total of 1071 learners attending the school; consisting of 512 boys and 559 girls. The educator to learner ratio was approximately 1:35 as there was a total of 29 educators. The school had 10 non-teaching staff members consisting of 2 administration clerks, 5 support staff members, 1 maintenance officer and 2 security guards.

The school is adequately resourced with a total of 29 classrooms, all of which were in use at the time of the visit. Specialist rooms include: 1 library/media centre, 3 Science/Biology laboratories, a staff room, a safe/strong rooms as well as 2 sick rooms. At the time of the visit the school was equipped with a total of 29 computers all of which were in working order. Internet access was not available at the school.

Technological Resources

TYPE OF RESOURCE	NUMBER AVAILABLE	NUMBER IN USE	NUMBER UNUSABLE
Tape Recorders	3	3	0
OHP	0	0	0
Computers	29	29	0
Computers with Internet Connections	0	0	0
Printers	4	4	0
Data Projector	0	0	0
Television Sets	3	3	0
Photocopiers	2	2	0
Fax Machine	1	1	0
Type Writer	0	0	0
Other			

ICT skills and use

In June 2005 the principal reported that the computers at the school were not used for teaching and learning purposes at all. He said that the computers are mainly used for administration purposes such as to compile formulate tests and mark sheets. The principal reported that only learners in grades 10, 11 and 12 attend computyping lessons twice a week. 16 Educators completed pre-training questionnaires as part of the case study research. The educator's knowledge and expertise in the use of ICT was exceptionally low as less than 30% of the educators reported to being computer literate. Despite the lack of ICT competency at the school 8 educator's reported to be making use of computers as part of lesson preparation as well as in their teaching. The educators indicated that they were making us of the computers in the following ways: to communicate with other professionals, to create worksheets, class tests, examination papers, spreadsheets as well as to teach typing and basic computer skills. The learners who participated in the focus group discussion reported that they do make use of the computers at school. The learners indicated that they attend computer lessons four times a week, which is a total of 8 periods. Lessons consist of computyping skills for example speed typing and accuracy, as well as skills such as writing CV's, testimonials and official letters.

Educators' self-reported ICT skills pre-training

ICT SKILLS	NUMBER ANSWERING YES (N=16	PERCENTAGE ANSWERING YES
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	13	81%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	5	31%
3. Insert a table into a document in a Word Processing programme	6	38%
4. Insert page numbers into a document	6	38%
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	5	31%
6. Activate the Internet and search the Worldwide Web for information	4	25%
7. Send an email message	4	25%
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	3	19%
9. Attach a document to an email message	0	0%
10. Design your own learning materials on the computer	7	44%
11. Create overhead transparencies	1	6%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels, 81%. Despite the low level of connectivity 19% of educators indicated that they were proficient in using the WWW. A relatively high percentage of educators, 44%, indicated that they design their own learning materials on the computer.

MICROSOFT PARTNERS IN LEARNING PROGRAMME

The initial three day Microsoft PiL training session took place in June 2005. The follow up training took place July 2005. The visit took place during the follow up training sessions. Only 11 out of 16 educators who completed the pre-training questionnaire took part in the training. The training session took place in the schools computer centre. During the training session each educator had access to their own computer. The room was set up as four rows of workstations, with the PIL CD installed on all the computers. The facilitator made use of a data projector to demonstrate. Most of the educators were quite enthusiastic about the work and eager to help each other when the need arose. A few educators became frustrated during the training session as they were stuck with a particular, they did not however ask for the facilitator's help.

The educators who participated in the focus group discussion felt that the training had been a great experience and made them realize that 'one is never too old to learn'.

They said that even those of them who thought they were computer literate learnt things they didn't know before. Most important thing identified was the confidence that came with doing this training and learning IT skills. Most educators mentioned collegial sharing and working together as a fun and useful part of the training that aided learning. Tip sheet was identified by almost all as the most useful aspect of the training CD. They came to the training initially thinking that they were going to be left alone to learn and struggle with computers but were pleasantly surprised to have a very different experience. A couple of educators said that they expected more written material to be given, others said that they could always print out what they needed from the CD (although access to a printer is an issue as there isn't one in the computer room). Some felt that initially 'hopping' from the tip sheets to the actual program

they were trying to do was a big frustration and therefore basic things like moving from one window to another on the computer should be more clearly explained. The main problem identified was the 'position of tip sheets as they appeared' on the computer. Suggestion was that it may be nicer to have them on in small windows while going through a programme (something like the Microsoft Helper function). But over all the educators found it enjoyable to learn from the CD instead of a book as reading a book without the practical can get boring. They found it great to have the CD accessible all the time while they were working on the computers rather than carrying a book around. The best part was that they could go back to the CDs as many times as they liked without having to ask any person.

The facilitator reported that the training she had received had not provided her with adequate preparation to deliver the programme.

'…it was not quite adequate. This was mostly the case with respect to knowing the technical aspects of the computer. It might help to give the trainers some very basic course in technical aspects.'

The trainer had positive impression of the PiL programme

'This programme is excellent as it replaces training manuals. While working on the computers you can just access the CD tips hands on. It is there when you need help on whatever you need it.'

The trainer reported the following problems

'… many educators struggled with the concept of learning without a manual! They don't believe that you can learn ho to use computers without a manual. Mostly they try to take notes when you are explaining rather than trying it out. They are hesitant to be very hands on and motivating them through the scenarios is very tough.'

She also mentioned the varied levels of the educator's ICT proficiency to be a problem

'Educators engaged in this training have different levels of computer skills and especially at the beginning (Day 1) it's very hard to juggle that.'

The general response to the Microsoft Partners in Learning programme was exceptionally positive at this school.

SCHOOL NINE

INTRODUCTION AND METHODOLOGY

School nine is a secondary rural school situated in the Limpopo province. One researcher visited the school in June 2005. The researcher spent a day at the school in order to collect necessary baseline information. The researcher interviewed the principal, carried out a focus group discussion with learners from the classes of teachers who would be taking part in the Partners in Learning training programme and ensured that the pre-training questionnaires had been completed by the educators.

The second school visit took place later that same month. Detailed observation of the training session was carried out in order to record the way in which the training actually happened. A

focus group discussion was held with the educators who had participated in the training to find out their perceptions of the training. An interview was conducted with the trainer on completion of the last day of the follow up training session.

SCHOOL CONTEXT

School Nine is a rural school situated in Vuyani Village, 65km from Giyani (West) in the Eastern District of the Limpopo province. The school has water, electricity, sanitation facilities as well as a telephone line. This is a secondary coeducational school. At the time of the visit there were a total of 692 learners attending the school; consisting of 340 boys and 352 girls. The educator to learner ratio was approximately 1:46 as there were a total of 15 educators. The school had 2 non-teaching staff members who are security guards.

The school is adequately resourced with a total of 16 classrooms, all of which were in use at the time of the visit. Specialist rooms include: 1 library/media centre, 1 Science/Biology laboratory, 1 computer laboratory, separate administration offices and a staff room. At the time of the visit the school was equipped with a total of 29 computers. all of which were in working order. Internet access was not available at the school.

Technological Resources

TYPE OF RESOURCE	NUMBER AVAILABLE	NUMBER IN USE	NUMBER UNUSABLE
Tape Recorders			✔
OHP	✔		
Computers	✔ 29 (recorded during school visit)	29	
Computers with Internet Connections	✔		
Printers	✔		
Data Projector	✔		
Television Sets	✔		
Photocopiers	✔		
Fax Machine	✔		
Type Writer	✔		
Other	VCR and satellite decoder for the Internet connection		

* Note that the actual number of each resource was not provided by the school

ICT skills and use

In June 2005 the principal reported that the computers at the school were used to type up and store class lists, schedules and tests. He mentioned that a few of the educators at the school were able to create Power Point presentations and that some educators were making use of materials from the Internet for teaching and learning purposes. According to the principal the educators are permitted to make use of the computer centre during their free periods and after school as it remains open until 16h30 each day. The learners are able to make use of the computer laboratory when there is an instructor to accompany them.

16 Educators completed pre-training questionnaires as part of the case study research. The educator's knowledge and expertise in the use of ICT was varied as some educators reported to being exceptionally computer literate and others not so. Despite the high level of ICT competency at the school only 4 educator's reported to be making use of computers as part of lesson preparation as well as in their teaching. The educators indicated that they were making us of the computers in the following ways: to download resources from the Internet, to design worksheets as well as to develop Power Point presentations for lessons. The learners who participated in the focus group discussion reported that they do make use of the computers at school. The learners indicated that they attend computer lessons approximately once a month. According to the learner's computers lessons consist of the following activities; typing letters and CV's, using email, reading news, as well as listening to music.

Educators' self-reported ICT skills pre-training

ICT SKILLS	NUMBER ANSWERING YES (N=16	PERCENTAGE ANSWERING YES

ICT SKILLS	NUMBER ANSWERING YES (N=16	PERCENTAGE ANSWERING YES
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	15	94%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	9	56%
3. Insert a table into a document in a Word Processing programme	10	63%
4. Insert page numbers into a document	13	81%
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	5	31%
6. Activate the Internet and search the Worldwide Web for information	12	75%
7. Send an email message	8	50%
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	10	63%
9. Attach a document to an email message	2	12.5%
10. Design your own learning materials on the computer	6	38%
11. Create overhead transparencies	0	0%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels, 94%. A high percentage of educators indicated that they were proficient in using the WWW, 63%, with only 12.5% able to send email. Also a moderate percentage of educators, 38%, indicated that they design their own learning materials on the computer.

MICROSOFT PARTNERS IN LEARNING PROGRAMME

The initial three day Microsoft PiL training session took place in June 2005. The follow up training took place later that same month. The research visit took place during the follow up training sessions. Only 10 out of 16 educators who completed the pre-training questionnaire took part in the training. The training session took place in the school's computer centre. During the training session each educator had access to their own computer. The room was set up with the workstations situated around the perimeter of the room, with the PiL CD installed on all the computers. The facilitator made use of a data projector to demonstrate. Initially the educators were very focused. They were concentrating hard on the task at hand, which was using the tip-sheets to help them create a poster in Microsoft Publisher. Towards the end of the session the educators seemed to loose focus, two educators left early and a number of educators left without even excusing themselves.

A number of educators tried to make use of the tip-sheets (by reading the instructions) before consulting the facilitator. When they experienced difficulty the educators tried to work together in groups to solve the problems. As a last resort when they couldn't progress any further the educators would ask the facilitator for help. The educators related well to the facilitator. They seemed to feel comfortable talking to her and joking with her. They didn't feel comfortable discussing certain topics however, such as how the computers are currently being used in their school, how they plan to make use of computers in the future. The educators who participated in the focus group discussion felt that the training had been extremely useful. One educator said

'Yes, the training was useful …. Since we started this training our skills have improved.'

Another educator mentioned 'We are now able to use our computer effectively; we can make something out of what we did.' 'We hope this will enhance our teaching and learning.'

The facilitator reported that the training she had received had not provided her with adequate preparation to deliver the programme.

'No we didn't really get any training. Luckily I have developed ownership for the materials and am more confident as I was involved in their development.'

Despite the lack of training the trainer remained positive regarding the PiL programme

'I think that the programme gives the teachers a lot of confidence very quick, it's user-friendly and they can work at their own time on their own pace.'

The trainer did however mention the following drawbacks

'I think time constraints, we don't a lot of time to do the training, we can only use holidays and weekends, that's the biggest problem.'

She also mentioned the fact that a lot of the educators ask to get tip-sheets printed and that there should be more links to websites than can help educators to searching the WWW

'…it would be useful to have some links to use Thutong as well as details about the Microsoft Agreement'

The general response to the Microsoft Partners in Learning programme was positive at this school.

SCHOOL TEN

INTRODUCTION AND METHODOLOGY

School Ten is a secondary rural school situated in the Limpopo province. One researcher visited the school in June 2005. The researcher spent a day at the school in order to collect necessary baseline information. The researcher interviewed the principal, carried out individual discussions with learners from the classes of teachers who would be taking part in the Partners in Learning training programme and ensured that the pre-training questionnaires had been completed.

Due to technical difficulties at the school the following up training session did not take place as a result the researcher did not visit the school a second time.

SCHOOL CONTEXT

School Ten is an rural school situated in Lenyenye, 65km from Tzaneen in the Limpopo province. The school has electricity, sanitation facilities and a telephone line, which was said to be unreliable. This is a secondary coeducational school. At the time of the visit there were a total of 867 learners attending the school; consisting of 357 boys and 493 girls. The educator to learner ratio was approximately 1:48 as there was a total of 18 educators. The school had no non-teaching staff members.

The school is adequately resourced with a total of 17 classrooms, all of which in use. Specialist rooms include: 1 library/media centre, 1 Science/Biology laboratory, 1 computer laboratory, 1 safe/strong room, and a staff room. At the time of the visit the school was equipped with a total of 20 computers all of which were in working order and had access to the Internet.

Technological Resources

TYPE OF RESOURCE	NUMBER AVAILABLE	NUMBER IN USE	NUMBER UNUSABLE
Tape Recorders	1	1	0
OHP	1	1	0
Computers	20	20	0
Computers with Internet Connections	20	20	0
Printers	1	1	0
Data Projector	1	0	1
Television Sets	1	1	0
Photocopiers	1	1	0
Fax Machine	0	0	0
Type Writer	0	0	0
Other			

ICT skills and use

In June 2005 the principal reported that the computers at the school were used to type up reports and schedules, for Mathematics and Science lessons as well as to download daily news from the Internet. He mentioned that there was an educator at the school was teaching the learners at the school to use computers. 11 Educators completed pre-training questionnaires as part of the case study research. The educator's knowledge and expertise in the use of ICT was exceptionally high. Despite the high level of ICT competency at the school only 4 educator's reported to be making use of computers as part of lesson preparation as well as in their teaching. The educators indicated that they were making us of the computers in the following ways: to compile examination papers, assignments and marks sheets. Most of the learners who participated in the interviews reported that they do make use of the computers at school approximately once a week. One learner indicated that she made use of the schools computers almost everyday, she also mentioned that

'There is no one teaching me because the teachers are too busy but I try to teach myself a few things.'

According to the learner's they make use of the computers to type up Word documents, search the Internet for Information as well as to play games now and again.

Educators' self-reported ICT skills pre-training

ICT SKILLS	NUMBER ANSWERING YES (N=11	PERCENTAGE ANSWERING YES
1. Open a new file in a word processing programme (i.e. Microsoft Word) and save it	10	91%
2. Troubleshoot computer problems (i.e. Solve minor problems such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears')	9	82%

ICT SKILLS	NUMBER ANSWERING YES (N=11	PERCENTAGE ANSWERING YES
3. Insert a table into a document in a Word Processing programme	10	91%
4. Insert page numbers into a document	8	73%
5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	8	73%
6. Activate the Internet and search the Worldwide Web for information	9	82%
7. Send an email message	10	91%
8. Connect to the Internet and find a specific site you are looking for (i.e. type in a particular address)	9	82%
9. Attach a document to an email message	7	64%
10. Design your own learning materials on the computer	4	36%
11. Create overhead transparencies	1	0.1%

From the above table we see that the use of Microsoft Word is rated the highest with respect to skills levels, 91%. A very high percentage of educators indicated that they were proficient in using the WWW, 82%, and able to send email, 64%. Despite the high level of ICT proficiency of the educators only 36% indicated that they design their own learning materials on the computer.

MICROSOFT PARTNERS IN LEARNING PROGRAMME

Due to technical difficulties at the school, the researcher was unable to visit during the PiL training. A brief history of the technical difficulties is described below according to a member of the schools technical support team.

'On 20-07-2005 I brought the server back to Pietersburg to rebuild. It was slow and unresponsive. I reloaded the operating system and software. (We use an image of the server) I found that the server was still the same and discovered that it gives a "memory dump to disk" error. The contractors came out and replaced the memory. That did not solve the problem. After much fighting to get them back, they eventually took the server to Mustek who replaced the processor. Thereafter the hard drive could not be accessed. I tried to reimage the hard dive in the server but could not. I removed the hard drive and put it in my own pc where I reimaged it. After replacing it in the server, I found that it was still giving errors. I reported it again and they eventually came to replace the hard drive. I again tried to reimage the hard drive in the server but could not. I followed the same steps as previously and the same scenario happened again. Now recently the motherboard was replaced still to no avail. I proved to that the hard drive functions perfectly in my pc which proves that there is nothing wrong with the image. I even took yet another hard drive to reimage in the server but could not. Now I am waiting for Mustek to come and collect the server.'

Annexure C - Analysis of Trainer Reports, Participant Course Evaluations and Follow-Up Surveys

INTRODUCTION

Three additional sets of data have been collected as part of programme implementation. These are trainers reports which trainers were requested to complete after each course, course evaluation forms be completed by all educators who have taken part in the initial training, and a follow-up survey to be completed by all participants at the end of the follow-up training session. In all instances, the PiL trainers were requested to collect this data and submit it to SchoolNet South Africa following each training session. All three of the instruments were designed prior to the start of the evaluation research, but incorporated into the evaluation research as an additional data source.

The data presented below is based on the all the trainers reports, course evaluations and follow-up surveys available in October 2005. It should be noted that additional reports were submitted to Schoolnet South Africa subsequent to this analysis. The table below summarizes the number of reports that were available for analysis in October 2005.

INSTRUMENT	NUMBER OF RESPONSES
• Trainer Reports	• 74
• Course Evaluation Forms	• 734
• Follow-up Survey	• 67

TRAINER REPORTS

A total of 74 trainers' reports were submitted. Of these 52 were completed following the initial three-day training session. The remaining 22 were completed following the two-day follow-up training. The tables below (based on the format of the trainers reports) present a summary of the data from the initial training trainer reports and the follow-up training.

Summary of trainer report results, initial training (n=52)

		NO	TO SOME EXTENT	TO A GREAT EXTENT	YES
1	• Sufficient computers were functional for a 1:1 computer to user ratio	7.7%	17.3%	15.4%	57.6%
2	• School management were supportive of the training	3.8%	1.9%	13.5%	80.8%
3	• The required software was loaded	5.9%	25.5%	29.4%	39.2%

		No	To Some Extent	To A Great Extent	Yes
4	• Teachers were able to log in and be ready for starting the course within a reasonable time	7.7%	25.0%	25.0%	42.3%
5	• The introductory explanation helped the teachers understand what the training was about	0%	5.9%	27.5%	66.6%
6	• I worked through a first scenario with the entire group	3.8%	5.8%	9.6%	80.8%
7	• I worked through a second scenario with the entire group	11.5%	7.7%	23.1%	57.7%
8	• I was able to help teachers who needed support	0%	2.0%	9.8%	88.2%
9	• I managed to persuade teachers to start helping themselves rather than ask me every time	0%	7.8%	27.5%	64.7%
10	• Teachers found the scenarios relevant	0%	5.8%	42.3%	51.9%
11	• Teachers found the examples useful	0%	7.7%	30.8%	61.7%
12	• Teachers found that the tip sheets were helpful	5.9%	11.8%	41.2%	41.2%
13	• I was able to cope with facilitating teachers working on different tasks	1.9%	3.8%	21.2%	73.1%
14	• I believe that this model of training is successful	0%	2.0%	36.0%	62.0%

Summary of trainer report results, follow-up training (n=22)

		No	To Some Extent	To A Great Extent	Yes
1	• Sufficient computers were functional for a 1:1 computer to user ratio	0%	0%	13.6%	86.4%
2	• School management were supportive of the training	0%	13.6%	9.1%	77.3%
3	• The required software was loaded	0%	27.3%	27.3%	45.5%
4	• Teachers were able to log in and be ready for starting the course within a reasonable time	4.5%	13.6%	18.2%	63.6%
5	• The introductory explanation helped the teachers understand what the training was about	0%	0%	9.1%	90.9%
6	• I worked through a first scenario with the entire group	9.5%	0%	0%	90.5%
7	• I worked through a second scenario with the entire group	27.3%	27.3%	18.2%	27.3%

		No	To Some Extent	To A Great Extent	Yes
8	• I was able to help teachers who needed support	0%	0%	9.1%	90.0%
9	• I managed to persuade teachers to start helping themselves rather than ask me every time	0%	4.5%	9.1%	86.4%
10	• Teachers found the scenarios relevant	0%	0%	31.8%	68.2%
11	• Teachers found the examples useful	0%	0%	18.2%	81.8%
12	• Teachers found that the tip sheets were helpful	0%	9.1%	27.3%	63.6%
13	• I was able to cope with facilitating teachers working on different tasks	0%	0%	9.1%	90.9%
14	• I believe that this model of training is successful	0%	0%	40.9%	59.1%

The tables above provide a range of descriptive information about the support of the school, how the training took place, and how well equipped the trainers felt to support the teachers. Overall, school management were reported to be supportive of the training. In some instances trainers reported having insufficient computers (not a 1:1 computer ratio) although this was for the minority of trainers. Most reported that the software required was loaded, at least to some extent. Improvements in terms of software being available and educators ability to log on and be ready to start the course in a reasonable amount of time are seen from the initial to the follow-up training, although 4.5% of trainers still reported that educators were not able to log on at the start of the follow-up training.

According to the trainer's reports, most were able to help teachers who needed support during the training, 88.2% during initial training and 90.9% during follow up training. The data also shows that it was easier for trainers to persuade teachers to start helping themselves rather than relying on the trainer by the follow-up training.

Overall, trainers report that teachers found the scenarios, examples and tip sheets helpful, with most responses for these three questions falling in to the 'to a great extent' or 'yes' categories. According to the trainers the model of training being used for this programme is seen as successful, with most rating this questions as 'to a great extent' or 'yes'.

Trainers and educators (in course evaluation forms) were asked to suggest new scenarios that educators mentioned during the training. Suggestions of both trainers and educators included:

- Maths and Science Scenarios;
- Publisher;
- Outlook, including how to create email addresses;
- PowerPoint;
- Timetable generator;
- Pastel accounting;
- More scenarios for the advanced group;
- An easy Word document without a table;
- Use of multiple worksheets in Excel;
- School Management;

- School reports
- Support for learners with special needs;
- Design of the school emblem;
- Lesson preparation as required in the RNCS;
- Summary and/or class register;
- More internet scenarios;
- Creating diagrams and drawings;
- Self test programmes for learners;
- More subject oriented scenarios;
- Logging on to the internet;
- Banking;
- Use of Encarta; and
- Quizzes, crossword puzzles, and mind games.

COURSE EVALUATION FORMS

A total of 734 educators completed course evaluation forms following their training. The data from these forms is summarized in the table below.

Educators' course evaluation forms (n=734)

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
	Before the course				
1	I am a confident computer user	10.5%	31.0%	40.9%	17,6%
	During the course				
2	I found the scenarios useful to my needs as an educator	0%	0.2%	39.3%	60.3%
3	I read the outcomes	0.1%	3.9%	66.5%	29.5%
4	I found the outcomes descriptions useful	0.4%	3.7%	50.6%	45.1%
5	I needed the help of the example document	0.5%	4.0%	56.9%	38.3%
6	I found the example documents useful	0%	1.0%	46.2%	52.8%
7	The task list was a useful guide for completing the document	0.1%	2.6%	52.1%	45.2%
8	The tip sheets in the resource list helped me to complete the task	0.4%	3.9%	51.9%	43.9%
9	The trainer supported me when I needed help	0.3%	0.4%	25.1%	74.2%
10	The trainer taught me to find solutions to problems that I experienced	0.4%	1.8%	34.8%	63.0%
11	My colleagues were able to help me when I needed help	1.1%	3.3%	48.0%	47.6%
12	I found the related scenarios useful in guiding me to my next project	0.6%	1.9%	50.5%	47.0%
13	I used the self-assessment sheet	2.2%	12.5%	53.9%	31.4%
14	I found the self-assessment sheet useful	2.3%	12.5%	51.2%	33.9%
15	I used the advanced tips	4.5%	11.6%	57.1%	26.7%

		Strongly Disagree	Disagree	Agree	Strongly Agree
16	I found the advanced tips useful	4.7%	10.5%	52.4%	32.4%
17	I enjoyed working at my own pace	0.6%	1.4%	41.3%	56.8%
18	I enjoyed being able to work independently on projects that suited my needs	0.4%	1.5%	42.3%	55.8%
19	I became a more independent learner of ICT	0.7%	5.3%	49.9%	44.1%
20	I found the pair and share session useful	1.1%	2.8%	45.9%	50.2%
	After the course				
21	I feel that my computer skills have improved	0.3%	1.2%	37.0%	61.5%
22	I enjoyed this approach to training	0.4%	0.9%	34.4%	64.3%
23	I will revisit these materials and work further on them soon	0.3%	0.4%	29.8%	69.5%

Based on the course evaluation forms, we see that 58.5% of educators rated themselves as confident computer users prior to the PiL training. This is a relatively high percentage and seems to contradict the educator self reported skills ratings in the educator surveys and also in the follow-up survey (results presented below). However, we do find that 98.5% of participants reported that their computer skills had improved following participating in the training. Overall, most participants enjoyed the approach to training (98.7%) and most reported that they would work further on their PiL materials soon (99.3%).

The results presented in the table above show a very positive response to the training approach and the PiL materials with the majority of responses falling in to the ‘agree’ and ‘strongly agree’ categories. Educators reported that they enjoyed working at their own pace (98.1%) and independently on projects that met their specific needs (98.1%). The tips sheets, advanced tip sheets and self assessment sheets were all positively rated. Educators reported that the trainers taught them to find their own solutions to problems (97.8%) and that they became more independent users of ICTs as a result of the training (94%).

FOLLOW-UP SURVEYS

Follow up surveys were completed by 67 educators. The results are summarized in the two tables below.

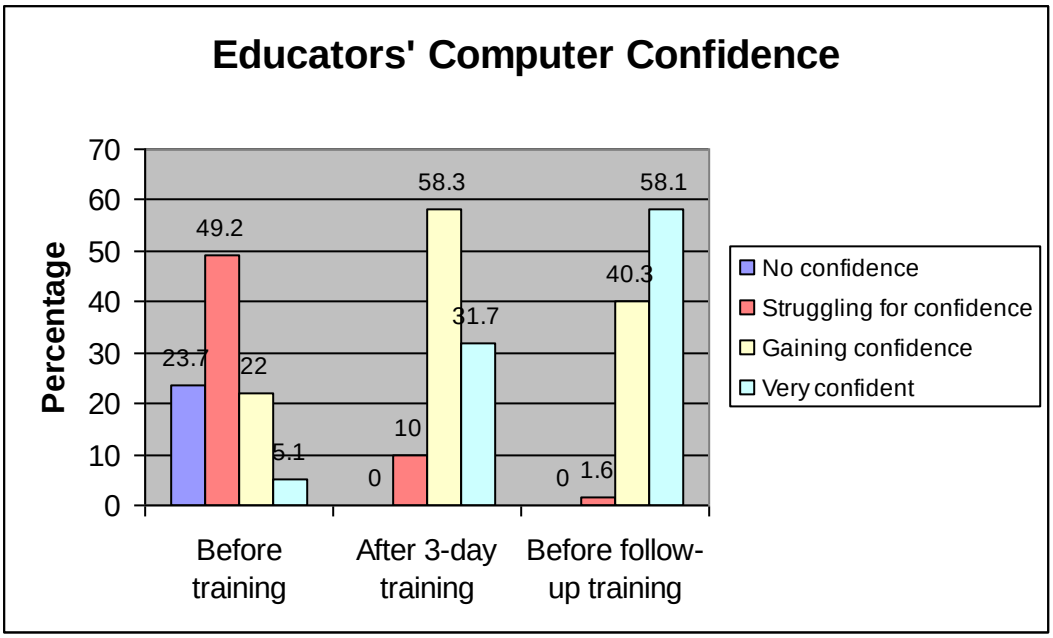
Follow-up Survey, computer confidence (n=67)

		No Confidence	Struggling For Confidence	Gaining Confidence	Very Confident
1	How was your computer confidence BEFORE the first 3-day training course?	23.7%	49.2%	22.0%	5.1%
2	How was your computer confidence AFTER the first 3-day training course?	0%	10.0%	58.3%	31.7%

		No Confidence	Struggling For Confidence	Gaining Confidence	Very Confident
3	How is your computer confidence now, 3-4 weeks later and immediately BEFORE the FOLLOW-UP course?	0%	1.6%	40.3%	58.1%

The table above shows how confidence in using computers has increased following participation in the PiL training. Before the initial training we see that only 5.1% reported feeling 'very confident', compared to 31.7% after the initial training and 58.1% by the time the follow-up training began. Before the training 23.7% of educators reported having no confidence to use a computer, compared to no educators report no confidence following the initial training session. These results support the self-report changes in ICT skills ratings found when analyzing the educator surveys.

The results have been presented graphically in the figure below. The graph emphasizes the increase in 'very confident' ratings, and decrease in 'no confidence' and 'struggling for confidence' ratings.



Follow-up Survey, scenarios completed (n=67)

		During 3 Day Course	After The 3 Day Course	During The Follow-Up Course	Not completed
1	Design an assessment tool (Basic)	57.6%	7.6%	12.1%	22.7%
2	Create a simple markbook (Basic)	50%	10.9%	17.2%	21.9%
3	Write a short bulletin (Basic)	21.2%	19.7%	10.6%	48.5%
4	Create a certificate (Basic)	31.3%	9.0%	16.4%	43.3%
5	Create a class planner (Basic)	25.4%	20.9%	17.9%	35.8%
6	Design a concert programme (Basic)	13.4%	17.9%	22.4%	46.3%

		During 3 Day Course	After The 3 Day Course	During The Follow-Up Course	Not completed
7	Design a newsletter (Basic)	17.9%	12.4%	14.9%	53.7%
8	Design a poster (Basic)	14.9%	9.0%	26.9%	49.3%
9	Disciplinary note (Basic)	23.9%	11.9%	20.9%	43.3%
10	E-mail (Basic)	20.9%	4.5%	1.5%	73.1%
11	Type a class test (Basic)	56.1%	10.6%	3.0%	30.3%
12	Creating a simple worksheet (Basic)	38.7%	14.5%	19.4%	27.4%
13	Write a good news note (Basic)	36.4%	6.1%	13.6%	43.9%
14	Write a letter (Basic)	62.0%	3.0%	7.6%	27.3%
15	Creating a simple presentation (Basic)	36.9%	16.9%	21.5%	24.6%
16	Reviewing documents (Basic)	16.2%	13.2%	23.5%	47.1%
17	Search the Internet (Basic)	13.2%	4.4%	2.9%	79.4%
18	Data analysis (Intermediate)	22.1%	14.7%	13.2%	50.0%
19	Draw up a budget (Intermediate)	16.4%	6.0%	25.4%	52.2%
20	Create a multimedia presentation (Intermediate)	14.1%	6.3%	23.4%	56.3%
21	Forms-based documents (Intermediate)	1.5%	15.2%	31.8%	51.5%
22	Organizing information in an outline (Intermediate.)	3.0%	9.0%	17.9%	70.0%
23	Create a graph (chart) (Intermediate)	12.1%	7.6%	48.5%	31.8%
24	Import a chart to Microsoft Word (Intermediate)	4.6%	10.8%	44.6%	40.0%
25	Use Internet information in Microsoft Word (Intermediate)	3.0%	10.6%	6.1%	80.3%
26	Creating a presentation template (Intermediate)	17.2%	9.4%	21.9%	51.6%
27	Mail merge a letter (Advanced)	9.1%	4.5%	22.7%	63.6%
28	Creating a class database (Advanced)	6.2%	10.8%	27.7%	55.4%
29	Creating a pivot table (Advanced)	0%	1.5%	28.8%	69.7%
30	Create a dynamic markbook (Advanced)	7.6%	6.1%	30.3%	56.1%

Overall, the five *most* commonly completed scenarios (during three-day training, after three-day training and during follow-up training) were:

- Create a simple mark book (completed by 78.9%);
- Design an assessment tool (completed by 77.3%);
- Creating a simple presentation (completed by 75.4%);
- Write a letter (completed by 72.7%); and
- Creating a simple worksheet (completed by 72.6%).

All of these scenarios are at basic level, highlighting educators' need for basic level ICT skills training.

Overall the five *least* commonly completed scenarios were:

- Use Internet information in Microsoft word (completed by 19.7%);
- Search the Internet (competed by 20.6%);

- Email (completed by 26.9%);
- Organizing information in an outline (completed by 29.9%); and
- Creating a pivot table (completed by 30.3%).

Of these least completed scenarios, one falls into the advanced category, two in the intermediate category and two in the basic category.

Designing an assessment tool (57.6%), typing a class test (56.1%) and creating a simple markbook (50%) are the three scenarios most commonly completed during the initial three-day training. Although there are some exceptions, the intermediate and advanced scenarios tended to be engaged with during the follow-up training course.

Annexure D - Summary of Departmental Interviews

1. How did you hear about the Microsoft Partners in Learning programme?
   ….. Three provinces reported hearing about PIL directly from Microsoft
   Two provinces reported hearing about PIL from SchoolNet SA (Janet Thomson specifically)
   The rest heard about it through governmental structures (e.g. the national ICT coordinator's work group, ICT provincial meetings.)

2. What do you understand to be the intended purpose of Microsoft Partners in Learning programme? Please describe.
   …. Responses included:

   Provide access to MS products (EC)
   Build capacity among educators and learners to use ICT's as part of classroom practice (x5: NW, NC, WC, FS, LM)
   Allow provincial departments achieve the strategic goals of the DOE white paper on e-Learning (WC)
   MS social responsibility programme, an outreach programme (WC)
   Enhances brand awareness
   Developing educational leaders (KZN)

3. What do you see as the strengths of this programme?
   …. Responses included:

   Adult learning approach, teachers can train themselves. (x3: LM, WC)
   Contextual/Situational learning: education setting (x4: FS, NC, NW, KZN)
   OBE compliant (WC)
   Materials readily available (FS)
   High quality materials (WC)
   Tip Sheets (NW)
   Ease of use (NW)
   Caters for all abilities (NW)
   Microsoft Schools agreement: Free software (EC)
   Don't know – have not implemented it (WC)

4. In your opinion, what are the weaknesses of this programme?
   …. Responses included:

   Too short! (KZN: running the principal's training course)
   People with no ICT competencies get lost (KZN, NW)
   No specific time frames, needs to have some deadlines (NW)
   Access to computers after formal training (NW)
   No attempt made by educators to work further on materials between visits (NW)
   Weekends has poor attendance (NW)

Focus is on schools exclusively, needs to include Provincial departments (EC)
Does not tie precisely with our outcomes (WC)
No accreditation – Needs to be some form of formal recognition for doing the course that tie with the NQF. (FS)
No post-course follow up. It needs to lead into something else. (LM)
Don't know - Have not experienced it (NC, WC)

5. What ICT strategies are currently in place in your province? Please describe.
   … Reponses include:

   Roll out of infrastructure (x4: WC, FS, NW, KZN)
   Professional development (x4: WC, FS, NW, KZN)
   Acquisition of private ICT initiatives for their schools – eg. Shuttleworth foundation, Telkom etc. (EC)
   Applying for funding/budget for ICT deployment (EC)
   Technical training (WC)
   Policy development around ICTs (WC)
   Planning from a provincial perspective for ICTs (EC)
   Emphasis on connectivity (WC, FS)
   Content/Syllabus development for ICT-based learning (WC)
   Moving schools specifically towards 'ICTs for teaching and learning' (FS)
   Equipping teachers with access to ICTs (FS)
   Computerising the Resource Centres (FS)
   Encouraging use in other technologies - whiteboard, TV etc. (WC)
   Training area specialists in ICTs (NW)

6. What are the strategic priorities of your Provincial Department of Education regarding ICTs?
   … Responses include:
   Aligning ourselves with the White Paper on e-Learning (KZN)
   Rolling out infrastructure (5x: KZN, NW, NC, FS, WC)
   ICT Professional development (5x: KZN, NW, NC, WC, FS)
   Professional development specifically for ICTs in subjects (WC)
   Engage with community (NC)
   Technical capabilities (NC)
   Information audit of ICTs in schools (EC)
   Developing guidelines to help schools (EC)
   Identify and enrol with private sector ICT initiatives (FS)

7. What progress has been made to date in achieving these strategic priorities? (Probe on what has worked and what challenges have been)
   …. Responses include:

   No response (KZN)

   Professional Development:
   PIL used as intro, Intel (Teach to the Future) as follow-up course (LM)
   Support FET Colleges so that they can meet the requirements for the new syllabus (WC)
   Good progress with training (LM)

Medium progress with training (FS, NC)
Little progress as yet / in planning phase (EC, KZN)

Roll out of ICT Infrastructure:
Good progress (WC, FS, NC, NW)
Little progress / in planning phase (EC)

Roll out and training with alternate technologies:
Good progress (WC)

Improving technical capacity
Not pervasive (NC)

8. How does the Microsoft Partners in Learning Programme fit in with the ICT Agenda of your Province?
…. Responses included:

Educator's training is important (x4: NW, EC, FS, LM)
Free software (MS School's Agreement) is very important (KZN, WC)
Free teacher training materials are important (EC, FS)
Principal's training materials are important (KZN, NW)
Educator's training is important for basic literacy (NC)
Technical training (Help Desk) will be important in the future (FS)
Fresh Start training is useful (WC)
PIL is seen as supplementary material/training (WC)
Have not yet fully decided (NC)

9. What is the process for selecting schools to be trained in your province? Please describe.
…. Responses include:

Schools that have computers (EC, KZN)
Schools that were previously disadvantaged (WC, NC)
Schools that have proactive/supportive management (WC, NC)
District officials help decide (LM, WC)
Schools that have good ICT facilities (LM)
Schools that have average facilities (LM)
Must have produced a technology/business plan (NW)
Project specific: e.g. Intel training in schools that have had ICTs for at least three years or rural schools where urban/rural imbalances need to be addressed. (WC)
Dineledi Schools (KZN)
FET schools, especially those that want to offer CAT and IT (FS)

10. What is the process for selecting educators to be trained in your province? Please describe.
…. Responses include:

All staff on installation of ICTs (FS, WC, LM)

Maths, Science and technology teachers (EC, FS)
Schools themselves make these decisions (NC, WC)
Emphasis on all subject teachers not just CAT and IT (NW)
Teachers from previously disadvantaged schools (NC)
Those that show interest first (NC)
Principal must have rudimentary skills (KZN – Principal's training only)

11. In your opinion, what impact will the Microsoft Partners in Learning programme have on the schools, in your province? (probe in relation to administration and teaching and learning)
    …. Responses Include:

    Don't know yet / too early to tell (EC, NC, KZN)
    Ease administration duties (NW, KZN)
    Improve ICT skills (WC, FS)
    Improve/enhance teaching and learning (LM)
    Aid cost effective strategies of ICT deployment (FS)
    Offer supplementary ICT training for teachers who want it (WC)

12. What have been the main challenges faced in terms of implementing this programme in your province?
    … Responses include:

    Principals send 'placeholder' teacher for themselves and arrive a day or two later and then replace the teacher (KZN)
    Principals who attend training don't have sufficient ICT skills to complete the course. (KZN)
    Instances where the principal or leadership of the school does not support the process. (NC)
    Don't know / Have not run the course (EC, WC)
    No support after the course. MS should set up a support desk (FS, LM)
    Lack of funding to run these courses properly (WC – not PIL specific)
    Shortage of good trainers (WC – not PIL specific)
    Quality of computer labs are poor and lead to technical difficulties (LM)

13. Have you received feedback on what the response of educators trained has been? Please describe..
    …. Responses include:

    Have received lots of positive feedback (LM, KZN [Principal's training])
    Have received some positive feedback with suggestions for improvements (NW)
    No (FS, NC)
    Not applicable: has not run the course. (WC, EC)

14. Is there anything about the Microsoft Partners in Learning programme that you think could or should be improved?
    … Responses include:

    Principal's course needs self reflection component, pretest and questionnaire

(KZN)
Principal's course needs monitoring after the course (KZN)
Educator's course needs to include subject specific scenarios (NW)
Educator's course needs accreditation on the NQF (FS)
Microsoft SA is slow in some cases of approving applications for the MS School's Agreement (WC)

15. Any other comments?

… Responses include:

Microsoft SA responds very quickly and professionally to communications and requests. (FS)
Too early to tell if PIL is significant but we are investigating with interest. (NC)
The distribution of MS Software needs to be based provincially, perhaps even in the provincial education dept office to ease distribution woes. (EC)
Vendors sell MS products to schools and don't mention the MS Schools Agreement. Either they need to be informed or schools need to be told in a better way (EC)

Annexure E - Overview of Key Indicators and Metrics

This section provides an overview of key indicators and metrics as outlined in the Guidelines for Evaluators. It should be noted that this information will be updated each year and will provide a means of tracking changes over time. The numbers in the table below come from the survey data – the same surveys will be administered each year to allow for tracking of changes.

INDICATORS AND METRICS	2005		2006	2007	2008
• Access to computers for teaching and learning	• 43.77%				
• Use of computers for teaching and learning	• 26.58%				
• Models of ICT (weekly)	• Lesson Planning	• 34.4%			
	• Part of a Lesson	• 22%			
	• Learner Usage	• 22.8%			
• Usage of ICT (Educators)	• Preparing tests and examinations	• 79.1%			
	• Making handouts or worksheets	• 76.5%			
	• Learner assessment	• 50.5%			
	• Searching for information on the Internet	• 45.9%			
	• Preparing letters for parents	• 45.5%			
	• Use Word Processing programmes	• 38.3%			
	• Create Charts or use of graphs	• 33.7%			
	• Create presentations to be used in class	• 32.7%			
	• Find information using other software	• 32.7%			
	• Create a class database	• 28.6%			

INDICATORS AND METRICS	2005		2006	2007	2008
	• Communication (Email)	• 25%			
	• Other	• 3.1%			
• Usage of ICT (Learners)	• Projects	• 44.4%			
	• Searching for information on the Internet	• 34.7%			
	• Using Word processing programmes	• 29.6%			
	• Drawing or finding pictures	• 26.5%			
	• Making Notes	• 24%			
	• Finding information using other software	• 23%			
	• Drill and practice exercises	• 15.8%			
	• Create graphs and charts	• 14.8%			
	• Create presentations	• 13.8%			
	• Email	• 7.1%			
	• Other	• 6.6%			
• Confidence of teachers to integrate technology	• No confidence	• 23.7%			
	• Struggling for confidence	• 49.2%			
	• Gaining confidence	• 22%			
	• Very confident	• 5.1%			
• Learner response to ICT use	• 22.8%				

INDICATORS AND METRICS	2005	2006	2007	2008
• Professional development activity in schools functioning	• PIL used as intro, Intel (Teach to the Future) as follow-up course - Limpopo • Support FET Colleges so that they can meet the requirements for the new syllabus – Western Cape • Good progress with training - Limpopo • Medium progress with training – Free State, Northern Cape • Little progress as yet / in planning phase – Eastern Cape, KwaZula-Natal •			
• Impact on curriculum, school and departmental levels	• See Report - Impact will be noted in 2006			
• ICT learning assessment practices (ICT Usage in Teaching for learner assessment)	• 50.5%			
• ICT leadership at departmental and school levels	• See Report – High level of ICT leadership at departmental levels; Moderate level of ICT leadership at school levels			
• Role of PiL in policy discussions and development at all levels	• See Report – PiL making significant contribution in terms of policy discussion and development – helping meet strategic priorities in terms of professional development.			
• Engagement of PiL Participants in research and knowledge building	• See Report – high level of engagement of PiL participants in case study research, moderate level of engagement of PiL participants in survey research.			

Annexure F – Research Instruments

ANNUAL SCHOOL SURVEY

INSTRUCTIONS

Please complete all questions. Unless otherwise specified in the survey, only ONE option should be selected for each question.

GENERAL SCHOOL INFORMATION

1. **School Name**_____

2. **Is the school:**

□ *Primary*

□ *Secondary*

□ *Other, please specify*_____

3. **In which type of area your school is located?**

□ *Rural Area*

□ *Township/peri-urban*

□ *Urban area*

4. **In which province is your school?**

□ *Eastern Cape*

□ *Free State*

□ *KwaZulu-Natal*

□ *Gauteng*

□ *Limpopo*

□ *Mpumalanga*

□ *Northern Cape*

□ *North West*

□ *Western Cape*

5. **Number of educators in the school**:_____

6. **Number of learners in the school: _____**
7. **Number of admin staff in the school: _____**

8. **Monthly school fees:_____**

ICT ACCESS AND USE

9. **Do you have a technology plan for your school?**
   □ *Yes*
   □ *No*

[If yes, please attach]

10. **Number of computers in the school for administration:_____**

11. **Number of computers in the school for teaching and learning: _____**

12. **Number of computers with access to the Internet?_____**

13. **What type of Internet connection does the school have?**
    □ *No Internet connection*
    □ *Dial up*
    □ *ISDN*
    □ *ADSL*
    □ *Satellite*
    □ *Wireless*

14. **Please list, with version numbers, the software currently available on the computers in your school.**

_____

_____

_____

_____

_____

_____

_____

15. Please indicate whether your school has the following technological resources:

More than one option can be selected

□ Data projector

□ Colour printer

□ Black and white printer

□ Television

□ Video machine

□ Overhead projector(s) (OHP)

□ Tape Recorder(s)

□ Photocopier(s)

□ Fax machine(s)

□ Other, please specify:_____

_____

_____

16. Where in your school are computers located?

More than one option can be selected.

□ Computer room/laboratory

□ Library/media centre

□ Classroom(s)

□ Admin block/offices

□ *Other, please specify:*_____

_____

_____

17. Do learners from the school access computers after school hours?

□ Yes

□ No

□ Don't know

18. If yes, where do learners access computers after school?

More than one option can be selected

□ At school

□ Community Centre

□ Internet Café

□ Home

□ Don't know

□ Other, please specify:_____

_____

_____

_____

_____

19. Please describe the timetable arrangements for computer use in the school.

_____

_____

_____

_____

_____

_____

20. Do learners in all grades make use of computers?

□ Yes

□ No

21. If no, please explain (including which grades use computers and why)._____

_____

_____

_____

_____

_____

_____

22. What challenges have you faced in making use of computers for teaching and learning?

More than one option can be selected

- □ Too few computers
- □ Class size too large to fit into computer room
- □ Educator ICT skills levels
- □ Learner ICT skills levels
- □ Timetabling to include all learners
- □ Technical support at the school
- □ Administrative support at the school
- □ Technical problems, e.g. computers not working
- □ Availability of software
- □ Availability of educational content
- □ Costs
- □ Other, please specify_____

_____

_____

_____

MICROSOFT PARTNERS IN LEARNING TRAINING

23. When did your school take part in Microsoft Partners in Learning Training?

- □ April/May 2005
- □ June/July 2005
- □ Other, please specify_____

24. How many educators took part in training?_____

25. How were these educators selected to take part in training?_____

_____

_____

_____

_____

26. What was the response of educators to the training?_____

_____

_____

_____

_____

_____

_____

27. Have you seen any changes in the way that educators make use of ICTs following their Microsoft Partners in Learning training?

□ Yes

□ No

28. Please explain, with examples. _____

_____

_____

_____

_____

_____

_____

29. Have you seen any changes in the way that learners make use of ICTs following educator's participation in Microsoft Partners in Learning training?

□ Yes

□ No

30. Please explain, with examples. _____

_____

_____

_____

_____

_____

_____

31. Have educators in the school taken part in any other ICT training or professional development activities?

□ Yes

□ No

32. If yes, please list._____

_____

_____

_____

_____

33. Any other comments on the Microsoft Partners in Learning Programme?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Thank you very much for answering these questions

ANNUAL EDUCATOR SURVEY

INSTRUCTIONS

Please complete all questions. Unless otherwise specified in the survey, only ONE option should be selected for each question.

You are NOT required to record your name on the survey. Your responses are anonymous.

GENERAL INFORMATION

1. **School name:**_____

2. **Are you male or female?**

□ *Female*

□ *Male*

3. **How old are you?**

□ *20-29*

□ *30-39*

□ *40-49*

□ *50 and above*

4. **Number of years teaching experience**

□ *0-5 years*

□ *6-10 years*

□ *11-15 years*

□ *16-20 years*

□ *21 years or more*

5. **Are you a:**

□ *GET Educator*

□ *FET Educator*

□ *Other (learner support, counselor, teacher educator, etc)*

6. Please specify in which type of area your school is located.

□ *Rural Area*

□ *Township/peri-urban*

□ *Urban area*

7. Do you have access to a computer at home?

□ *Yes*

□ *No*

8. When did you take part in Microsoft Partners in Learning training?

□ *April/May 2005*

□ *June/July 2005*

□ *Other, please specify*_____

ICT ACCESS AND USE

9. How often do you use ICTs to support your *lesson planning*?

   □ *Daily*

   □ *Weekly*

   □ *Monthly*

   □ *Several times a year*

   □ *Once a year*

   □ *Never*

10. How often do you use ICTs as *part of a lesson*?

   □ *Daily*

   □ *Weekly*

   □ *Monthly*

   □ *Several times a year*

   □ *Once a year*

   □ *Never*

11. How often do you have *your learners* use ICTs?

- □ *Daily*
- □ *Weekly*
- □ *Monthly*
- □ *Several times a year*
- □ *Once a year*
- □ *Never*

12. Since completing Microsoft Partners in Learning training, do you use computers in your teaching:

- □ *More often*
- □ *About the same as before*
- □ *Less often*

13. Please explain your answer to question 12. _____

_____

_____

_____

_____

14. How easy or difficult is it to schedule time in the computer lab/media center?

- □ *Very difficult*
- □ *Somewhat difficult*
- □ *No opinion*
- □ *Easy*
- □ *Very easy*

15. For what specific activities do *you* (the educator) use ICTs in your teaching (more than one option can be selected)

- □ *Learner assessment*
- □ *Make handouts or worksheets*
- □ *Search for information on the Internet*
- □ *Find information using other software (e.g. Encarta)*

□ *Use Word Processing programmes*

□ *Prepare tests or exams*

□ *Create presentations to be used in your class*

□ *Prepare letters for parents*

□*Communication (email)*

□*Create graphs or charts*

□*Create a class database*

□*Other, please specify*_____

_____

_____

_____

16. For what specific activities have your *learners* used ICTs to support their learning

□ *Search for information on the Internet*

□ *Find information using other software (e.g. Encarta)*

□ *Email*

□ *Make notes*

□ *Create presentations*

□ *Projects*

□ *Create graphs or charts*

□*Use Word Processing programmes*

□ *Draw or find pictures*

□ *Drill and practice exercises*

□*Other, please specify*_____

_____

_____

_____

17. Please briefly describe one of your most successful ICT-based lessons

_____

_____

_____

_____

_____

_____

_____

18. The following statements are about challenges you may have faced while implementing lessons using ICT. Please indicate the extent to which you agree or disagree with each statement.

	Strongly Disagree	*Disagree*	*No Opinion*	*Agree*	*Strongly Agree*
a) It was difficult to manage your learners on the computers.					
b) Not enough computers were available.					
c) You did not have adequate access to the Internet.					
d) The class time or lab time that was available was too short.					
e) You did not have strong enough computer skills.					
f) Many students did not have strong enough computer skills.					
g) You did not have adequate administrative support.					
h) You did not have adequate technical support.					
i) You did not have adequate instructional support.					

MICROSOFT PARTNERS IN LEARNING TRAINING

1. Please rate your ***ability*** in ICT skills ***before*** and ***after*** taking part in the Microsoft Partners in Learning training. Please select answers for each ICT skill in the ***before and after columns***

	BEFORE TRAINING					**AFTER TRAINING**			
	Poor	**Fair**	**Good**	**Excellent**		**Poor**	**Fair**	**Good**	**Excellent**
File Management									
Using a word processing programme (Microsoft Word)									
Creating a presentation using PowerPoint									
Use Microsoft Publisher to create a newsletter or poster									
Using a spreadsheet to create a graph									
Internet searching									
Use Microsoft Access to develop a class database									

19. Since completing the Microsoft Partners in Learning training how often have you used the Microsoft Partners in Learning materials (CD)?

□ *Daily*

□ *Weekly*

□ *Monthly*

□ *Several times a year*

□ *Once a year*

□ *Never*

20. Since completing the Microsoft Partners in Learning training have you taken part in any other ICT related training or professional development programmes?

□ *Yes*

□ *No*

21. If yes, please list the course/programmes you have, or currently are, taking part in.

_____

_____

_____

_____

_____

22. Any other comments?_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Thank you very much for answering these questions

ANNUAL LEARNER SURVEY

INSTRUCTIONS

Please answer all questions. There are no 'right' or 'wrong' answers; we are interested in what you think.

You do not need to put your name on this paper.

GENERAL INFORMATION

1. **School: _____**

2. **Are you male or female?**

□ *Female*

□ *Male*

3. **How old are you?_____**

4. **What grade are you in?_____**

5. **Do you have a computer at home?**

□ *Yes*

□ *No*

ICT ACCESS AND USE

6. How often do you use computers as *part of a lesson*?

Choose one answer only

□ *Daily*

□ *Weekly*

□ *Monthly*

□ *Several times a year*

□ *Once a year*

□ *Never*

7. How often do you use computers in your own time (e.g. after school or at break)?

Choose one answer only

□ *Daily*
□ *Weekly*
□ *Monthly*
□ *Several times a year*
□ *Once a year*
□ *Never*

8. What kinds of things do you use computers for?

More than one answer can be chosen

□ *Search for information on the Internet*
□ *Find information using other software (e.g. Encarta)*
□ *Email*
□ *Make notes*
□ *Create presentations*
□ *Projects*
□ *Create graphs or charts*
□ *Use Word Processing programmes*
□ *Draw or find pictures*
□ *Homework*
□ *Games*
□ *Other, please specify*_____

_____

_____

_____

9. Do you think computers help you to learn?

□ *Yes*

□ *No*

10. Please explain your answer._____

11. Any other comments on using computers at school?_____

Thank you very much for answering these questions

CASE STUDY (BASELINE VISIT)

SCHOOL INFORMATION SURVEY

1. SCHOOL NAME:_____

2. PROVINCE:

Free State	Gauteng	Limpopo

3. LOCATION:

(Note: more than one block can be ticked if relevant, e.g. rural township)

Rural	Urban	Township

4. TYPE OF SCHOOL

Primary	Secondary	Other (specify)_____

5. DOES THE SCHOOL HAVE:

	Yes	No
Water		
Electricity		
Sanitation facilities		
Telephone line		

6. WHAT ARE THE MONTHLY SCHOOL FEES?_____

7. INFORMATION ABOUT LEARNERS:

Total number of learners	
Number of boys	
Number of girls	

8. INFORMATION ABOUT STAFF:

8.1 How many full time educators does the school have?_____

8.2 How many contract educators does the school have?_____

8.3 How many non-teaching staff does the school have? (specify role, e.g. administrator below)_____

_____

_____

_____

_____

9. INFRASTRUCTURE AND FACILITIES:

9.1 Availability of classrooms:

Total number of classrooms	
Number of classrooms in use	
Average class size	

9.2 Availability of specialist rooms:

Type of facilities	***No. available***	***No. in use***	***No. unusable***
Library/Media Center			
Science/Biology Laboratory			
Computer Laboratory			
Separate administration offices			
Staff room			
Safe/Strong room			
Sick room			
Other (please specify)			

9.3 Availability of technological resources

Type of resource	***No. available***	***No. in use***	***No. unusable***
Tape Recorders			
OHP			
Computers			
Computers with Internet connections			
Printers			
Data projector			
Television set			
Photocopier			
Fax machine			
Type writer			
Other (please specify)			

CASE STUDY (BASELINE VISIT)

EDUCATOR PRE-TRAINING QUESTIONNAIRE

1. School Name: _____
2. Grade(s) currently taught:_____
3. Learning Area/Subject:_____
4. Number of years teaching experience:_____
5. Please list your qualifications:_____

_____

_____

_____

_____

6. Have you taken part in any other educator professional development courses related to Information and Communication Technologies (ICTs)?

Yes	No

7. If yes, please describe these._____

_____

_____

_____

_____

_____

_____

_____

_____

8. Why did you decide to take part in the Microsoft Partners in Learning training?

_____

_____

_____

9. What do you expect to gain from this training?_____

10. Please describe any difficulties or challenges that you think you might face in your participation in this programme_____

11. Which of the following functions are you able to perform on a computer?

11.1 Open a new file in a word processing programme (i.e. Microsoft Word) and save it	Yes □ No □
11.2. Troubleshoot computer problems (i.e. solve minor problems, such as when somebody can't get a document to print, or when one of the toolbars suddenly 'disappears').	Yes □ No □
11.3. Insert a table into a document in a word processing programme	Yes □ No □
11.4. Insert page numbers into a document	Yes □ No □
11.5. Use a spreadsheet programme such Excel to add a column of numbers, for example	Yes □ No □
11.6. Activate the Internet and search the World Wide Web for information	Yes □ No □
11.7. Send an email message	Yes □ No □
11.8. Connect to the Internet and find a specific website you are looking for (i.e type in a particular address)	Yes □ No □
11.9 Attach a document to an email message	Yes □ No □
11.10. Design your own learning materials on the computer	Yes □ No □
11.11. Create overhead transparencies (OHTs) using computers	Yes □ No □

12. Do you currently use computers for lesson planning and/or teaching?

Yes	No

13. If yes, please describe how you have used computers for these activities:_____

_____

_____

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14. How do you think using computers more might benefit you as an educator?

15. How do you think using computers more in your teaching might benefit your learners?

16. Any other comments?

THANK YOU VERY MUCH FOR TAKING THE TIME TO COMPLETE THESE QUESTIONS

CASE STUDY (POST TRAINING VISIT)

PRINCIPAL'S INTERVIEW

Notes to the interviewer: These questions should be used as a guide, please probe and follow up on issues raised.

QUESTIONS:

1. Name: _____
2. School:_____
3. Where you happy with how the Microsoft Partners in Learning Training took place?

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4. What feedback did you receive from the educators who took part in the training?_____

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5. How do you think your school, educators and learners, have benefited from participating in this programme?_____

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6. Have you seen evidence of educators using ICTs more or in different ways for teaching and learning, or admin, following the training? Please give examples.

7. Have you experienced any challenges with respect to implementing what educators have learned in the training? _____

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8. What are the timetable arrangements for use of the computer room at present?_____

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9. Are there any other issues that we have not yet discussed that you think are important?_____

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Thank you very much for answering these questions

CASE STUDY (POST TRAINING VISIT)

LEARNER FOCUS GROUP

Notes: These questions are very broad, and should be used to guide the focus group discussions only. Phrasing will need to be adapted depending on the age of the learners taking part. Allow participants to raise their own points, and probe in as much detail as possible.

Note down number of learners taking part, number of boys and number of girls. Note down grade of learners.

Focus groups should include between eight to ten learners, and will most likely need to be conducted during break and directly after school so as not to take learners out of class. At each school, at least two (more if possible) focus groups of different learners should be conducted. Learners taking part should be selected from classes with teachers who have taken part in PiL training.

QUESTIONS TO GUIDE FOCUS GROUP DISCUSSION

1. Do you use computers at school?
2. How often do you use computers at school?
3. What kinds of things do you use computers for (get examples of specific classroom activities that learners have done)?
4. (If computers are not currently used at school) - Would you like to use computers at school? Why?
5. Do you think using computers can help you to learn? Why?
6. Do you use computers at home or after school (find out where, e.g. community centre)?
7. If yes, what kinds of things do you use computers at home for?
8. What do you like most about using computers for learning?
9. What do you not like about using computers for learning?
10. Any other comments?

CASE STUDY (TRAINING VISIT)

TRAINING OBSERVATION

SCHOOL:_____

DATE:_____

TIME OF TRAINING:_____

INITIAL OR FOLLOW-UP TRAINING:_____

TRAINER:_____

NUMBER OF EDUCATORS ATTENDING:_____

FIELDWORKER:_____

DETAILED TRAINING NARRATIVE

Describe how the training session is started, then capture what is happening at the training once every hour, noting time in the time column. Keep notes about any interesting activities, behaviours, events etc in between each hourly observation.

Keep as detailed observation notes as possible. We are interested in understanding how the training session plays out. Always err on the side of caution, noting down more rather than less of what is happening.

TIME	
	Start of training

Based on your observations, please provide details for each of the following:

1. Make notes about the room in which training is taking place – how it is set up, do educators work at their own computer, etc.

2. How are the educators relating to the work they are doing? (excited, frustrated, bored etc)

3. Describe how the trainer handles the training – approach used, level of involvement with educators, confidence, etc.

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4. How do the educators and trainer relate?

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5. Do educators work together or independently, share what they are doing, chat etc?

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5. Do educators learn strategies for solving their own problems? / Do educators first try to make use of tip sheets to find the information they need to answer their questions before asking the trainer for assistance?

6. Any other comments about this training session?

CASE STUDY (TRAINING VISIT)

EDUCATOR FOCUS GROUP

Notes: The focus group discussion should last for about 30-45 minutes and should include eight to ten educators at a time. Try to include all of the educators taking part in the focus groups. It might be necessary to conduct more than one group to include everyone. Keep as detailed notes as possible.

QUESTIONS TO GUIDE THE FOCUS GROUP DISCUSSION:

1. What has your experience been of the Microsoft Partners in Learning training that you are taking part in?

2. Has the training met your expectations? Please explain.

3. Of the activities/scenarios you have completed so far, which have you *enjoyed* most? Why?

4. Of the activities you have completed so far, which have been most and least *useful*? Why?

5. How easy do you find the CD to navigate (i.e. find the information you need)? Please explain.

6. How do you plan to use in practice what you have learnt during the training?

7. If you were going to do the training over again, is there anything that you would like to see happening differently?

8. Any other comments.

CASE STUDY (TRAINING VISIT)

TRAINER INTERVIEW

QUESTIONS TO GUIDE THE INTERVIEW

16. How did you hear about the Microsoft Partners in Learning programme?

17. Why did you decide to become a trainer?

18. Have you been involved in other training programmes in the ICT and education area? Please describe.

19. As a trainer, what are your opinions of this programme?

20. Do you feel that the training you were provided with prepared you for your role as a trainer? Why?

21. What do you see as the strengths of this programme?

22. What have been the main challenges you have faced?

23. What has the response of educators you have trained been?

24. Is there anything about the Microsoft Partners in Learning programme that you think could or should be changed?

25. Any other comments?

Thank you very much for answering these questions

NATIONAL DEPARTMENT OF EDUCATION REPRESENTATIVES (INTERVIEW SCHEDULE)

DATE OF INTERVIEW:

NAME:

POSITION:

RESEARCHER:

QUESTIONS TO GUIDE THE INTERVIEW

26. How did you hear about the Microsoft Partners in Learning programme?

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27. What do you understand to be the intended purpose of the Microsoft Partners in Learning programme? Please describe.

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28. What do you see as the strengths of this programme?

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29. In your opinion, what are the weaknesses of this programme?

30. What National ICT strategies are currently in place? Please describe.

31. What are the strategic priorities of the National Department of Education regarding ICTs?
32. What progress has been made to date in achieving these strategic priorities? (Probe on what has worked and what challenges have been)

33. How does the Microsoft Partners in Learning Programme fit in with the National ICT Agenda?

34. What is the process for implementing Microsoft Partners in Learning? Please describe.

35. What have been the main challenges faced in terms of implementing this programme?

36. In your opinion, what impact will the Microsoft Partners in Learning programme have on schools, specifically in relation to teaching and learning?

37. What has the response of Provincial Officials been?

38. Is there anything about the Microsoft Partners in Learning programme that you think could or should be improved?

39. Any other comments?

Thank you very much for answering these questions

PROVINCIAL DEPARTMENT

(INTERVIEW SCHEDULE)

DATE OF INTERVIEW:

NAME:

POSITION:

PROVINCE:

RESEARCHER:

QUESTIONS TO GUIDE THE INTERVIEW

40. How did you hear about the Microsoft Partners in Learning programme?

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41. What is the intended purpose of Microsoft Partners in Learning programme? Please describe.

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42. What do you see as the strengths of this programme?

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43. What ICT strategies are currently in place in your province? Please describe.

44. How does the Microsoft Partners in Learning Programme fit in with the ICT Agenda of your Province?

45. What is the process for selecting schools to be trained in your province? Please describe.

46. What is the process for selecting educators to be trained in your province? Please describe.

47. What impact will the Microsoft Partners in Learning programme have on the schools, specifically in relation to teaching and learning, in your province?

48. What have been the main challenges faced in terms of implementing this training in your province?

49. What has the response of educators trained been?

50. Is there anything about the Microsoft Partners in Learning programme that you think could or should be changed?

51. Any other comments?

Thank you very much for answering these questions

Course Evaluation

Partners in Learning

School:

Date of training:

For each item place an X in the box that best describes your response.

	Before the course	Strongly disagree	Disagree	Agree	Strongly agree
1	I am a confident computer user				
	During the course				
2	I found the scenarios useful to my needs as an educator				
3	I read the outcomes				
4	I found the outcomes descriptions useful				
5	I needed the help of the example document				
6	I found the example documents useful				
7	The task list was a useful guide for completing the document				
8	The tip sheets in the resource list helped me to complete the task				
9	The trainer supported me when I needed help				
10	The trainer taught me to find solutions to problems that I experienced				
11	My colleagues were able to help me when I needed help				
12	I found the related scenarios useful in guiding me to my next project				
13	I used the self-assessment sheet				
14	I found the self-assessment sheet useful				
15	I used the advanced tips				
16	I found the advanced tips useful				
17	I enjoyed working at my own pace				
18	I enjoyed being able to work independently on projects that suited my needs				
19	I became a more independent learner of ICT				
20	I found the pair and share session useful				
	After the course				
21	I feel that my computer skills have improved				
22	I enjoyed this approach to training				
23	I will revisit these materials and work further on them soon				

Suggested new scenarios:

General comments: