

Intel® Teach to the Future Evaluation Year One Interim Report

September 2003

INTRODUCTION

The Intel® Teach to the Future programme was launched in South Africa in early 2003. At the time of writing this report, there were 215 schools accepted into the programme, 116 facilitators had been accepted some of whom have already been trained and others are still to be trained, 249 educators had completed the training and 868 are currently registered for training¹.

In June 2003 an independent evaluator, Neil Butcher and Associates, was appointed to conduct the evaluation for the first year of the programme. The South African Intel® Teach to the Future programme has adopted a phased approach to evaluation. The evaluation process began in July 2003 and the first phase will be completed by January 2004.

This report focuses on outlining the research that has been conducted thus far, as well as providing further details of the upcoming research activities. Although it is premature to present detailed findings since data collection and analysis is still in process, Appendices 1 – 3 present descriptive summaries of the research conducted in each of the three selected provinces together with preliminary findings in each case. Appendix 4 shows all the research instruments used thus far. The audience for this report is primarily Intel® Teach to the Future Programme staff and management.

RESEARCH DESIGN AND METHODOLOGY

The South African education landscape is complex, with schools that differ widely with respect to resources, educator capacity and commitment, and management expertise. 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

¹ As shown by the statistics summary, Intel® Teach to the Future database, 23/09/2003.

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 context².

As such, the evaluation has been designed to assess the implementation of the Intel® Teach to the Future programme across a range of schooling contexts. As noted above a phased approach has been adopted and the first phase (July 2003 – January 2004) was designed to be exploratory, providing input into the next stages of evaluation that will focus more on impact and, importantly, to provide evaluation findings that will enable project management to improve the programme going into year two and beyond. In addition, this six month study has allowed for a testing of the case study methodology and will also allow for a piloting of the Intel® Teach to the Future Post Training Survey to be piloted for the South African context before being more widely used.

EVALUATION OBJECTIVES

This year one evaluation is a formative evaluation, specifically seeking to learn lessons that will enhance the project in the coming two years. No impact assessment will be conducted during this phase of the evaluation process since few schools have progressed far enough to allow for impact data to be collected.

The evaluation research has three overall objectives, to:

1. Document and assess the implementation of the Intel® Teach to the Future programme across a range of schooling contexts within South Africa;
2. Assess the extent to which the aims of the Intel Teach to the Future programme are being achieved thus far; and
3. Develop an evaluation plan for year 2 of the project that focuses on impact.

EVALUATION QUESTIONS

The following five questions are being asked in the South African Intel® Teach to the Future evaluation, phase one and beyond.

1. How is the Intel® Teach to the Future programme implemented in a range of South African schooling contexts?
2. What are the experiences (positive and negative) of participants (project management, senior facilitators, facilitators, educators and learners) in the programme?

² Roos, G (2003). Understanding the South African Programme context.

3. What opportunities and pitfalls can be identified in the implementation of the Intel® Teach to the Future programme?
4. Is there evidence of the use and integration of technology at the classroom level after taking part in the Intel® Teach to the Future training?
5. Has the use of ICT stimulated the pedagogical outcomes of the Intel® Teach to the Future programme (using questions to stimulate higher order thinking, project-based learning, cross-curricular work, educator collaboration)?

This first phase has focused on evaluation questions 1-3, but not on the experiences of learners, as this was deemed premature for the stage of the project. In addition to collecting data to begin answering the first three questions, baseline data (focusing on specific schools) is also being gathered with respect to questions 4 and 5.

A case study approach has been adopted for this phase, focusing on 8 schools (to fit within the evaluation budget) in three provinces. The provinces represented are KwaZulu-Natal, Gauteng and Limpopo. The schools were chosen, together with Intel® Teach to the Future staff, to represent as wide a range of South African schooling contexts as possible. This means we have a mix of rural, urban and peri-urban schools, a range of socio-economic contexts, and a range of primary, secondary and high schools. In addition, the community centre model is also included in the case study sample. This is where a community centre, that provides computer facilities to schools in the area who do not have their own computers, hosts the Intel® Teach to the Future training. The table below provides an overview of the school characteristics. The names of the schools are not provided as some schools specifically requested to remain anonymous. The last two columns – ‘Number of educators registered’ and ‘level of educator ICT skills’ are taken from the online form completed by the school when enrolling for the programme.

SCHOOL NUMBER	PROVINCE	GEOGRAPHIC AREA	SOCIO-ECONOMIC CONTEXT	NO. EDUCATORS REGISTERED	LEVEL OF EDUCATOR ICT SKILLS
1 (Secondary School)	KZN	Rural Township	Low to middle	15	Few computer literate
2 (Community Centre)	KZN	Rural township	Low	20	Many computer literate
3 (Secondary School)	KZN	Township	Low	12	Almost all computer literate
4 (Secondary School)	Gauteng	Urban	Middle	17	Few computer literate
5 (all levels – grade 0 to post grade 12)	Gauteng	Urban	High (Independent)	22	Many computer literate

SCHOOL NUMBER	PROVINCE	GEOGRAPHIC AREA	SOCIO-ECONOMIC CONTEXT	NO. EDUCATORS REGISTERED	LEVEL OF EDUCATOR ICT SKILLS
6 (Secondary School)	Limpopo	Rural township	Very Low	20	Few computer literate
7 (Primary School)	Limpopo	Urban	Middle (Independent)	1 (?)	Almost all computer literate
8 (Primary School)	Limpopo	Urban	Middle (ex-Model C)	40	Few computer literate

During this phase of the evaluation each school will be visited twice, once before or right at the start of training and once towards the end of training – after ten weeks to compare how schools work through the ten-week programme and to gather perceptions from schools, facilitators and educators about the programme. This report provides descriptive detail of selected findings from the first set of visits. Some of the data collected will be analysed during the data analysis period after the second set of visits.

The second set of school visits will be taking place from 6-10 October 2003 in KZN and Limpopo and 13-17 October 2003 in Gauteng. During these visits the Post Training Questionnaire designed for use in all countries implementing the Intel® Teach to the Future programme, with additional questions of importance to the South African programme, will be used. This will allow for testing before the questionnaire is widely used during the next round of training and following evaluation phase. One of the evaluator's deliverables for this phase is an evaluation plan for the coming year, focusing on impact at the classroom level and including learner experiences. This evaluation plan will make use of both the Post Training Questionnaire and the Core Survey, together with case studies in order to understand the specific contextual influences in South Africa. The current phase of the evaluation is also a pilot process for the case study methodology to be used in the following stages of the evaluation if budgets allow.

In answering the research questions noted above the following research methods are being used. Please see Appendix 4 for all the research instruments used thus far.

RESEARCH METHODS

1. Review of project documentation
2. Brief self-administered questionnaires for educators in the 8 selected schools taking part in the Intel® Teach to the Future training – one at the start of training to assess expectations, and one after training to evaluate the training programme.
3. Observations of Intel® Teach to the Future training sessions
4. Lesson observations

5. Interviews (using a semi-structured questionnaire):
 - a. Project level – key project staff, including project management and senior facilitators
 - b. School level – with school management, Intel facilitator, teachers taking part in the training.

In addition, the facilitator training self-reflection and post-training evaluation forms that are already being collected as part of the training programme will be analysed, and contribute to the overall evaluation.

EVALUATION DELIVERABLES

The Phase One Evaluation has the following five deliverables:

1. Document the project
2. Case Studies in 8 schools
3. Analyse data collected from training facilitators
4. Produce an evaluation plan for year 2
5. Produce an interim and a final evaluation report

RESEARCH ACTIVITIES CONDUCTED TO DATE AND FORTHCOMING

As noted above, this report does not set out to present detailed analyses and findings because data collection is still in process and focused data analysis will take place over the coming two months. It is however useful to report on the research activities that have been conducted thus far to provide an indication of the progress of the evaluation research. This is done against the five deliverables noted above.

1. Document the project

A range of project documentation has been collected and is currently being reviewed. Interviews have been conducted with the project manager, Janet Thomson, and with the Regional Education Manager for Intel South Africa, Parthy Chetty. Additional interviews with key project staff are still to be conducted. This information will be used to document the conceptualisation of the project in the South African context, the implementation model, and perspectives of project management and staff of the programme.

2. Case Studies in 8 schools

School selection took place in early July 2003. Each of the eight schools has been visited once. During these visits general information about each school was collected; educators completed pre-training questionnaires and took part in an educator focus group; the facilitator was interviewed; and lesson observations took place.

Appendices 1-3 present descriptive findings from these first visits for each province. The aim of these summaries is to provide details on the context of each school and also to provide project staff with some preliminary findings – such as how the programme is being

implemented at the school level, expectations of the programme, experiences of facilitator training, and current uses of computers for teaching and learning. The pre-training questionnaires and lesson observations will be analysed during the data analysis period after the second visits. The second school visits will take place in early October as specified above.

3. Analyse data collected from facilitators' training

The questionnaires completed during the facilitator training are being collected as training takes place and will be analysed during October 2003 after the set of current training has been completed.

4. Produce an evaluation plan for year 2

The case study research experiences are useful in informing the conceptualisation of the evaluation plan for year 2. Unlike phase one which is largely exploratory, this evaluation will focus on classroom impact and also impact at the learner level. The plan will be based on the Core Survey provided recently by EDC with additional questions relevant to the South African context. In addition, depending on budget considerations, it will be proposed that the case studies also be continued as these provide rich contextual detail that is essential for understanding the implementation of the Intel® Teach to the Future programme in the South Africa context, and specially across different conditions in the country. This evaluation plan, taking on board the evaluation guidelines recently provided by EDC, will be produced by 31 October 2003 as requested by EDC.

5. Produce an interim and a final evaluation report

This is the interim evaluation report. The beginnings of the case study write up presented here as appendices will form part of the overall evaluation report, integrating data from the second school visits and also the data still to be analysed. The final evaluation report will bring all the evaluation findings together, reflect on the South African context and provide both programme level recommendations and recommendations for the following phases of the evaluation.

APPENDIX 1: KWAZULU-NATAL PROVINCE VISIT ONE

SCHOOL CONTEXT

The schools and community centre in KZN were visited from 28 July 2003 to 1 August 2003. To provide contextual background against which to consider the preliminary findings below a brief contextual description of each school is provided here.

SCHOOL 1 (HIGH SCHOOL)

School 1 is a township high school in Vulindlela Township in the KwaDlangezwa area. This township is just outside of Empangeni, KwaZulu-Natal and the school is situated adjacent to the University of Zululand. The school has water, electricity and sanitation facilities. This is a girls only boarding school which caters for learners from grades 8 to 12. At the time of the visit there were 805 learners of which 124 girls are day scholars only. The remainder are all boarding at the school. The school used to be co-ed. In 1988 the administration block was burnt down by some of the male learners. After this it was decided to phase out boys and the school has been girls-only from 1994. The educator to learner ratio is approximately 1:37 as there are 22 educators. All of the educators have an M+3 qualification or equivalent. The school has seven non-teaching staff members, three administration staff and four support staff working in the boarding establishment.

The school is fenced and secure, with a security guard. There is a tarred parking area surrounded by neat gardens at the entrance and the school buildings are very neat and in good condition. The school seems to be very well organised. There are display cabinets in the reception area with various teaching awards and certificates of excellence. There are 20 classrooms and all are currently in use. The average class size was noted to be approximately 45 learners. Specialist rooms include: staff room, two safe/strong rooms, library, home economics laboratory, separate administration offices (seven offices) and a computer laboratory. There are 42 computers that were sponsored by Portnet in 1999. The school is going to be part of a new Telkom project and will be getting additional computers through this programme.

This school had not started the Intel® Teach to the Future training during visit one, nor had educators signed up for the course. During the time scheduled for the educator focus group the researcher was asked instead to introduce the Intel® Teach to the Future programme to the school.

SCHOOL/CASE 2 (COMMUNITY CENTRE MODEL)

Case 2 is a community centre situated in Mpophomeni Township just outside of Howick in the KwaZulu-Natal midlands. This township can be classed as a rural township. The centre has 20 computers, one of which was not working when the centre was visited. This site was chosen for the Intel® Teach to the Future evaluation because it is an example of a community centre model. The centre currently provides computer facilities and services for use by the

local schools. A facilitator for the Intel® Teach to the Future training was trained from an adjacent high school, which is approximately 100meters from the centre. This facilitator provides training for educators from different schools in the township. Training takes place at the computer centre.

At the time of visit one, educators from four schools in the township were taking part in the training. The researcher visited each school (for which contextual information is provided below). However, at one school the three educators who had attended the first session had already withdrawn because their ICT skills were not advanced enough. This meant that there were three schools taking part.

Brief contextual descriptions of each school are provided below to provide an indication of the conditions in which the educators doing the training will be working.

The community computer centre is very neat and well looked after. There are lots of posters on the walls detailing the history of the centre from setting up to first training provided etc. There are also posters detailing useful web resources, and also a range of SchoolNet posters. The computer centre is secure, with burglar bars and security gates. The centre's two staff members both noted that the centre is running very well. The main difficulty faced is "as always – Funding!"³. The centre has recently been granted sponsorship for their ISDN line for the year, but there are also many other running costs, including salaries, maintenance etc that must be covered. The centre charges for services in order to cover costs. Charges are as follows:

- R5 per hour for using the computer and Internet for adults
- 50c for 30 mins for the school children
- Printing costs 50c per page.

The centre is used by the local schools for lessons and each school contributes and monthly amount for this service. This ranges from R50 to R800 depending on how many times the computer centre is used. One high school, which is very near the centre, now has computer literacy as a subject for grades 8 and 9. The school uses the centre daily for these lessons. Computer training is also provided for community members. The costs for this are R630 for three months training each day for two hours as well as time for practicing.

The current computer centre timetable is as follows:

8am-9am: High School B (every day)

9am-11am: Adults/Community (every day)

11.40am-12.30pm: High School B (Mon-Thurs)

12.30pm-2.30pm: Each school in the area has this slot one day per week

3pm-5pm: Adults/Community/School children (close at 3pm on Fridays).

School A (Secondary School)

School A is a secondary school is situated in Mpophomeni Township about 15-30 minutes walking distance from the computer centre. The school has water, electricity, and sanitation facilities. There is also a telephone line. The school is co-ed with learners from grades 8 to 12. At present there are 720 learners and 20 educators, including the principal who also does some teaching. This makes the educator-learner ratio approximately 1:36. There are four temporary educators and the school also has two non-teaching staff, a secretary and a security

³ Siphon Caluza, interview.

guard. The school fees are R130 per year. The school has 20 classrooms, all of which are in use and the maximum class size is about 50 learners although not all classes are this big. The school has a library, a laboratory, a strong room and a separate administration office. The school has one computer that is used in the administration office.

School B (Secondary School)

School B is a secondary school situated in Mpophomeni Township about 500m from the computer centre. The school has water, electricity, and sanitation facilities. There is no telephone line, but a public call box is available in the staff room for incoming calls and for teachers to use for outgoing calls. The school is co-ed with learners from grades 8 to 12. At present there are 760 learners and 23 educators, one of whom is a temporary staff member. This makes the educator-learner ratio approximately 1:33. The school also has three non-teaching staff, a secretary and two security guards. The school fees are R180 per year. The school has 13 classrooms, all of which are in use and the maximum class size is about 50 learners although not all classes are this big. The school has a library that is also one of the classrooms used for teaching but with books too, a laboratory, a strong room and a separate administration office, one for the principal and one for the deputy principal. There is also a kitchen for the staff. The school has one computer that is used in the administration office.

School C (Junior Secondary School)

School C is a junior secondary school situated in Mpophomeni Township a fair distance from the computer centre. The school has water, electricity, and sanitation facilities. There is also a telephone line. The school is co-ed with learners from grades 8 to 10. At present there are 360 learners and 10 educators, including the principal who also does some teaching. This makes the educator-learner ratio 1:36. The school fees are R100 per year. The school has 20 classrooms, of which 11 are in use and the average class size is about 30. The school has two separate administration offices, a staff room and a safe/strong room. There is no library or laboratory.

SCHOOL 3 (SECONDARY SCHOOL)

School 3 is a township secondary school in Empangeni, KwaZulu-Natal. The school is situated in a small township called Ngwelezane, approximately 5kms outside of Empangeni. The school has water, electricity and sanitation facilities. This is a co-ed school, which caters for learners from grades 8 to 12. At the time of the visit there were 948 learners of which 428 were boys and 520 were girls. The educator to learner ratio is approximately 1:40 as there are 24 educators, one who is a temporary member of staff. All of the permanent staff members have an M+3 qualification or equivalent. The school has four non-teaching staff members: a secretary, two caretakers and one cleaner.

The school is fenced and secure. There is a tarred parking area at the entrance and the buildings are very neat and in good condition. Learners are required to assist with cleaning so that they learn to value having a clean and neat school. There are a total of 31 classrooms of which 26 are in use at present. Specialist rooms include: staff room, safe/strong room, library, home economics laboratory, physics laboratory, separate administration offices, a sick room and a computer laboratory. The school has 30 computers of which 20 have Internet connections. Many of the educators have completed the SchoolNet EDN modules and confidence for using computers is generally quite high.

The following data was collected during the KZN research visit 1.

School 1

ACTIVITY	DETAILS
Facilitator Interview	Complete
Educator Focus Group	Not held, during the time set aside for this the researcher had to introduce the programme to educators
Lesson Observations	1 Lesson Observation
Educator Pre-training Questionnaire	22 questionnaires collected, all staff members were requested to complete questionnaire since the group who would take part in the training was not yet clear.

School/Case 2 (including three schools from which educators come)

ACTIVITY	DETAILS
Facilitator Interview	Complete
Educator Focus Group	3 focus groups held, one at each school
Educator Pre-training Questionnaire	8/11 submitted questionnaires

School 3

ACTIVITY	DETAILS
Facilitator Interview	Complete
Educator Focus Group	9/12 educators attended (note: this was a very short focus group, 10 minutes only due to a shorter break time)
Lesson Observations	2 Lesson Observations
Educator Pre-training Questionnaire	10/12 submitted questionnaires

PRELIMINARY FINDINGS

In this section we present some preliminary findings. It is important to note that a full analysis of the information collected from each school will only be done after the second set of research visits, which will take place during early October 2003. These findings draw on informal observations, facilitator interviews and educator focus groups. The questionnaires completed by the educators and the lesson observations will be analysed later. We present here a summary of findings across the three schools, noting specific school details as appropriate. The final analysis and evaluation report will include a detailed case study of each school as well as a summary of findings.

IMPLEMENTATION OF THE INTEL TEACH TO THE FUTURE PROGRAMME AT THE SCHOOL LEVEL

At the time of the first set of visits, School 1 had not started training, nor had educators signed up for the training. The school did not have Internet access, which is why training had not yet begun. When the researcher arrived for visit one all educators were called into the staff room and the researcher requested to present the Intel® Teach to the Future programme to them. This was done, together with the facilitator.

The educators taking part in the Intel® Teach to the Future training in KZN all heard about the training from the facilitators. In the case of the community computer centre where more than one school is involved, the facilitator sent a letter to the principal of each school with information about the training. In addition, at a workshop for educators about HIV/AIDS held at the computer centre an announcement was made about the training and pamphlets handed out. At School 3 most of the educators have done the SchoolNet Educator Development modules and are excited about taking part in more training. The response of educators to the training has generally been positive, although at the community computer centre many were concerned about the level of ICT skills needed. This was not a concern at School 3 because of the previous training that the educators have done. It was also reported that the fact that Intel® Teach to the Future training is endorsed by the South African Council for Educators (SACE) “is a cherry on the top”.

Training at the community computer centre (school/case2) was started on Saturday 26 July 2003. At the time of visit one the educators had agreed that training would take place each Saturday, but this was later changed to Wednesday and Thursday afternoons. One of the difficulties experienced in this area is that of transport. Many of the educators do not live in the township and need to catch taxis or have lift clubs to Pietermaritzburg in the afternoons after school. This makes fitting in Intel® Teach to the Future training tricky and may be a reason that only 11 educators from all the schools in the township have signed up.

At School 3 training started on Wednesday 30th July 2003 (the first session was observed by the researcher) and is held on Wednesday and Thursday afternoons.

In the educator focus groups educators were asked about how supportive their school is for the use of computers in their teaching and learning. In all cases concerns were raised about access to computers. Not only was the number of computers available seen as a problem, but also access to the computer room which is already used for computer literacy classes, and in the case of the community centre, the community and five different schools.

FACILITATOR TRAINING

All three facilitators attended the same facilitator training held at Hilton College from 30 June to 5 July 2003. All felt that the trainers and the training were very good, but completing everything in one week was too intense. For example, some responses were “the course is packed and the week is too little to get everything in” and “the training was very quick and the file is very big!” Two facilitators noted that two weeks or ten days for the training would be better. One suggestion was to do half the training during one school vacation after which the facilitator could implement modules 1-5 during the term. The second set of modules could be covered in the next holiday and then training for modules 6-10 the following term.

While this might seem like a reasonable suggestion it is likely that problems would arise if facilitators do not have an overview of the whole training programme. The different levels of ICT skills with which educators enter the facilitator training was also noted as a concern and a reason for the difficulties of completing the work within the week of training. Lastly, one facilitator raised the concern that he had not had any opportunity to practice the facilitation skills that would be required of him when conducting training at his school and that working through the modules was important but could be supplemented with practical experience in how to facilitate the training.

FACILITATORS' PERCEPTIONS OF STRENGTHS AND WEAKNESSES OF THE INTEL TEACH TO THE FUTURE PROGRAMME

In their interviews the facilitators were asked about what they saw to be the strengths and the weaknesses of the programme having now done the facilitator training.

Strengths included:

- CDs provide valuable information about OBE and how to plan lessons, assess learners and other things related to OBE that we have been battling with
- Teachers are likely to be more confident for both ICT and OBE after doing the training
- Teachers will learn how to plan lessons on computers and these plans can be used again the following year with small changes made as needed
- Learners' learning should improve if teachers use what they learn here
- PowerPoint presentations, Internet and publisher skills that will be learnt will help to make learning more interesting for learners

Weaknesses included:

- Some things in the course are created for the American context and might not be relevant for us
- Most people don't have computer skills so as a facilitator I will have to do some basic ICT training for teachers first
- The time required for the training is a weakness because most educators do not have this much time available for training, and teachers don't want to use all their spare time if they are not being paid for it
- Our principals don't understand the importance of computers so we also need some training for the principals too
- The course is a lot of work for teachers and I am not sure if they will all be able to stomach it, also many have other commitments after school so attending training might be difficult

EDUCATORS' EXPECTATIONS OF THE INTEL® TEACH TO THE FUTURE PROGRAMME

During both the educator focus groups and in the pre-training questionnaire questions were asked about expectations of the Intel® Teach to the Future programme. Below responses from the focus groups are summarised. Responses from the pre-training questionnaire will follow.

Some of the expectations noted included:

- A lot! How to get my integrate my computer knowledge into my teaching and how to get my learners to become actively engaged with computers and the Internet
- To be able to teach using a computer
- To learn new strategies for teaching
- To learn how to design a website
- To help learners take possession of knowledge
- To be well acquainted with a computer
- To have access to information available on the Internet
- To be able to give learners projects and assignments where they are able to use computers.
- To be more proficient in computers.

CURRENT USE OF ICTS FOR TEACHING AND LEARNING

Use of computers for teaching and learning differed across the schools. At School 1 very few educators have basic computer skills and few use computers for teaching and learning. In the township with the community computer centre computers are not used within the schools because the technology is not available at the schools. For this reason educators reported that they did not use computers much for teaching and learning. The computers are used most for computer literacy classes. Each school uses the computer centre for one afternoon per week so any one learner does not get to make use of computers very regularly; this makes using computers for teaching and learning difficult. It was reported that learners did use the centre in their own time after school for projects⁴

PERCEPTIONS ABOUT THE ROLE OF COMPUTERS IN EDUCATION

“It is the way to go. If you are computer literate it opens many doors” is a good summary of one of the most common types of response to this question during the educator focus groups. This response was often followed on with comments about the need to keep up with changes taking place in the world with respect to ICTs. The importance of computers for providing up to date information, especially where library resources are poor was also noted as an important educational benefit.

⁴ Please note: due to the very reduced time for the focus group at Thanduyise High School this issue was not discussed with educators during the focus group. The pre-training questionnaires will provide data to address this issue and in the second educators’ focus group this will be a core focus.

APPENDIX 2: GAUTENG PROVINCE VISIT ONE

INTRODUCTION

Unlike the for Limpopo and KwaZulu-Natal provinces, the school visits for the Gauteng schools do not have to take place in the same week because the researchers are based in Johannesburg making school visits for these two schools more flexible than for the other provinces where travel is involved. This is fortunate because School 5 is an independent school and thus follows different school terms. The first set of evaluation visits for the Gauteng schools took place at different times. School 5 was visited on the 17th and 18th of July 2003 and School 4 the following week on the 21st and 22nd July 2003.

SCHOOL CONTEXT

To provide contextual background against which to consider the preliminary findings below a brief contextual description of each school is provided here.

SCHOOL 4 (SECONDARY SCHOOL)

School 4 is an urban secondary school in Mayfair, Johannesburg. Although situated centrally in Johannesburg, many of the learners come in from Sowetho by train each morning. The school has water, electricity and sanitation facilities. This is a co-ed school, which caters for learners from grades 8 to 12. At the time of the visit there were about 850 learners with an approximately even split between boys and girls. The educator to learner ratio is approximately 1:28 as there are 30 educators. Of the 30 educators, 22 are permanent staff and eight are temporary staff. The governing body employs one educator. The school has nine non-teaching staff members: two administration staff, six cleaners, and one security guard at the gate.

The school is fenced and secure with a security guard who facilitates access to the school grounds. There is a tarred parking area at the entrance and the buildings are neat and in a fairly good condition. There are a total of 32 classrooms of which 25 are in use at present. The average class size was noted to be about 35 learners. Specialist rooms include: a library, six laboratories (science, biology and computer room). The computer room has very limited use because access is restricted. There is a separate administration block with five administration offices of which three are in use. The school has a safe/string room, a sick room for learners and a staff room.

Although there is a computer room it is not being used for the Intel® Teach to the Future training. This is because the computers are not networked and only one computer has an Internet connection. Also, the deputy principal restricts access to the computer room so the computer resources are not widely accessible to either staff or learners. Learners in grades 8 and 9 have computer literacy classes in the computer room. The school is about 4km from the Rand Afrikaans University (RAU) and the facilitator is currently enrolled for a Masters Degree at the university. He was thus able to arrange for one of the RAU computer

laboratories to be used for the Intel® Teach to the Future training and this is where training takes place.

SCHOOL 5 (INDEPENDENT SCHOOL, GRADE 0 TO POST GRADE 12)

School 5 is an independent college comprising a Boys' College, Boys' Preparatory School, Girls' College, Girls Preparatory School, a Post-Matric Centre and a Pre-Primary School. The school's website describes the college as a 'village of schools'⁵. The college was founded in 1953 and is situated in Randburg, a suburb of Johannesburg. The very well resourced schools are situated on a 90-hectare estate. Security is good, the entire property being fenced and access is provided via two boom gates with two security personnel at each. Roads within the estate are tarred and all buildings, roads, sports facilities, chapel etc are in very good condition. The college caters for learners from Grade 0 to grade 12 and post-matric. Across all these grades, the college has approximately 2500 learners, of which 1500 are boys and 1000 girls. The monthly school fees are approximately R3000. There are 220 educators all employed by the school governing body. In addition, there are 36 administrators and 48 ground staff working at the college. The learner to educator ratio is approximately 1:12. Across the schools making up the College there are 150 classrooms all of which are in use and the average class size is reported to be approximately 25. The College has three libraries, 30 laboratories (science, biology, computer), twelve separate administration offices, four staff rooms, three strong rooms/safe and five sickrooms. There are 150 computers all connected to the Internet. In addition, many learners also have their own laptops to work on.

At the time of these visits, School 5 was busy with the second set of Intel® Teach to the Future training and the research has focused on the educators taking part in the second training only.

DATA COLLECTED

The following data was collected during research visit 1.

⁵ For more details please see www.stithian.com.

School 4

ACTIVITY	DETAILS
Facilitator Interview	Complete
Educator Focus Group	15 educators attended (13 in one group, 2 in another)
Lesson Observations	4 Lesson Observations
Educator Pre-training Questionnaire	16/26 submitted questionnaires (facilitator is following up to collect the remainder)
Training observation	Observed first training session

School 5

ACTIVITY	DETAILS
Facilitator Interview	Complete
Educator Focus Group	Total of 12 attended focus groups (group one had 7 and group 2 5 participants)
Lesson Observations	4 Lesson Observations
Educator Pre-training Questionnaire	25/27 submitted questionnaire
Training Observation	One training observation, modules 9& 10

PRELIMINARY FINDINGS

In this section we present some preliminary findings. It is important to note that a full analysis of the information collected from each school will only be done after the second set of evaluation visits, which will take place during October 2003. These findings draw on informal observations, facilitator interviews and educator focus groups. The questionnaires completed by the educators and the lesson observations will be analysed later. We present here a summary of findings across the two schools, noting specific school details as appropriate. In this province we have two very differently resourced schools. This makes the comparisons across the schools particularly interesting, although in some instances similar issues are raised. The final analysis and evaluation report will include a detailed case study of each school as well as a summary of findings.

IMPLEMENTATION OF THE INTEL TEACH TO THE FUTURE PROGRAMME AT THE SCHOOL LEVEL

At both of the schools the educators taking part were informed of the Intel® Teach to the Future programme by the facilitator. In both cases presentations were made in the staff room. One facilitator was approached by Janet Thomson, the project manager, to become a facilitator and the heard about the Intel® Teach to the Future Programme at a conference and then made contact with Janet Thomson thereafter.

At School 5, the training took place over four weeks from the 22nd July to the 15th August 2003. The training schedule was as follows:

DAY	DATE	TIME	MODULE No.		DURATION
Tue	22 nd July	17h30 to 21h30	Module 1	Week night	4 hours
Thurs	24 th July	17h30 to 21h30	Module 2	Week night	4 hours
Thurs	31 st July	17h30 to 21h30	Module 3	Week night	4 hours
Tue	5 th Aug	17h30 to 21h30	Module 4	Week night	4 hours
Mon	11 th Aug	08h00 to 17h00	Module 5 and 6	Vacation Time	8 hours
Wed	13 th Aug	08h00 to 17h00	Module 7 and 8	Vacation Time	8 hours
Fri	15 th Aug	08h00 to 17h00	Module 9 and 10	Vacation Time	8 hours

At School 4 the training is held on a Monday and Friday afternoon after school at the RAU computer labs. The training started on Monday 21st July and at the time of writing was due to run for 10 weeks, although the facilitator felt that 12 weeks would possibly be needed.

At both schools the response from educators to the programme has been very positive with educators being enthusiastic about the training. However, in both cases educators were also apprehensive about the level of ICT skills required for the course.

During the focus groups educators were asked about how supportive their school environment was for the training and for using computers in teaching and learning. Responses differed widely across schools. At School 5 it was noted that although they have two computer rooms there was still sometimes a need for more computers to meet demand. However, it was clearly noted that the ICT resources at the school were very good. One educator noted that the computer resources are not the problem, but time to use them is because there are so many other demands placed on educators. There is more than one IT support person at the school and some concerns were raised about the extent of this support, but not from the Intel® Teach to the Future facilitator who was on several occasions said to be very supportive of educators, both those that have ICT skills and those who do not. At School 4 educators immediately raised concerns about lack of access to computers – this was done even before this question was asked. Although the school has a computer room, it is not accessible to learners and educators as the deputy principal holds the key. The limited computer resources are used for computer literacy classes so it was felt that there would be insufficient computers. The size of classes was also noted as a problem as there are not enough computers to accommodate all the learners even if access to the computer room was easier.

FACILITATOR TRAINING

The two facilitators interviewed did not attend the same facilitator training. The facilitator from School 4 attended training from 7-11 July 2003 at the University of Pretoria and the School 5 facilitator attended the earlier training, from 31 April to 5 May 2003. In addition,

the School 5 facilitator is also now a Senior Facilitator. Both felt that the training enabled them to feel confident about providing the training at their schools, although in both cases the time pressure of the course was noted. For example, “it was very intensive and one has to be on one’s toes. But I think it did a good job of giving the bigger picture and opened up new avenues for me about how to use computers”.

FACILITATORS’ PERCEPTIONS OF STRENGTHS AND WEAKNESSES OF THE INTEL TEACH TO THE FUTURE PROGRAMME

Strengths included:

- Teachers will be better equipped as teachers and we learn to look at both teachers and learners in a different light
- The possibility to encourage learners to develop higher order thinking skills
- The course demands a fulltime commitment from educators to complete it so the training helps to breed people who stick at it and don’t give up too easily
- The hook is the promise of learning technology skills, but actually the educators get much more than this from the course.

Weaknesses included:

- Teachers are scared because all of this is new to them, some have no computer experience at all
- Teachers do not have computers at home so it makes practicing and take home work difficult
- The first manual had lots of problems, but the second one is better
- Too many American examples which are less relevant and sometimes almost paternalistic
- There is no incentive for teachers to train more than the 5 people that they are required to teach, yet it is the hope that they would train many more. What is the incentive for teachers to give so much of their time for this training?

EDUCATORS’ EXPECTATIONS OF THE INTEL TEACH TO THE FUTURE PROGRAMME

During the focus groups, educators were asked about their expectations of the programme. This same question was also asked in the pre-training questionnaire and this data will be analysed for the final report. Some of the expectations expressed during the focus groups included:

- To become better at IT skills
- To learn the variety of ways that computers can be used
- To become more effective as a teacher
- You have learner’s attention when you use computers, especially for the boys
- We need to keep a step ahead of the learners and it is hard to catch up with them (another participant joked “you never will!”)
- To use computers as a tool for lessons

CURRENT USE OF ICTS FOR TEACHING AND LEARNING

Questions were asked in the educator focus groups about the extent to which computers are used for teaching and learning at present. The educator pre-training questionnaires will provide additional details here too.

At School 5, all staff have to use a computerised administration system, so all educators use computers for this purpose. Some have used information resources such as Encarta for learner's projects, e.g. a project on the pyramids, and other CD-Roms have also been used. Most educators however, did not feel that they used computers much for teaching and learning purposes.

At School 4 some educators reported using computers for lesson planning and for administration. However, further probing revealed that this was only true of those educators who have computers at home. For the majority, computers are not used for teaching and learning. It was noted that if the computer lab were available for use after school that more educators would like to use them for teaching and learning.

PERCEPTIONS ABOUT THE ROLE OF COMPUTERS IN EDUCATION

During the educator focus group discussions questions were asked about views of the role of computers in education. In all the focus groups the importance of computers for education was emphasised. For example, "it is very important because the world revolves around computers these days", and "Computers are a phenomenal resource, but there are intimidating". The potential role of computers was noted by all, as was the fact that many do not yet feel comfortable to use the technology. Computers were noted to make learning more interesting for learners, to help educators become more effective, reduce workload and also to provide immediate feedback to learners for tasks that are done using computers.

OTHER COMMENTS

Other comments of interest made by the facilitators during the facilitator interviews included the need for follow-up training and ways of sharing experiences for facilitators from different schools; the need for more effective promotion of the Intel® Teach to the Future programme to schools; and the need for some form of incentive to encourage facilitators to do more than the required amount to training. Because of the time commitment required of facilitators, who still have all their standard educator responsibilities, when doing the training, some form of incentive is needed otherwise facilitators will be less likely to conduct additional training sessions. For example, at School 5, two training sessions have been run in 2003, this amounts to 80 hours, or 10 working days, of the facilitator's time. A concern was raised about how facilitators, given their busy schedules, can reach out to other schools that would like to have such training but do not have an appropriate person to conduct the training.

APPENDIX 3: LIMPOPO PROVINCE VISIT ONE

INTRODUCTION

The first set of evaluation visits took place during the week of 21-25 July 2003. Two researchers visited each of the three schools. These research visits were successful and very helpfully facilitated by Estia Warmenhoven, the Senior Facilitator for Limpopo. The researchers are grateful for Estia's support.

SCHOOL CONTEXT

To provide contextual background against which to consider the preliminary findings below a brief contextual description of each school is provided here.

SCHOOL 6 (SECONDARY SCHOOL)

School 6 is situated in a rural township 15km outside of Tzaneen. The school has water, electricity and sanitation facilities. As there are no geysers, hot water needs to be heated manually. This is a co-ed school, which caters for learners from grades 8 to 10. At the time of the visit there were 520 learners of which 246 were boys and 274 were girls. The educator to learner ratio is approximately 1:35 as there are 15 educators, three of whom are temporary staff members. The school has two non-teaching staff members who are employed as security night watchmen. The school is enclosed within a metal fence and entrance to the school is granted through a small metal gate, which is freely accessible to all. The buildings are in fair condition, although many classrooms have broken windows, broken chairs and missing door handles. There are a total of 8 classrooms all of which are in use. Due to the large number of learners some classes take place outside under the trees on the schools' grassy sports field. Specialist rooms include an administration office, which is currently under construction, a staff room and computer laboratory. The computer laboratory is secure, clean and well kept with fans to prevent over heating and covers for each workstation when not in use. There are a total of 34 computers of which 20 are in working order and 15 have Internet access. Due to the expense of maintaining the IT infrastructure at the school and the fact that just 20 per cent of learners pay their school fees, only those learners who wish to take part in Computer Studies may make use of these facilities for an additional fee of R20 per month. School 6 has taken part in previous projects run by SchoolNet South Africa.

SCHOOL 7 (INDEPENDENT, PRIMARY SCHOOL)

School 7 is a rural school situated on the outskirts of Tzaneen in the Limpopo Province. The school is equipped with water, electricity and has sanitation facilities. This is an independent, co-ed school, which caters for learners from grades 0 to 7. Monthly school fees are R500 for junior learners and R700 for senior learners. At the time of the visit there were 143 learners of which 63 were boys and 80 were girls. The educator to learner ratio is approximately 1:16 as there are 9 educators. The school has three non-teaching staff members; these include an

administrator, a tea lady and a gardener. There is no secure infrastructure surrounding the schools' perimeter. The buildings are in excellent condition, with clean and colourful classrooms. There are a total of 10 classrooms of which all are in use. Specialist rooms include an administration office, staff room, sick room, library, hall, two storerooms as well as a computer laboratory. The computer laboratory is secure, clean and well kept. There are a total of 24 computers of which all are in working order and 2 have Internet connections. All learners receive weekly IT lessons. Due to the strain on resources all educators perform multifunctional roles. Educators teach a number of subject areas as well as performing certain administrative duties; both the principal and her secretary are qualified educators and take classes during the course of the day.

SCHOOL 8 (PRIMARY SCHOOL)

School 8 is an urban primary school situated in the town of Tzaneen. The school has water, electricity and sanitation facilities. This is a co-ed school, which caters for learners from grades 0 to 7. At the time of the visit there were 1233 learners of which 628 were boys and 605 were girls. There are 41 educators (one of which is a temporary member of staff) and the educator to learner ratio is approximately 1:30. The school has 21 non-teaching staff members: 3 administration clerks, 9 general hostel assistants as well as 9 general school assistants. The school is secure as it is enclosed within a pre-cast wall and has a security check point located at the main entrance. The buildings are in very good condition, with a combination of pre-fab and brick classrooms. The school also has an enclosed heated swimming pool, which is used throughout the year. There are a total of 37 classrooms of which all are in use. Specialist rooms include: staff room, safe/strong room, hall, media centre, library, science laboratory, 7 administration offices, 2 sick rooms and 2 computer laboratories. There is a main computer laboratory, which is equipped with quite dated IT infrastructure, this laboratory is available to all learners throughout the school for fortnightly computer lessons. A second computer laboratory is available for learners participating in the 'Future Kids' programme for an additional fee of R80 per month. These learners are allowed to make use of the laboratory on a daily basis, during 2nd break. This centre has been decorated and furnished in such a way so as to provide an effective environment for teaching and learning. It has been equipped with modern IT infrastructure and access to the Internet is also available.

DATA COLLECTED

The following data was collected during research visit 1.

School 6

ACTIVITY	DETAILS
Facilitator Interview	Complete
Educator Focus Group	10/10 educators attended
Lesson Observations	4 Lesson Observations
Educator Pre-training Questionnaire	10/10 submitted questionnaire

School 7

ACTIVITY	DETAILS
Facilitator Interview	Complete
Educator Focus Group	7/7 attended focus group
Lesson Observations	4 Lesson Observations
Educator Pre-training Questionnaire	7/7 submitted questionnaire

School 8

ACTIVITY	DETAILS
Facilitator Interview	Complete
Educator Focus Group	11/11 educators attended
Lesson Observations	3 Lesson Observations
Educator Pre-training Questionnaire	8/11 submitted questionnaire

In addition to this information from each school an extra focus group was held with a group of facilitators from the area, so including facilitators from a wider range of schools than those in the sample.

PRELIMINARY FINDINGS

In this section we present some preliminary findings. It is important to note that a full analysis of the information collected from each school will only be done after the second set of evaluation visits, which will take place during October 2003. These findings draw on informal observations, facilitator interviews and educator focus groups. The questionnaires completed by the educators and the lesson observations will be analysed later. We present here a summary of findings across the three schools, noting specific school details as appropriate. The final analysis and evaluation report will include a detailed case study of each school as well as a summary of findings.

IMPLEMENTATION OF THE INTEL TEACH TO THE FUTURE PROGRAMME AT THE SCHOOL LEVEL

Most of the educators had heard about the Intel Teach to the Future Programme from Estia Warmenhoven or from their principal after Estia had contacted the principal. At one school a formal presentation about the programme had been done.

At School 7 the training was due to start on 5th August, and take place once per week from 13h30 to 16h30. Training at School 6 was due to start on 28th July and take place three evenings per week (Monday to Wednesday) from 18h00 to 22h00. The facilitator at School 8 had not set a date for starting training at the time of the research visit, but it was planned for training to take place on Wednesday afternoons from 14h00-16h00.

When asked about the response of educators to the programme, facilitators from two schools noted an enthusiastic and positive response. However, all three facilitators also noted that educators are apprehensive about the level of IT skills needed. One facilitator reported that

the level of skills required intimidated educators in the school. At School 6 ten educators have joined training, at School 7 there are 7 educators taking part and 11 educators at School 8.

During focus group discussions the educators were asked whether they thought their schools provided a supportive environment for the Intel Teach to the Future Programme. It was noted in all three focus group discussions that insufficient computers would be a problem when trying to make more use of these resources for teaching and learning. As noted in the context section above, at School 6 only learners who have paid school fees are allowed to use the computers, and at School 7 it was noted that there is very little time for computer use besides for the specific computer classes.

FACILITATOR TRAINING

All three facilitators had attended training at Unicorn Primary School from 7-11 July 2003. Each of the facilitators were asked questions about their training and how well they thought this had prepared them to run training within their schools. Two of the facilitators noted that they felt well prepared after their training and that the training was very good. One facilitator raised a concern about how condensed the training was and that some sections had to be skipped over in order to complete the training in time. A concern was also raised that the requirement for facilitators was to be IT literate, but this means different things to different people, people have different perceptions of what it means to be computer literate. This creates problems when individuals of different abilities are in the same training group. It was noted, that there needs to be a clearer way of stating what IT skills are needed for someone to be able to complete the training.

The facilitator focus group including facilitators from a wider range of schools also provided similar information. Many felt that a preliminary course was needed to improve their IT skills before doing the Intel training. It was noted that schools found it difficult to work out how to become involved in other training provided by SchoolNet that would have helped them to be better equipped for this programme. Most of the facilitators noted that they had struggled with the IT aspect of the course. It was also noted that people were not entirely certain of what to expect from the programme as there was not enough information provided about what the course was about. There was a general concern that the facilitator training was too rushed.

These concerns and challenges notwithstanding, most felt that the course was enjoyable and were optimistic that it would yield positive results in the future. A suggestion was made that selecting more than one facilitator for each school might be helpful as this would help with the promotion of the course and also provide additional support when doing training at one's school.

FACILITATORS' PERCEPTIONS OF STRENGTHS AND WEAKNESSES OF THE INTEL TEACH TO THE FUTURE PROGRAMME

During the facilitator interviews questions about the perceived strengths and weaknesses of the programme were asked. Because the training has not yet begun in the schools these responses are mostly based on the facilitator training and experiences from this week.

Strengths included:

- Sharing ideas with other educators
- The use of ICTs
- The inclusion of curriculum statements
- The inclusion of weblinks
- The user-friendly navigation system of the CD
- The range of useful resources included on the CD.

Weaknesses included:

- Not enough orientation before facilitator training begins. It would be helpful to distribute the CDs before training so that facilitators have a sense of what the training is about before they arrive.
- The programme takes for granted that everyone is aware of what OBE is and that it is being implemented in their schools.
- No way of testing each individual's level of IT skills before the facilitator training. This means that some people had to spend a lot of time during the training helping others who did not have the required IT skills.

EDUCATORS' EXPECTATIONS OF THE INTEL TEACH TO THE FUTURE PROGRAMME

During focus group discussions educators were asked about their expectations of the training they were soon to begin. This was also a question asked in the educator questionnaire still to be analysed. Some of the expectations expressed during the focus groups include:

- the hope to be better equipped with the tools to deal with specific year and age groups
- to feel more comfortable and capable to share computer knowledge with learners
- to understand computers better
- to gain computer skills
- to improve learners' quality of learning by using computers
- to 'get up to pace' with learners who have a better knowledge of computers than educators
- to develop computer skills and have the ability to share this with others.

CURRENT USE OF ICTS FOR TEACHING AND LEARNING

At each of the schools it was noted that computers are used mostly for lesson preparation and for administration. This includes compiling reports, schedules, worksheets etc. At School 7 an educator has used computers for a trigonometry lesson and at School 8 an educator had given learners instructions to use the Internet as part of their assignments. Generally, though, in these three schools there is little use of ICTs for teaching and learning at present, except for computer literacy classes.

PERCEPTIONS ABOUT THE ROLE OF COMPUTERS IN EDUCATION

During the focus groups, with the educators at each school and also during the focus group made up of facilitators from a range of schools questions were asked about perceptions of the role that computers can play in an education context.

There was a general response in each instance, summarised as “computers are the way of the future” and must become increasingly a part of teaching and learning, although many were concerned about their lack of skills to use the technology. Some expressed reservations about the use of computers and particularly the keyboard when teaching young children who have yet to master other skills, like reading and writing. Some noted that using computers is time consuming, as it requires a lot of lesson preparation. There was a concern about the fact that learners who come from different backgrounds have different starting points when it comes to using a computer and this can make teaching more difficult, as one has to try and strike a balance amongst the various needs of learners. Overall, while there is agreement that computers are important and are an excellent resource, it was noted that they must be used in a controlled manner, otherwise some students merely cut and paste information found on the Internet instead of engaging with what they are doing.

APPENDIX 4 – RESEARCH INSTRUMENTS

In this appendix each of the research instruments used during the first set of case study visits is presented. Some of these instruments will be reused in their same form for the second set of visits, others will be adapted, and a post training survey will also be used.

INTEL® TEACH TO THE FUTURE EVALUATION
SCHOOL INFORMATION SURVEY

1. SCHOOL NAME: _____

2. PROVINCE:

KZN	Limpopo	Gauteng
-----	---------	---------

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 educators does the school have? _____

Please specify for the following categories:

	<i>Male</i>	<i>Female</i>
Number of educators qualified with M+3 or equivalent		
Number of educators on permanent staff		
Number of educators employed by School Governing Body		
Number of temporary educators		

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

<i>Type of staff member</i>	<i>Male</i>	<i>Female</i>

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:

<i>Type of facilities</i>	<i>No. available</i>	<i>No. in use</i>	<i>No. unusable</i>
Library			
Laboratory (Specify, e.g. Computer, Science)			
Separate administration offices			
Staff room			
Safe/Strong room			
Sick room			
Other (please specify)			

9.3 Availability of technological resources

<i>Type of resource</i>	<i>No. available</i>	<i>No. in use</i>	<i>No. unusable</i>
Tape Recorders			
OHP			
Computers			
Computers with Internet connections			
Television set			
Photocopier			
Fax machine			
Type writer			
Other (please specify)			

**INTEL® TEACH TO THE FUTURE EVALUATION
EDUCATOR PRE-TRAINING SELF-ADMINISTERED
QUESTIONNAIRE**

1. Title and Name: (Mr/Mrs/Ms) _____

2. Grade(s) 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 this Intel Teach to the Future Programme training?

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 <input type="checkbox"/> No <input type="checkbox"/>
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 <input type="checkbox"/> No <input type="checkbox"/>
11.3. Insert a table into a document in a word processing programme	Yes <input type="checkbox"/> No <input type="checkbox"/>
11.4. Insert page numbers into a document	Yes <input type="checkbox"/> No <input type="checkbox"/>
11.5. Use a spreadsheet programme such as Lotus or Excel – add a column of numbers, for example	Yes <input type="checkbox"/> No <input type="checkbox"/>
11.6. Activate the Internet and search the World Wide Web for information	Yes <input type="checkbox"/> No <input type="checkbox"/>
11.7. Send an email message	Yes <input type="checkbox"/> No <input type="checkbox"/>
11.8. Connect to the Internet and find a specific website you are looking for (i.e type in a particular address)	Yes <input type="checkbox"/> No <input type="checkbox"/>
11.9 Attach a document to an email message	Yes <input type="checkbox"/> No <input type="checkbox"/>
11.10. Design your own learning materials on the computer	Yes <input type="checkbox"/> No <input type="checkbox"/>
11.11. Create overhead transparencies (OHTs) using computers	Yes <input type="checkbox"/> No <input type="checkbox"/>

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

Yes	No
-----	----

13. If yes, please describe: _____

INTEL® TEACH TO THE FUTURE EVALUATION

FACILITATOR BASELINE INTERVIEW

Note to the interviewer: These questions should be used as a guide for the interview. It is important for you to follow-up on and probe important issues as they arise during the interview.

1. Name:
2. School:
3. Grade taught:
4. Learning area/subject:
5. Do you have any previous experience with educator professional development in the area of ICTs? If yes, please describe.
6. How did you find out about the Intel Teach to the Future programme and why did you decide to become a facilitator?
7. When and where did you attend the Intel Teach to the Future programme facilitator training?
8. Please comment on how well you think the facilitator training has prepared you for running the training in your school.
9. What do you understand to be the aims of the Intel Teach to the Future programme?
10. What do you think are the major strengths of the Intel Teach to the Future programme?
11. What do you think are the major weaknesses of the Intel Teach to the Future programme?
12. What particular benefits do you see for your school from this programme?
13. How has the Intel Teach to the Future programme been promoted to the educators in the school?
14. What response has been received thus far from educators about the Intel Teach to the Future programme?
15. When will this term's training begin?
16. Please describe when and where training takes place.

-
17. In your opinion, to what extent are question-based and/or project-based learning a part of current practice at this school? Please give details.
 18. In your opinion, to what extent do educators work together in lesson preparation and teaching? Please give details.
 19. In your opinion, to what extent is cross-curricular teaching taking place at present. Please give details.
 20. Do you have any other comments about the Intel Teach to the Future programme?

THANK YOU VERY MUCH FOR ANSWERING THESE QUESTIONS

INTEL® TEACH TO THE FUTURE EVALUATION

EDUCATOR FOCUS GROUP DISCUSSION QUESTIONS

NOTE: This focus group has been designed as a means of verifying the information provided in the Educator Pre-training questionnaire and also to provide an opportunity to further explore issues raised.

QUESTIONS TO GUIDE THE FOCUS GROUP DISCUSSION:

1. What are your perceptions about the role of computers in education?
2. How did you hear about the Intel Teach to the Future Programme?
3. What are your expectations of the Intel Teach to the Future Programme?
4. Do you think that your school provides a supportive environment for using computers for teaching and learning?
5. Describe how you use ICTs for teaching and learning at present.
6. Do educators work collaboratively in lesson planning and/or teaching in your school?

DETAILED LESSON NARRATIVE

Note down how the lesson is introduced, the activities included, the involvement of the learners, general response to the lesson, outcomes of the lesson and details of behaviours during the lesson.

TIME	
	Start of period

TEACHING AND LEARNING PROCESSES

Look at the teaching-learning process in the classroom, in particular the interactions that are taking place. Rate each of the following questions on a 5-point scale by putting a cross through the appropriate number:

1. Do learners interact *meaningfully* with the educator and with one another?

Hardly ever

1	2	3	4	5
---	---	---	---	---

 A lot

2. Do valuable learning opportunities arise from these interactions?

Hardly ever

1	2	3	4	5
---	---	---	---	---

 A lot

3. Does the educator exploit these learning opportunities as they arise?

Hardly ever

1	2	3	4	5
---	---	---	---	---

 A lot

4. Are the learners negotiating the solution to a problem/exploring an issue meaningfully?

Hardly ever

1	2	3	4	5
---	---	---	---	---

 A lot

5. Is the educator acting as a facilitator for the learners as they negotiate/explore?

Hardly ever

1	2	3	4	5
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 A lot

If you noticed any significant details in relation to the above questions, make a note of them here (include the relevant question number):
