Decentralized Basic Education Three (DBE3)

Relevant Education for Youth

Evaluation of the Implementation and Impact of the DBE3-Intel "Getting Started Program"

Prepared by DBE3:
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DBE3 is a Partnership between

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Disclaimer

The views expressed in this paper do not necessarily reflect the views of the United States Agency for International Development (USAID) or the United States Government

Front Cover

The Front Cover shows a photograph of students at MTsN Binjai, North Sumatra learning to use Computers during an ICT lesson.

ABBREVIATIONS AND ACRONYMS

AED	Academy for Educational Development
BTL1/2/3/4	Better Teaching and Learning
COP	Chief of Party/Program Director
DBE	Decentralized Basic Education
DBE3	Improving the Relevance of Junior Secondary Education
DC	District Coordinator
DCOP	Deputy Chief of Party
DINAS	Provincial or district education office
DIKNAS	Dinas Pendidikan Nasional (National Education Office)
DF	District facilitator (DBE3 Staff)
GOI	Government of Indonesia
ICT	Information & communications technologieS
IT	Information Technology
LSE	Life Skills Education
LPMP	Lembaga Peningkatan Mutu Pendidikan (Institute for Assuring the Quality of Educational Personnel – MONE)
M&E	Monitoring & Evaluation
MONE	Ministry of National Education
MORA	Ministry of Religious Affairs
MGMP	Musyawarah Teacher Mata Pelajaran (junior high school subject teacher association)
MAPENDA	Madrasah dan Pendidikan Agama (Madrasah and Religious Education – a section of Religious Affairs)
MT	Master Trainer
MTs	Madrasah Tsanawiyah (Islamic Junior Secondary School)
NCG	Non Cash Grant
NGO	Non Government Organization
PC	Personal Computer
PPA	Public-Private Alliances
PT	Participant Teacher
SMP	Junior secondary school
ToT	Training of Trainers
USAID	United State Agency for International Development
UT	Universitas Terbuka (Open University of Indonesia)

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INTRODUCTION

This paper is intended to present the results of an evaluation conducted on the implementation and impact of the joint DBE3-Intel program to train teachers in selected Junior Secondary schools in Indonesia using the Intel Getting Started module of the Intel Teach Program, which took place between 2007 and early 2009. The submission of this report is in accordance with the requirements of the Alliance between Intel and USAID.

This report includes 4 main sections. The **first section** of the report provides some general information about the DBE3 – Intel program including aims and objectives, the scope, beneficiaries and a brief overview of the key project inputs. **Section Two** presents a summary of the evaluation including the data collection methods, instruments, process and data analysis which the evaluators undertook during a six month period. **Section Three** highlights the main findings of the evaluation and the **fourth** and final section of the report presents the general conclusions and recommendations of the evaluators with a view to increasing the quality of the program and its beneficial impacts

There are eight annexes enumerating **(A)** Pre Qualification Criteria **(B)** School Participating in the DBE3-Intel Program (**C)** Outline of the Getting Started Training Program **(D)** to **(H)** Evaluation Instruments

EXECUTIVE SUMMARY

This paper presents the results of an evaluation conducted on the implementation and impact of the joint program between USAID and Intel® to implement the Intel® Teach Getting Started program to Junior Secondary School teachers in Indonesia through the Decentralized Basic Education 3 Relevant Education for Youth (DBE3) Program.

The objective of the alliance is to support the Government of Indonesia's to train teachers to *"use information and communications technology to support student learning in the academic subject they teach"* (Ministerial Regulation No 16/2007 on Teacher Competency Standards).

During phase 1 of the program, DBE3 and Intel trained 40 Master Trainers and 395 teachers in 20 schools across 5 provinces and distributed 137 computers and 444 pieces of ICT equipment (including software, UPS and anti virus) to the 20 schools to support the implementation of the program.

In mid 2009, DBE3 conducted and evaluation of the program in order to assess how well the program had been implemented and what could be done (if anything) to increase the quality of the program and its beneficial impacts

The evaluation concluded that the program achieved some notable success in terms of improving teachers ICT skills and increasing the use of ICT as a teaching tool but had been much less successful impact on improving the use of ICT in the classroom as a learning tool. Five of the key findings and resulting recommendations presented in the report are summarized in the table below.

Finding	Recommendation
Only 25% of teachers increase their use of computers following the program. The program has more impact at the school level on pedagogical skills rather than use of ICT the lack of access to computer facilities is seem as the major cause of this.	Ensure that schools have sufficient equipment to support implementation of the training. Procure and distribute laptops which, because they are portable, can more easily be used in the classroom. Involve ICT teachers and Principals in the training to work on scheduling of use of available fixed ICT equipment
The content of the training program is overly ambitious; most participants leave knowing a little about many things but have not practiced and developed any skills in depth this results in a continuing lack of confidence	Reduce the content and pace of the program to focus on developing specific skills at the end. Remove Microsoft Power Point from the program content as many of the tools produced by Power Point can also be created by Microsoft Word.
The program has been successful in improving teachers use of computers for administrative and management activities but not to support student learning. Where computers are being used in the classroom they are having a negative impact on student learning.	The training focus should change examine how computers can be integrated into lessons in the general curriculum (rather than administrative purposes) and provide teachers with simple, achievable subject specific models to follow and build on, which do not depend on LCD and internet. For example, students typing stories and other forms of writing, preparing presentations following group discussions or to analyze interpret and evaluate results of experiments.

Teachers are enthusiastic immediately after the workshop but this motivation fades following the workshop because of the lack of on going instructional and technical support	The program should consider what happens "beyond the workshop" Master Trainers should be organized to provide continued support and mentoring to trained teachers after the workshop to help them continue to develop their skills and to implement what they have learned in the classroom. Emphasis needs to be given to both individual and collective mentoring e.g. through school level MGMP or professional development meetings where school ICT teachers, and Master trainers work alongside teacher to develop, implement and review lessons which integrate ICT
Schools where principals were involved and supportive tended to have better spirit in trying to implement what they have learned in the training.	Strengthen the Principal's Leadership Forum and provide real examples of what principal can do to support successful implementation. Support principals to develop actionable plans to sustain and grow their investments in computers technologies and connectivity and develop plans for students' use of ICT in the classroom Make it compulsory for principals and ICT teachers to participate in the training.

This paper will be shared with Intel and USAID and used to improve the implementation and impact of phase 2 of the program. The results of the evaluation have already been used to support the redesign of the wider DEB3 ICT in Education strategy.

1.0 CONTEXT

1.1 Overview

The DBE 3 – Intel® Teach Public Private Alliance (PPA) is a joint program between USAID and Intel® to implement the Intel® Teach Getting Started program to Junior Secondary School teachers in Indonesia through the Decentralized Basic Education 3 Relevant Education for Youth (DBE3) Program.

1.2 Objectives

The Intel Teach education program is a worldwide effort to help integrate technology into education in order to enhance student learning. Through the program, participating teachers learn how, when and where to incorporate technology tools and resources into their teaching and learning plans. They are also trained to create assessment tools and align lessons with educational learning goals and standards. The program incorporates the use of the Internet, Web page design, and student projects as a comprehensive educational tool. The training is intended to meet the needs of teachers by increasing their knowledge and ability in integrating the use of Information and Communication Technology (ICT) into the teaching and learning process.

The objective of the Intel Teach program is directly in line with Government of Indonesia goal to support teachers to "use information and communications technology to support student learning in the academic subject they teach" (Ministerial Regulation No 16/2007 on Teacher Competency Standards). It also directly corresponds with the overall goal of the USAID DBE3 project, which is to support the improvement of the *relevance* of education through increasing the opportunities for students to develop and apply *life skills* in their learning *across the curriculum*. As *ICT capability* is a key *21st Century life skill* it clearly falls within this stated project goal and DBE3 is committed to supporting the development of students ICT capabilities[1].

[1] Which are defined as the ability to use ICT and information tools appropriately and effectively to achieve a desired result. To be considered ICT capable, a person requires not only a set of basic skills, such as how to use a mouse, but also the ability to select appropriate routines, techniques and

1.3 Activities

Following agreement between USAID and Intel in 2007, DBE3 proceeded to implement the program. DBE3 first conducted a 'needs assessment' of the 20 schools selected to benefit from the first phase of the program. The needs assessment was conducted by 2 consultants from AED who visited each of the DBE3 schools to assess existing ICT facilities and capabilities. Assessments were made based on pre-qualification criteria provided by Intel, which is included in annex A. The ICT status was determined through interviews with staff and on site observation and testing of equipment such as powering up the computers, testing the mouse, monitor, key board and CD Rom drive, checking the memory and verifying operating software.

The assessment divided schools into green schools (those ready to participate) yellow schools (needing minor upgrades before they could participate and red schools (those requiring significant upgrades) as follows.

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processes to produce a specific outcome. In Indonesia, schools often take a *skills based approach* to ICT and focus on students' acquisition of the technical competencies through the ICT subject. Rarely do students have the opportunities to apply these skills for a purpose across the general curriculum. As the mastery of these skills is of little value unless there is a purpose to using them, the aim of the DBE3 project is to support schools to provide opportunities for students to *practice apply* and *develop* their ICT capability through the appropriate use of ICT to support learning *across the curriculum*. The outcome of the DBE3 ICT program is that students in target schools develop the abilities to:

- Use a variety of information sources and ICT tools to find, analyze, interpret, evaluate and present information for a range of purposes.
- Use the computer independently and creatively, make critical and informed judgments about when and how to use ICT for maximum benefit in accessing information, in solving problems or for expressive work.

Table 1: Readiness of 20 selected schools by Province and Status

Status	South Sulawesi	East Java	Central Java	North Sumatra	West Java/ Banten	Total
Green (Ready)	2	1	0	0	2	5
Yellow (Almost Ready)	0	3	3	2	1	9
Red (Not Ready)	2	0	1	2	1	6
Total	4	4	4	4	4	20

To ensure selected schools met the qualification criteria and were able to facilitate the training program and implement what they had learned in the training in the classrooms, DBE3 procured and distributed 137 computers and 444 pieces of ICT equipment (including software, UPS and anti virus) to the 20 schools as detailed in annex B.

The training program followed the 'Train the Trainer' model and was delivered in two stages. The first stage involved two teachers from each school, who were trained as Master Trainers (MT). The Master Trainers were selected by the participating schools according to the following criteria:

- Should be teachers who already have basic ICT skills (use of computer software applications – Word, Excel, Power point – Internet Explorer)
- Priority given to those teachers with more than 3 years teaching experience
- Should be teachers who are active in innovating teaching methodology
- Have good professional knowledge to manage teacher training

During phase 1 of the program, DBE3 trained 40 master trainers. A profile of the Master Trainers is presented in table 2.

Table 2: Master Trainer (MT) Profiles

No	Province	District	Number of Teacher		Age Average
			Male	Female	
1	North Sumatra	Binjai	7	1	35
2	West Java - Banten	Tangerang	8	0	38
3	Central Java	Kudus	5	1	37
4	East Java	Surabaya	3	3	36
5	South Sulawesi	Pangkep	6	2	32

In the second stage these two Master Trainers trained the remaining teachers (PT) within the selected target schools. During phase 1 of the program, DBE3 trained 395 participant teachers. A profile of the participant teachers is included in table 3 below.

Table 3: Participant Teacher (PT) Profiles

No	**Province**	**District**	**Number of Teacher**		**Age Average**
			Male	Female	
1	North Sumatra	Binjai	17	51	39
2	West Java - Banten	Tangerang	34	46	41
3	Central Java	Kudus	34	38	44
4	East Java	Surabaya	31	46	42
5	South Sulawesi	Pangkep	25	49	39

The content of the training program is provided in annex C.

The program also included meeting with school principals which were intended to:

- Assist the Principals to understand the program
- Support them to understand how an effective technology integration plan can make a difference to the teaching and learning process,
- Identify the principal's role in the integration of technology to teaching and learning process
- Help principals to develop an action plan to integrate technology in their school's teaching and learning process.

The Principals' Leadership Forum was a 4 to 8 hours workshop conducted under the guidance of a Senior Trainer with participating principals from schools that are involved in the Intel Getting Started Program.

Following completion of the program, DBE3 conducted an evaluation in order to investigate how various aspects of the program were being implemented and elicit feedback on the challenges and successes of the program components.

2. 0 THE EVALUATION

2.1 Aim

The purpose of the evaluation was to appraise the overall success of phase 1 of the USAID - Intel Getting Started program, which had been implemented through the DBE3 program. "Success" would be measured against the objectives for the implementation of the program which was to improve teachers' use of ICT so they could provide increased opportunities for students to practice apply and develop their ICT capability through the appropriate use of ICT to support learning across the curriculum. The key question to be answered through the evaluation was:

What has been the impact of the DBE3-Intel Getting Started Program on the teaching and learning process in the classroom?

In order to answer this question, the evaluation would address a number of sub questions as follows:

- What are participants' perceptions of the program?
- To what extent has the training program been implemented?
- What factors affect the implementation of the program?

2.2 Methods

The evaluation used both qualitative and quantitative approaches. These included:

Mail Survey

A questionnaire designed to obtain a response from all participants to understand the extent to which the program benefitted them and what challenges they faced in implementing the training.

Case Study

In-depth case studies of a small sub-set of participating schools where researchers would visit schools, conduct a visible check on ICT laboratories, conduct focus group discussions with teachers, observe lessons, and interview master trainers, participant teachers and school administrators in order to gain a more in-depth understanding of the processes and outcomes of the program. This qualitative approach was important to reveal the underlying issues not detectable through the mail survey.

The evaluation instruments used are included in annexes D to G.

2.3 Sample

The population involved in the evaluation was extensive and included all beneficiaries from phase 1 of the program.

Mail Survey

The mail survey was distributed to all 40 Master Trainers and 395 participant teachers involved in the program. The response rate for Master Trainers was 90% and for participant teachers was 95%. However, not all respondents completed all questions on the survey, which was a complicating factor.

Case Studies

The case studies were carried out in 6 of the 20 schools (30%) located in 3 of the target provinces (60%). Sample schools were representative and included SMP, MTs, Public and Private Schools and those in urban and non urban areas. Schools involved in the case studies are listed in table 4.

Table 4: Schools participating in the case studies

Schools	Type	District	Location	Provinces
SMP Negeri 2 Pangkajene	Public	Pangkep	Urban	South Sulawesi
MTs Darussalam Anrong Appaka	Private	Pangkep	Rural	South Sulawesi
SMP Negeri 1 Gebog	Public	Kudus	Urban	Central Java
MTs Al Hidayah Gebog	Private	Kudus	Rural	Central Java
SMP Negeri 6	Public	Binjai	Urban	North Sumatera
MTs Negeri 1	Public	Binjai	Rural	North Sumatera

Each case study included the following activities:

- Focus Group Discussions with 10-15 teachers per school making a total of 106 teachers
- Structured interview with the School Principal of each visited school (6 principals)
- Observation of 26 lessons
- A visible check of the computer laboratory in each school with a total of 6 computer laboratories

2.4 Timeframe

The research process took a period of 8 months. The key activities in the process were as follows:

Time	Research Activity
June 2009	A 4-day meeting between evaluators and DBE3 to agree an evaluation approach and to modify the basic evaluation design and instruments (provided by Intel) where necessary.
June – July 2009	The modification of instruments by evaluators supported by the DBE3 Monitoring and Evaluation specialist.
July 2009	Preparation and delivery of the adapted mail survey instrument to 40 DBE3 Master Trainers (MT) and 395 DBE3 Participant Teachers (PT).

July and August 2009	3 day field visits to 3 DBE3 sample sites to carry out classroom observation, Focus Group Discussion (FGD) and interviews and inventory of ICT equipment. • Pangkep in South Sulawesi • Binjai in North Sumatra • Kudus in Central Java
September 2009	Initial analysis of the quantitative (surveys) and qualitative (field) data
October 2009	Preparation and sharing of draft report Re-analysis and checking of data
November 2009	Discussion with DBE3 technical staff who provided input and feedback on the report
January 2010	Final report produced based on inputs and documented feedback

2.5 Data Analysis

The quantitative data from the Mail Surveys was coded thematically and analyzed using Microsoft Excel formula. The result was presented in numerical descriptive forms such as frequency and percentage.

The qualitative data collected through the case studies was analyzed thematically based on observation notes, interviews, checklist, and FGD. The data gathered showed various aspects of the program being implemented, factors affecting the implementation of the program, feedback on challenges and successes of the program, and impact of the program on participating teachers.

2.6 Reliability

Data for the evaluation was collected by independent evaluators and enumerators supported by relevant DBE3 technical and field staff (such as the Monitoring and Evaluation Specialist). Where possible the evaluation process included checks in order to ensure accurate information was obtained. The data included in this report has been cross referenced and examined for consistency and for unusual and unexplained patterns. Issues from this checking have been discussed, sources checked, calculations re-checked and adjustments made where necessary. Although every care has been taken in collecting and analyzing the data, it is inevitable that some errors may have been made.

On a few occasions evaluators noted a contradiction between responses included in the mail survey and data collected through the case studies. Where there are significant differences, evaluators more often than not concluded that data collected through the case studies was more likely to be accurate as it could be verified.

3.0 FINDINGS

3.1 Participants' Perceptions

Usefulness of the training

96% of teachers involved in the program felt that the training was useful for their work, although naturally the extent to which it was useful varied as figure 1 shows. 48% of the participants considered the training very useful whereas 26% considered it moderately useful and 17% sometimes useful.

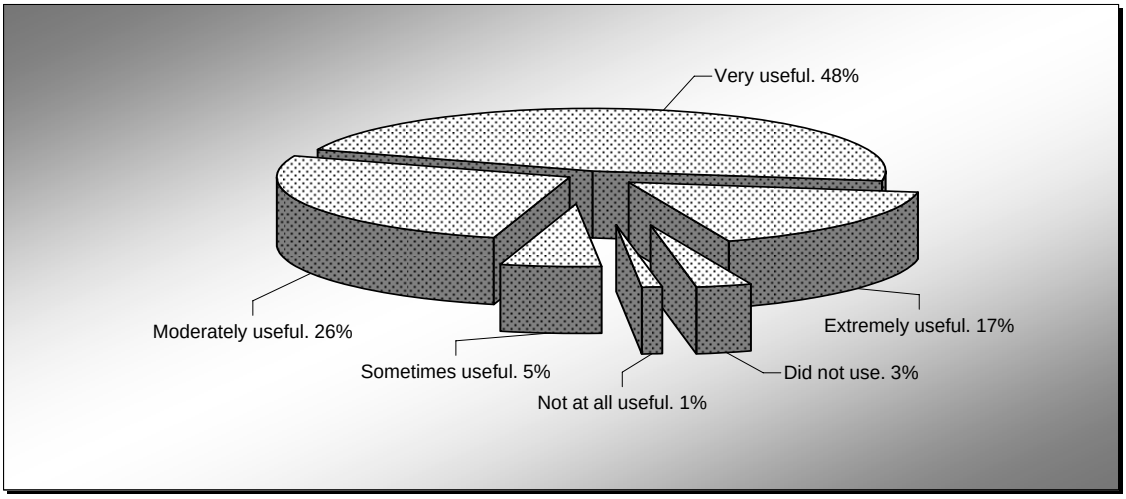

Figure 1:

Participants' perceptions on training "usefulness"

The extent to which the training was considered useful is directly linked to the teachers' previous skills and experience in ICT. When asked why they thought the training was useful, teachers commented that it had helped them to improve their computer skills and also increased their confidence to at least operate a computer even if only for the most basic functions. Teachers said that the training had given them basic knowledge of twentieth century skills and basic competencies to operate computer and use programs such as Microsoft Word, Excel and Power Point. The training had particularly helped beginner teachers with minimum skills and experience to use computers for

teaching and administration purposes. For the small percentage of who said that the training was sometimes useful or not at all useful commented that the training was too simple and they did not learn anything new.

Many participants also enjoyed the training because they felt it gave them the opportunity not only to learn the theory but also to try and implement the knowledge that they have just received by practicing their computer skills. For teachers with no prior computer skills the training program was useful in stimulating their interest in learning more. A number of teachers also commented that the training had not only improved their computer skills but also gave them new ideas and skills for general teaching. The training introduced teachers to a number of teaching strategies and approaches that can be supported by computers.

Although nearly 100% of teachers felt that the training was useful, it is interesting to note that in general, their expectations were not met. This is likely because most teachers had very high and unrealistic expectations of the training and thought that when the training was complete, they would have good technical skills and the ability to independently operate computers for personal and professional purposes. However, the 4-day training was inadequate to provide such skills.

This is perhaps a result of miscommunication about the purpose of the training. In fact, the training contents was not designed or intended to produce people with complete knowledge and competencies to operate computer programs by the end of the training. The focus was on developing certain pedagogical skills which could be supported by computer skills.

ICT Skills

"We have learned to develop lesson plan and create students' grade list using computers", a teacher from MTs Al Hidayah, Gebog, Kudus.

The evaluation showed that most of the teachers involved in the program felt that they improved their ICT skills and their confidence in using a computer as a direct result.

As the graph in figure 2 illustrates, although we can not specifically determine exact numbers or percentages of teachers moving from one category to another in terms of skill level, by comparing the numbers in each category before and after the training, we can conclude that the majority of teachers improved their skills as a result of the program.

The data shows that before the training 72 teachers were novice users whereas only 47 were novice users after suggesting that 25 (35%) of teachers felt that their skills and experience had improved. There is a much larger increase of 101 (224%) in the number of teachers in the advanced category after the training. These figures are confirmed by the results of the focus group discussions in which 80% of respondent participant teachers said that they had improved their computer skills through the training.

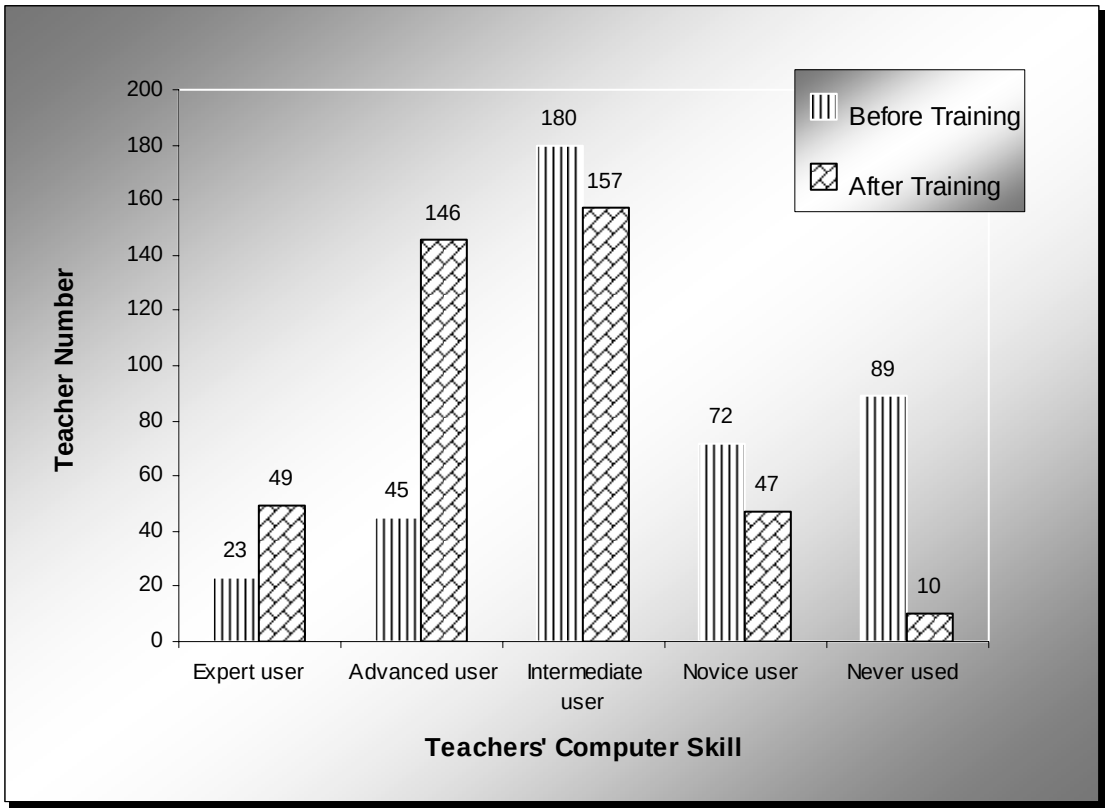

Figure 2

Teachers Skill Level before and after the Training (Mail Survey Results)

However, most teachers acknowledged that although they had made progress, it was generally slow progress suggesting that at most, most teachers probably advanced by a maximum of one category as a result of the training (e.g. from novice to intermediate) rather than a number of categories (e.g. from novice to advanced).

Training Content

During the evaluation, participants were asked whether they agreed or not with the following statements regarding the concepts introduced in the training.

- Student-centered instruction helps students prepare for the 21st century workplace.
- The most important goal of instruction is to encourage critical thinking among students. Learning facts is secondary.

- Student learning can be promoted through collaboration with others.
- Students learn to think critically by reviewing and revising their work.
- Student learning is best promoted through active exploration of ideas and materials
- Student activities should be connected to long-term goals to build understanding and skills
- Teachers need to build on students' existing strengths to enhance their learning.
- The content of students' learning should be at least partly based on student interest.

As figure 3 shows, there was general agreement from all participants for each of the statements.

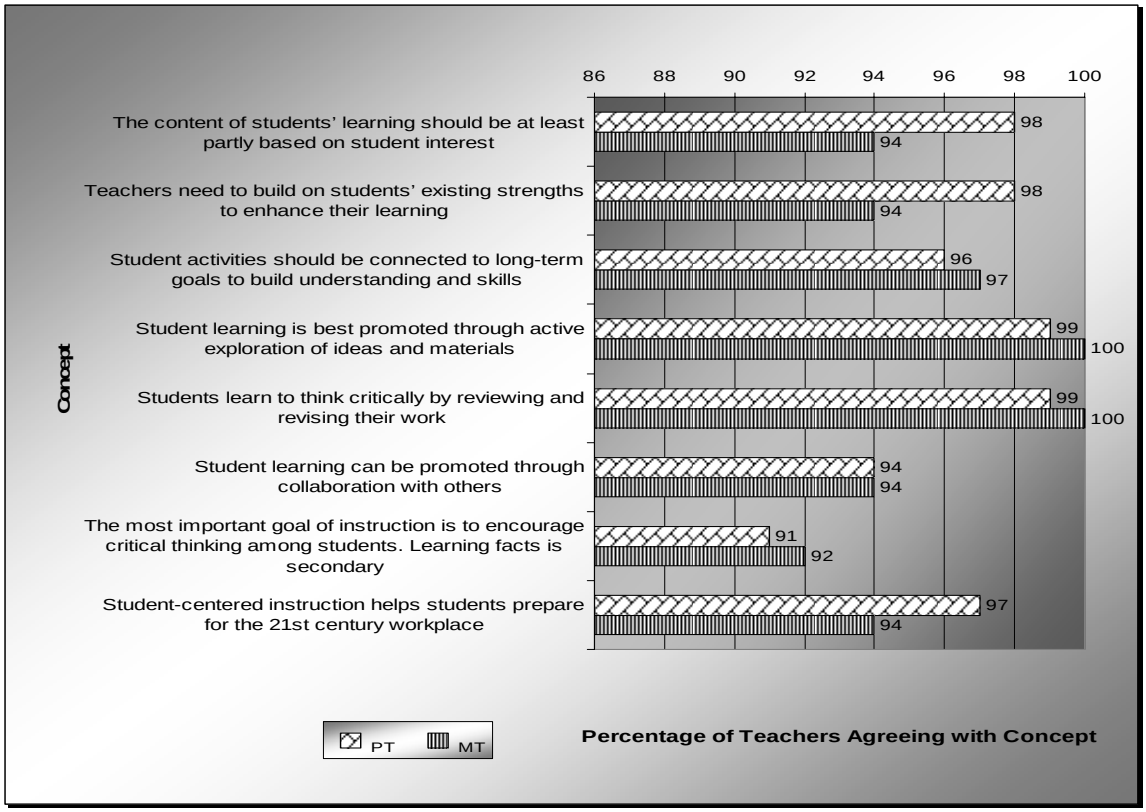

Figure 3:

Teachers and Trainers Perceptions on Concepts Presented through the Program

This implies that the content of the training program was appropriate and relevant and teachers generally agree that their lessons should be on an active learning approach and include the eight key aspects of learning and teaching process above. Whether this was implemented or not is discussed in the following section.

3.2 Implementation of the Training Program

Use of Computers

Although the computer skills of the majority of teachers had improved as a result of the program, the evaluation found that this did not automatically result in more teachers actually using computers following the program. Only 25% of teachers involved in the program claimed that they used computers more frequently following the program than before for professional and personal use. This means that for 75% of teachers there was no positive change following the training.

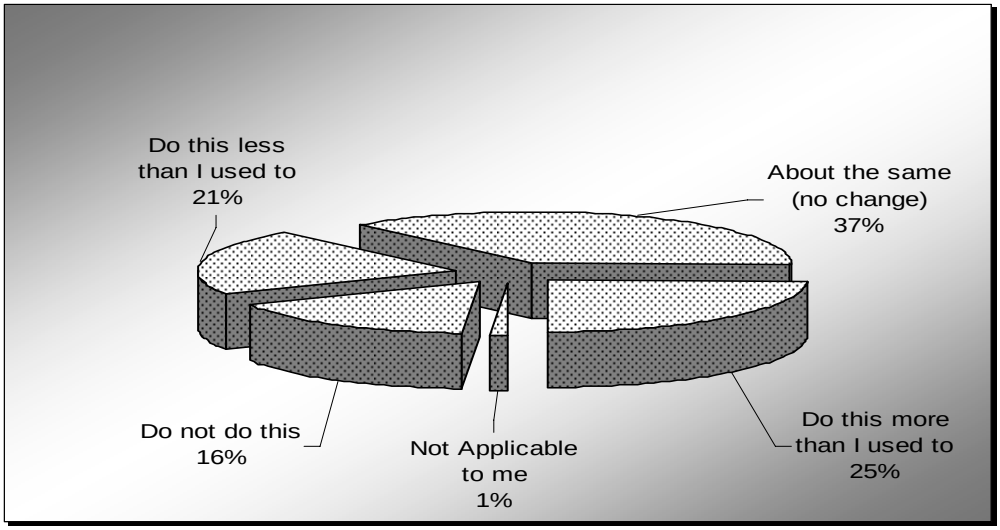

Figure 4:

Frequency of Computer Use Following the Program

In terms of whether teachers are implementing what they have learned in the training, the impact also seems to be somewhat limited. As the data in figure 4 shows, in every

category of activity included in the training, less than 40% of teachers said that they are doing the activity more than before meaning that in almost all categories, the majority of teachers said there was real change following the training. With regards to using technology productivity tools and products for example 42% of teachers said that there was no change following the training and 23% of teachers said that they did this less than they used to.

The two categories where most teachers seem to have made the least change are in using the internet and using technology as a learning tool. In all cases involving the internet as a learning resource or as a learning tool for professional development, less than 25% of teachers said they do this more than they used to and many teachers say that they never do this. In terms of using internet as a learning tool, 39% of teachers said that they never do this. It should be noted that this is not necessarily a weakness of the training program itself, but could be a result of teachers' lack of access to internet, which is discussed later in the report.

The areas where teachers have made the most change seem to be confined to areas where computers are not necessary. This includes collaborating with other teachers where 35% of respondents said they do this more after the training than before; and promoting higher order thinking skills in students with 37% of teachers doing this more after the training than before.

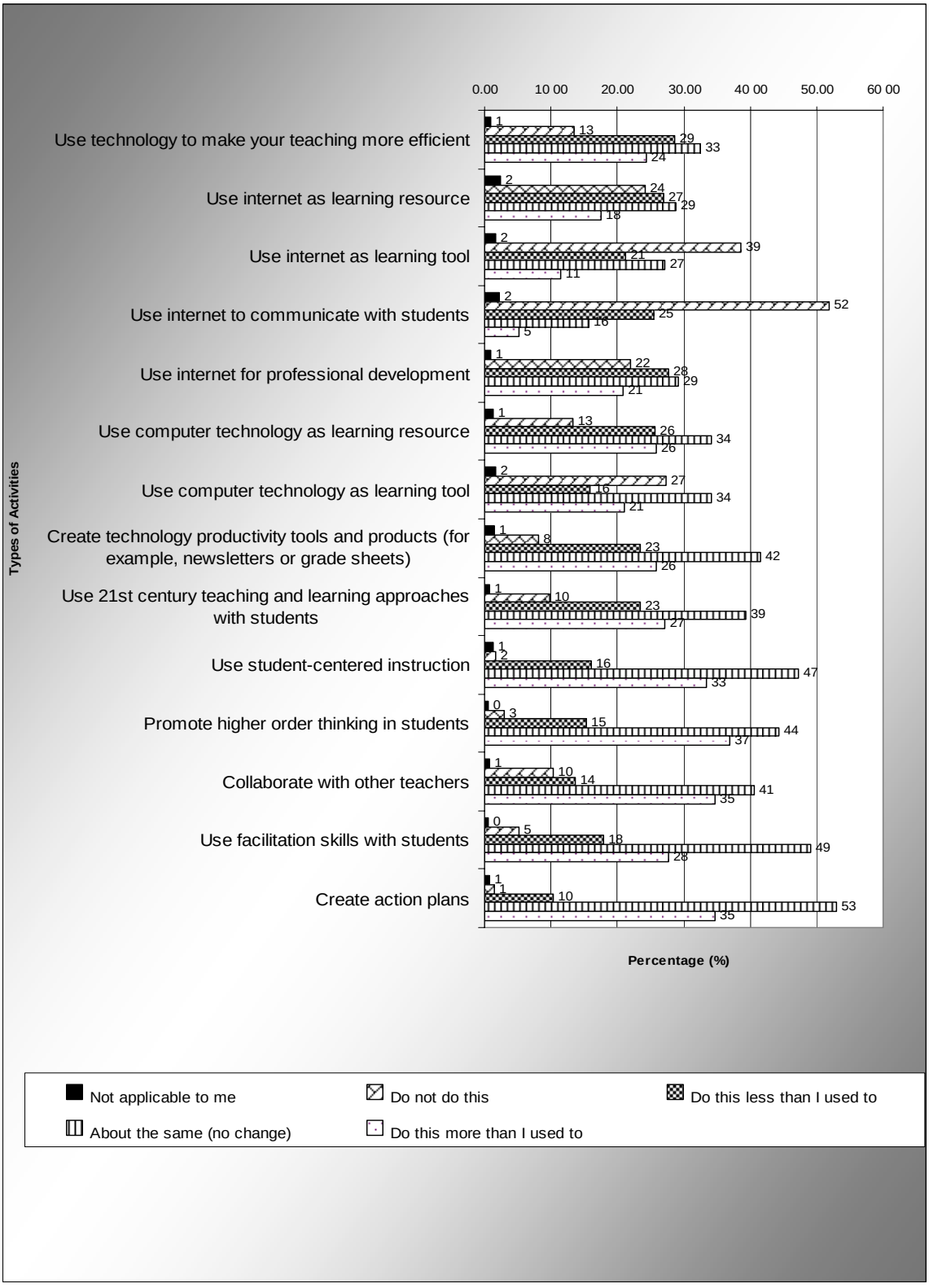

Figure 5:

Activities conducted by teachers following the Training

Use of programs

During the training, teachers learned to use different types of computer programs for different purposes for example creating a lesson plan and creating certificates using a word processing program, creating an instructional learning tool and classroom rules using multimedia program, and creating a class inventory and seating arrangement using spreadsheet program.

The results of the evaluation showed that where as most teachers had improved their technical computer skills, in general progress seemed to be limited to certain programs and following the training, teachers were only really using Microsoft Word.

There is some inconsistency between the mail survey results and the data collected through the case studies. Data from the mail survey suggests that following the training program, the teachers have been using computers to develop a large number of teaching and learning tools with the largest amount being developed with multimedia programs (such as power point) followed by spreadsheet programs (excel) and then word processing (word). However, the case studies revealed that in fact most teachers have made very slow progress in using multimedia programs and primarily use word processing to create teaching and learning materials. The case studies show that teachers have actually been making the productivity tools introduced at the training, but they do not always make them using exactly the same approach and using the same program as introduced in the training and they do not always use the same grouping. For example, at the training the “classroom rules” tool falls within the category of “multimedia program”, while some teachers might produce “classroom rules” using word processing program.

Observation of classroom activities during the case studies also show where ICT based materials were being used in the lesson, only 15.3% of teachers used ICT based teaching

materials they had created and 84.7% used ICT-based teaching materials made by other people. 90% of the ICT-based teaching materials used in class were developed using Microsoft Word.

Impact on Teaching and Learning

Illustration 1:
Biology lesson at SMPN 2 Pangkajene, Pangkep, South Sulawesi

The evaluation found that the training program has had a positive impact on use of computers to support teaching and administrative duties but almost no impact on student learning.

An analysis of the teaching and learning tools most produced by teachers following the training clearly shows the emphasis on the teaching side. As figure 6 illustrates all of the favored tools prepared by teachers following the training are intended to help them to teach, these include tools to help teachers prepare lessons (e.g. developing action plan and weekly lesson planner), help them with administrative duties (e.g. grade books and classroom inventories).

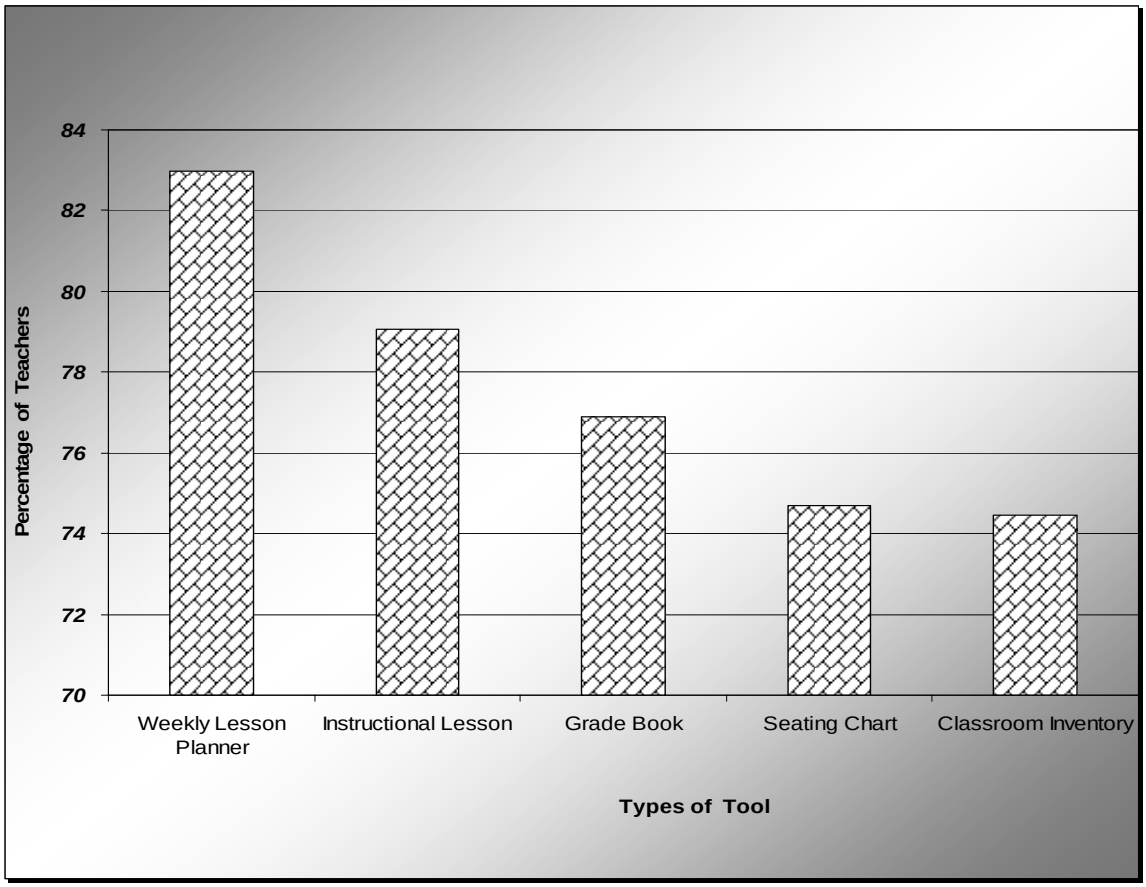

Figure 6:

Most Produced Teaching and Learning Tools

The most common use of the computer to support teaching and learning is to use it to prepare lessons plans. However, for some teachers even this was difficult. At SMPN 6 Binjai, North Sumatra, teachers are not allowed use computers to write their lesson plans (RPP) as the principal is concerned that teachers would copy each other's lesson plan should they be allowed to use computers to write them. Therefore, it is compulsory for teachers to submit lesson plans in written form.

Although most participants (Master Trainers and Participants teachers) agreed strongly with many of the concepts included in the training (see figure 3) very few of them are actively implementing these concepts.

For example, where as 94% of teachers and 97% of Master trainers said that they agreed that they should use ICT as a method for student centered learning in the classroom (see figure 3), from the 26 lessons observed during the case studies, evaluators found only 8% of the teachers used computers in the classroom to support the lesson. Moreover, where computers were being used in the classroom, they were not being used for student centered instruction but for teacher "lecturing" with the teachers using one laptop and a digital projector to present from the front. Some examples are shown in illustrations 1 and 2. In terms of the impact on the teaching and learning process, this has to be considered a negative impact because it is encouraging teachers to lecture from the front, requiring students to sit passively and listen, which is contrary to the active learning approach being promoted by the national government and the DBE3 project.

Illustration 2
Biology lesson at SMPN 1 Gebog, Kudus, Central Java

Evaluators consider it likely that the focus on the use of computers and LCD to present and lecture is a reflection of the training approach used in the Getting Started program. A key approach in any educational training program is to consistently model the content of the training. For example, there is little use in giving a lecture on active learning. To really understand facilitators have to model it and trainees should experience it. Throughout the 4 days of the Getting Started program, teachers are being trained by trainers using a laptop and digital projector. This sends a very clear message to trainees that using a computer to "teach" requires a digital projector.

None of the favored tools included in figure 5 are intended to help students to learn and classroom observation by evaluators confirmed that computers were not being used by students in the classroom to support their learning. When teachers were asked if they were using computers to support learning activities most said that they were. When asked specifically what they were doing, most teachers said that they were '*encouraging*" students to use computer and internet to help them learn and some teachers said that they asked students to complete various assignments by using computers and/or internet but did not provide time and facilities in class. Observation conducted through the case studies however, found that only 4% of teachers actually encouraged students to use computers or the internet.

It is perhaps important to note that direct observations during the case studies were held simultaneously in each school and so for a school with limited number of laptops it would be difficult to use ICT for teaching and learning at the same time in many classrooms.

Dissemination

Master Trainers were selected and trained through the program with the intention of giving them the knowledge and skills to be able to train and support teachers in identified schools to implement the program and also to disseminate the program to other schools and teachers.

As the data in figures 7 shows, Master Trainers were able to further disseminate the program beyond the immediate 20 schools and 395 teachers proving that they had developed not only the knowledge and skills but also the confidence. Only 6% of the Master Trainers did not conduct any dissemination training whereas 94% did. 92% trained other teachers within their own schools and 31% disseminated the training to schools outside of the DBE3-Intel program.

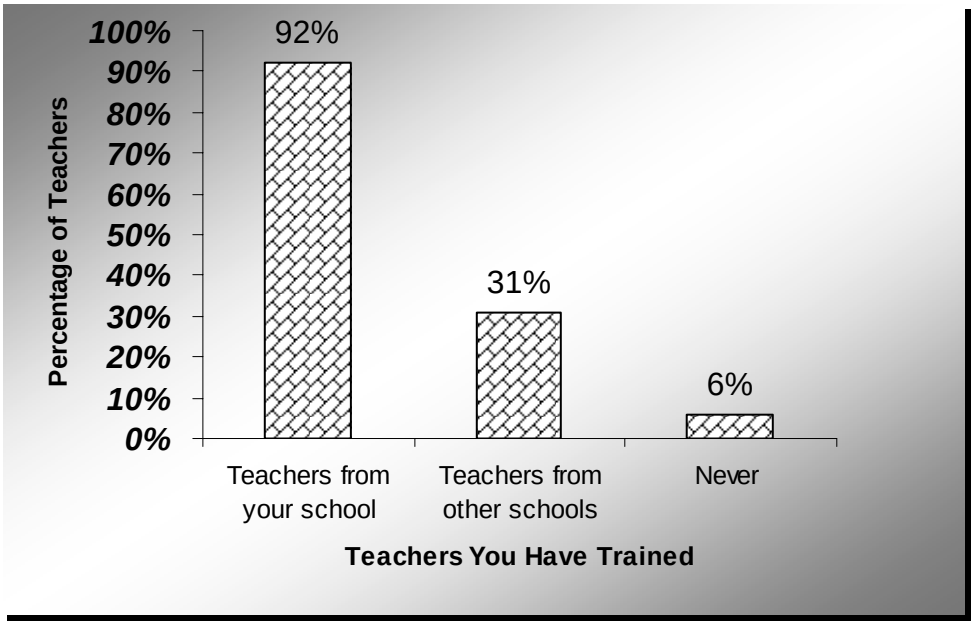

Figure 7:

Master Trainers conducting Dissemination Training following the Program

3.3 Contributing Factors

As has been demonstrated in this report, the majority of participants in the training both MT and PT agree with the concepts introduced in the training but do not always implement them. This is not from lack of motivation on participants' behalf but more as a result of the obstacles they face in schools. The evaluation identified a number of factors which affected the implementation and impact of the program.

The mail survey results (see figure 8) showed that in most participants' opinions, the main challenges facing them following the program were the lack of access to ICT equipment and a lack of confidence.

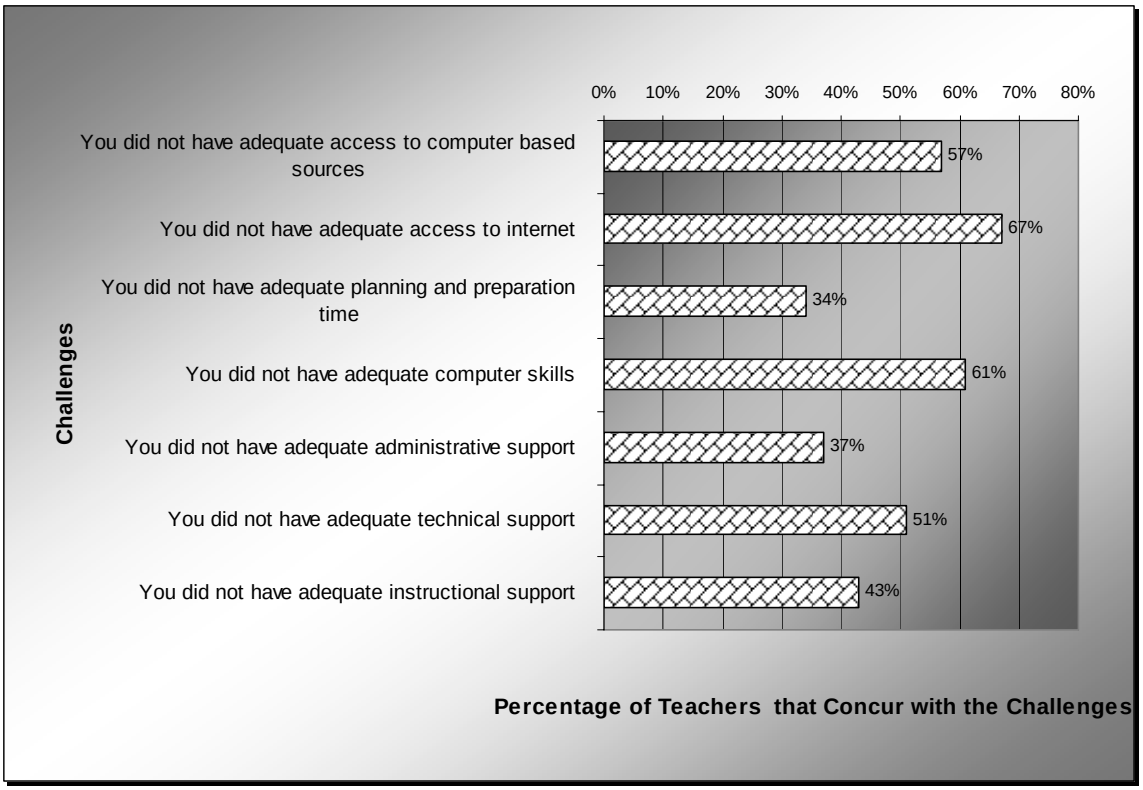

Figure 8:

Challenges to Program Implementation according to Participant Teachers

Lack of Skills

"I am so happy to be able to participate in this ICT training, now I can operate Microsoft Excel, although only for basic functions" a teacher from MTs NU Al Hidayah, Kudus, Central Java.

Even though most teachers improved their computer skills as a result of the training it is interesting to note that many teachers felt their skills did not improve enough to enable them to implement fully the training. 61% of the respondents felt that their lack of computer skills is a challenge to implementing the training. This result was confirmed by participants in the field case studies. There is a natural connection between lack of skills and lack of confidence. Many teachers involved in the focus group discussions confirmed that although they had improved their skills they had not improved sufficiently in order to feel confident enough to use computers on their own. Many teachers said that they were reluctant to use computers because they were afraid that

they would "break" them because they have very limited knowledge and skills about computers and they had so little practice time in the training. They were concerned that computers are expensive and complicated thing that will lead to many complexities and possible punishment if they were broken.

Lack of access

"The training is very useful although we still face challenges in implementing what we have learned due to limited number of ICT equipment especially laptop and projector" a teacher from MTs Darussalam, Pangkep, South Sulawesi.

Another factor contributing to the limited impact of the program was teachers' lack of access to computers. 54% of mail survey respondents identified this as a challenge. When asked what access they did have to computers, 2% of the respondents said that they had no access in schools at all. 98% said that they could access computers in school but they were often located in the computer laboratory, the Science laboratory or in the Principals. This meant that use of computers was limited because the laboratories were being used by students for lessons and extra curricular activities or by the school principal for school management tasks so teachers could not move their students into the computer rooms to use the facilities for general lessons and also meant that teachers were unable to continue to practice and improve their ICT skills and gain more confidence.

Prior to the implementation of the training program, DBE3 had made efforts to increase teachers and students access to computers by procuring and distributing 137 computers and 444 pieces of ICT equipment (including software, UPS and anti virus) to the 20 schools. However, these were mostly desk top computers which were then placed in computer laboratories. During the school visits carried out as part of the case studies, evaluators found that only 92. 3% of the computers provided by the program were still functional. Schools need to take steps to maintain investments in ICT equipment.

The lack of available portable computers in schools (laptops) in schools also explains why only around 8% of teachers observed were able to use computers in the classroom. Following the training, most teachers felt that they need at least two things in order to implement the training properly, namely a laptop and LCD projector, the two things that are very limited in number in their schools. Teachers commented that it was almost impossible to use laptop and LCD projector for daily use, because the number of classrooms and teachers greatly outnumbered the total laptop and LCD projector available in schools.

Mail survey respondents clearly felt that access to internet was even more of a problem with 67% saying that inadequate access to the internet was a challenge to implementing the training. This is interesting as in fact use of the internet is only one part of the training program and implementing the training is not internet dependent.

The lack of confidence and lack of access combined go a long way to explaining why the elements of the program which are most consistently implemented are the non ICT pedagogical skills (such as higher order thinking skills) which were discussed in previous sections.

The results of the discussions during the case studies confirmed the results of the mail survey and but also added a few underlying issues which were not captured in the mail survey.

Overloaded Training

Participants in the focus group discussions commented on the lack of training time as a factor affecting the implementation and outcomes of the training. Participants felt that the allocation of time for the training (4 days) was not enough to ensure that the content was covered sufficiently. Many participants mentioned the difficulties they had in keeping up with the master trainers as they went through the content and because

the agenda was overloaded and trainers had to cover the content they often felt that they did not have the opportunity to practice and master certain skills before moving on with the program.

The consequences of an overloaded content are clearly evidenced through analyzing what teachers have done following the training. Whereas the results of the mail survey suggested that teachers had been developing spreadsheets and presentations using Microsoft Word and Power Point, the field case study evaluation proved that in fact, most teachers are still having difficulties using Microsoft Excel and Power-point and rarely use them. A number of tools that can be developed by Microsoft Excel or Power Point, for example classroom inventory, seating arrangements, grade books and classroom regulations are being done using Microsoft Word. When asked if Excel and Power point were more difficult, most teachers commented that they did not have enough time in the training to develop the skills as they did with word and therefore, are not really able to use them well.

Lack of Technical and Instructional Support

According to the mail survey, less of an inhibiting factor was the lack of technical and instructional support. Only 51% and 43% respectively considered that lack of support was a challenge. However, almost all teachers in the focus group discussions felt differently. Teachers commented to evaluators that only having two master teachers facilitating each teacher training workshop is insufficient. With approximately 20 teachers in workshop it is difficult for only 2 facilitators to provide enough support and guidance to the participants especially with skills ranging from beginners to advanced users. Although some parts of the training are designed to be conducted in pairs and in groups these pairs and groups still require support from facilitators. The limited number of facilitators (master trainers) delivering a practical training can be a strong factors in preventing participants developing sufficient skills in all programs involved in the training - Microsoft Word, Excel and Power Point.

Moreover, many teachers commented on the lack of support following the workshop as one reason they did not implement all of what they had learned. Often teachers said that they wanted to practice some of the things that they had learned in the training but would have liked to ask for advice and guidance from the master trainers, which was not forthcoming. Post workshop elements or on the job training need to be included in the role of the Master Trainers.

Age

The focus group discussions with teachers revealed how age seemed to be factor preventing the full implementation of the training program. As table 3 on page 8 shows, the average age of the participant teachers in the program was 41. These participant teachers, who had already been in-service for a long period of time, commented that although they were motivated by the training workshop, they had difficulties in learning and implementing the new things in their daily teaching practice at their age. In general they considered that the training program may be more suitable to younger teachers who could more easily absorb and implement new learning and were more energetic and motivated.

Role of the Principal

One of the important factors found to support the successful implementation of the training program in schools was the role of the school principals. Evaluators found that in schools where principals were very involved in the program and supportive to the increase of education quality in general and the field of ICT in particular, teachers tended to have much greater spirit in trying to implement what they have learned in the training. More than 60% of Principals of the schools involved in the program were supportive, but this means that 40% were not. Some school principals made special efforts to encourage teachers to implement the training such as in SMPN 1 Gebog, Kudus, Central Java where teachers have been given flash disks for free by their school to support their daily professional activities. In other schools, management regulations

in other schools actively discouraged teachers from using computers for teaching and learning activities such as in the aforementioned MTsN Binjai in North Sumatra.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 General Conclusions

This evaluation concludes with answering the questions posed at the beginning.

- ***What are participants' perceptions of the program?***

The training program is well received by schools and teachers alike. Teachers are enthusiastic to develop their ICT skills and are in agreement with the content of the training program. However, it seems that most teachers have unrealistic expectations for the training program and are disappointed following the training.

- ***To what extent has the training program been implemented?***

The implementation of the training varies. In general, the program has been successful in developing most participating teachers ICT competencies but only 25% use computers more after the training than before. Although the training teaches participants to develop a wide range of teaching and learning tools using a number of different software programs, including Microsoft Word, Excel and Power-point, following the workshop, teachers only seem to use Microsoft Word, participants even use Word to prepare tools that they were trained to develop using other programs. More teachers seem to have made more progress in implementing the pedagogical skills taught through the program (rather than the ICT) skills but despite being in agreement with the concept of student centered learning, very few teachers apply it in their classroom after the training.

- ***What factors affect the implementation of the program?***

There are numerous factors explaining the inconsistent implementation of the program described above. The key inhibiting factors seem to be teachers' lack of access to computers. Although there are computers in 98% of the schools where teachers work, they are not always available for use as they are in areas being used by other teachers

and managers. Many teachers also do not feel confident enough to use computers following the training and would like additional technical and instructional support but this is not readily available from Master Trainers.

- ***What has been the impact of the DBE3-Intel Getting Started Program on the teaching and learning process in the classroom?***

The program has had little impact on the teaching and learning program in the classroom. The program has been somewhat successful in improving teachers use of computers but this seems to be mostly for administrative and management activities but not to support student learning. Whilst there is nothing wrong with teachers using computers to prepare for lessons and manage their time and class better, the ultimate aim of the program was to develop students ICT capability and this is has not occurred as a result of the Getting Started program. Worryingly, where computers are being used in the classroom by participant teachers, they are having a negative impact on student learning as teachers are using them as a tool to "lecture" with which means students have to sit in silence and listen. This is contrary to the wider teacher training program of DBE3 and the National Government which advocates for use of activity based learning approach (PAKEM).

4.2 Recommendations

Because of these findings the evaluators have made 8 recommendations designed to increase the quality of the program and its beneficial impacts.

#	Finding	Recommendation
1	Teachers think that the program is very useful and beneficial and are keen to develop ICT skills but seem to have unreasonable expectations of the outcomes of a 4 day program	At the beginning of the training program, it is important to provide a clear explanation that the training program will not automatically produce teachers with advanced technical

		computer skills in order for participants to have realistic expectations and are not disappointed at the end.
2	The program is successful in improving teachers' computer competencies but only in certain programs. Following the training, teachers only use Microsoft Word to prepare all types of materials. Moreover, teachers tend to use templates provided rather than create their own	Focus the training on Microsoft Word which is the most adaptable and 'friendly program". Remove Microsoft Power Point from the program content as many of the tools produced by Power Point can also be created by Microsoft Word.
3	Only 25% of teachers increase their use of computers following the program. The program has more impact at the school level on pedagogical skills rather than use of ICT the lack of access to computer facilities is seem as the major cause of this.	Ensure that schools have sufficient equipment to support implementation of the training. Procure and distribute laptops which, because they are portable, can more easily be used in the classroom. Involve ICT teachers and Principals in the training to work on scheduling of use of available fixed ICT equipment
4	The content of the training program is overly ambitious; most participants leave knowing a little about many things but have not practiced and developed any skills in depth this results in a continuing lack of confidence	As # 2. Reduce the content and pace of the program to focus on developing specific skills at the end. Decrease "teaching" time and intensify 'application" or practice time. Increase the ratio of Master Trainers to participant teachers to ensure all teachers have adequate instructional support during practice time.

5	The program has been successful in improving teachers use of computers for administrative and management activities but not to support student learning. Where computers are being used in the classroom they are having a negative impact on student learning.	The training focus should change examine how computers can be integrated into lessons in the general curriculum (rather than administrative purposes) and provide teachers with simple, achievable subject specific models to follow and build on, which do not depend on LCD and internet. For example, students typing stories and other forms of writing, preparing presentations following group discussions or to analyze interpret and evaluate results of experiments.
6	Teachers have a limited view of how computers can be used to support learning; understanding is limited to the need for a laptop, LCD and access to internet.	As above but also change the current training delivery approach of the program to model the types of strategies and methods that teachers can use in the classroom
7	Teachers are enthusiastic immediately after the workshop but this motivation fades following the workshop because of the lack of on going instructional and technical support	The program should consider what happens “beyond the workshop” Master Trainers should be organized to provide continued support and mentoring to trained teachers after the workshop to help them continue to develop their skills and to implement what they have learned in the classroom. Emphasis needs to be given to both individual and collective

		mentoring e.g. through school level MGMP or professional development meetings where school ICT teachers, and Master trainers work alongside teacher to develop, implement and review lessons which integrate ICT
8	Schools where principals were involved and supportive tended to have better spirit in trying to implement what they have learned in the training.	Strengthen the Principal's Leadership Forum and provide real examples of what principal can do to support successful implementation. Support principals to develop actionable plans to sustain and grow their investments in computers technologies and connectivity and develop plans for students' use of ICT in the classroom Make it compulsory for principals and ICT teachers to participate in the training.

ANNEX A: PRE QUALIFICATION CRITERIA

Schools must have a facility with at least 10 computers which meet the following specifications

Hardware

- Intel Pentium Processor 200 MZh or above
- Microsoft Windows 2000 (including service pack 2 and Microsoft Paint) operating system or above
- At least 64 MB RAM
- Monitor Resolution 800 X 600
- Internet Connection
- CD Rom Driver
- Internet Browser
- Microsoft Internet Explorer 5

Software

- Adobe Acrobat Reader 7.0
- Microsoft Excel 2000
- Microsoft Word 2000
- Microsoft Powerpoint 2000

Others

Commitment to implement as per the pilot plan of the subsequent PT/MT trainings and actively participate in the activities related to the pilot program.

ANNEX B: SELECTED SCHOOLS AND EQUIPMENT DISTRIBUTED

Province	School	Units				
		Functional Computer	Software (XP licensed & Microsoft Office 2003/2007)	Media Kit Office	UPS	Anti Virus
South Sulawesi	SMPN 2 Pangkajene	0	10	1	10	1
	MTsN Ma'arang	10	10	1	10	1
	MTs Darussalam	9	10	1	10	1
	SMPN 1 Ma'arang	5	10	1	10	1
East Java	SMPN 15 Kenjeran	0	10	1	10	1
	SMPN 31 Kenjeran	10	10	1	10	1
	MTs Nurul Hikmah	10	10	1	10	1
	SMP Daniswara Gubeng	10	10	1	10	1
Central Java	SMPN 1 Gebog Kudus	0	10	1	10	1
	SMPN 1 Kaliwungu Kudus	10	10	1	10	1
	MTsN 1 Kaliwungu Kudus	10	10	1	10	1
	MTS NU Al Hidayah Kudus	10	10	1	10	1
North Sumatra	SMPN 8 Binjai	10	10	1	10	1
	SMPN 6 Binjai	10	10	1	10	1
	SMP Tunas Pelita, Binjai	10	10	1	10	1
	MTsN 1 Binjai	10	10	1	10	1
West Java / Banten	MTsN 1 Tangerang	0	10	1	10	1
	SMPN 4 Tangerang	0	10	1	10	1
	SMP Nusa Putra Banten	10	10	1	10	1
	MTs Darul Irfan Tangerang	3	10	1	10	1
	Total	**137**	**200**	**20**	**200**	**20**

ANNEX C: INTEL® TEACH GETTING STARTED COURSE OUTLINE

Module 1: Developing 21st Century Skills

- Exercise 1: Identifying Essential Skills
- Exercise 2: Comparing Classrooms of Today versus Classrooms of Tomorrow
- Exercise 3: Learning about the Course
- Exercise 4: Introducing Yourself
- Take-Home Exercise- Reflecting on Module 1

Module 2; Learning Computer Basics and the Internet

- Pair and Share: Reflecting on Module 1
- Exercise 1: Naming the Parts and Moving the Mouse
- Exercise 2: Working with Windows
- Exercise 3: Searching the Internet
- Exercise 4: Using the Help Guide
- Take-Home Exercise- Reflecting on Module 2

Module 3: Fostering Critical Thinking and Collaboration

- Pair and Share- Reflecting on Module 2
- Exercise 1: Engaging in Higher-Order Thinking
- Exercise 2: Promoting Collaboration
- Exercise 3: Planning, Doing, Reviewing, and Sharing
- Take-Home Exercise- Reflecting on Module 3

Module 4: Discovering Word Processing

- Pair and Share- Reflecting on Module 3
- Exercise 1: Exploring Word Processing Software
- Exercise 2: Discussing Word Processing Skills
- Exercise 3: Identifying Word Processing Resources
- Exercise 4: Using Word Processing Skills
- Take-Home Exercise- Reflecting on Module 4

Module 5: Applying Word Processing

- Pair and Share- Reflecting on Module 4
- Exercise 1: Creating Word Processing Productivity Tools
- Exercise 2: Being a Critical Friend
- Exercise 3: Showcasing Word Processing Productivity Tools
- Take-Home Exercise- Reflecting on Module 5

Module 6: Discovering Multimedia

- Pair and Share- Reflecting on Module 5

- Exercise 1: Exploring Multimedia Software
- Exercise 2: Discussing Multimedia Skills
- Exercise 3: Identifying Multimedia Resources
- Exercise 4: Using Multimedia Skills
- Take-Home Exercise- Reflecting on Module 6

Module 7: Applying Multimedia

- Pair and Share- Reflecting on Module 6
- Exercise 1: Creating Multimedia Productivity Tools
- Exercise 2: Showcasing Multimedia Productivity Tools
- Take-Home Exercise- Reflecting on Module 7

Module 8: Discovering Spreadsheets

- Pair and Share- Reflecting on Module 7
- Exercise 1: Exploring Spreadsheets Software
- Exercise 2: Discussing Spreadsheets Skills
- Exercise 3: Identifying Spreadsheets Resources
- Exercise 4: Using Spreadsheets Skills
- Take-Home Exercise- Reflecting on Module 8

Module 9: Applying Spreadsheets

- Pair and Share- Reflecting on Module 8
- Exercise 1: Creating Spreadsheets Productivity Tools
- Exercise 2: Showcasing Spreadsheets Productivity Tools
- Take-Home Exercise- Reflecting on Module 9
- Module 9 Summary

Module 10: Developing 21st Century Approaches

- Pair and Share- Reflecting on Module 9
- Exercise 1:Facilitating Learning
- Exercise 2: Accepting Change
- Exercise 3: Promoting Key Skills
- Take-Home Exercise- Reflecting on Module 10
- Module 10 Summary

ANNEX 4

INTEL IMPACT SURVEY

KUESIONER MASTER TEACHER

1. Tanggal Survey	
2. Nama Master Teacher	
3. Jenis Kelamin	1. Laki-laki 2. Perempuan
4. Umur	……. tahun
5. Mata Pelajaran yang diajar	
6. Nama Sekolah	
7. Alamat Sekolah	
8. Kecamatan	
9. Kabupaten	
10. Provinsi	

PETUNJUK :
Untuk pertanyaan-pertanyaan di bawah ini, beri tanda " √ " (contreng) pada kolom/kotak jawaban yang tersedia.

1. Seberapa jauh Anda setuju atau tidak setuju sehubungan dengan pernyataan-pernyataan mengenai proses belajar dan mengajar di bawah ini.

	Pernyataan	Setuju	Tidak Setuju
a)	Saya menerapkan instruksi yang berpusat pada siswa untuk membantu siswa mempersiapkan diri untuk pasar kerja abad ke-21.		
b)	Saya lebih mendorong pemikiran kritis siswa sebagai tujuan utama instruksi ini daripada penguasaan fakta-fakta pembelajaran.		
c)	Saya menerapkan pola pembelajaran tutor sebaya dan kerja kelompok.		
d)	Saya mendorong siswa untuk berpikir kritis melalui proses meninjau kembali dan merevisi hasil kerja mereka.		
e)	Saya menerapkan metode dan pendekatan dalam pembelajaran melalui eksplorasi ide-ide dan materi secara aktif		
f)	Saya memilih dan menetapkan aktivitas siswa yang sesuai dengan tujuan jangka panjang untuk meningkatkan pemahaman dan keterampilan.		
g)	Saya menekankan dan memanfaatkan kelebihan yang dimiliki siswa untuk meningkatkan kemampuan belajar mereka.		
h)	Saya mendorong keaktifan dan penguasaan materi dengan memperhatikan minat siswa.		

2. Setelah Anda mengikuti pelatihan Intel Getting Started, seberapa sering Anda melakukan hal-hal berikut ini :

CATATAN:
Jawaban TIDAK BERLAKU dipilih hanya jika sebelum ikut pelatihan Intel, Anda TIDAK PERNAH melakukan kegiatan yang dimaksud.

	Kegiatan	Tidak berlaku	Tidak melakukan	Melakukan kurang dari biasanya	Melakukan sama dengan biasanya	Melakukan lebih dari biasanya
a)	Memanfaatkan teknologi untuk menciptakan pembelajaran yang lebih efisien					
b)	Memanfaatkan internet sebagai sumber belajar					
c)	Memanfaatkan internet sebagai alat belajar					
d)	Memanfaatkan internet sebagai alat untuk berkomunikasi dengan siswa					
e)	Memanfaatkan internet untuk pengembangan profesionalisme diri					
f)	Menggunakan teknologi komputer sebagai sumber belajar					
g)	Menggunakan teknologi komputer sebagai alat belajar					
h)	Menciptakan sarana produktivitas dan produk-produk teknologi (misalnya, leaflet atau daftar nilai)					

i)	Menggunakan pendekatan abad ke-21 dalam pembelajaran					
j)	Menerapkan instruksi yang berpusat pada siswa					
k)	Mendorong pemikiran tingkat tinggi pada siswa					
l)	Berkolaborasi dengan guru lain dalam pembelajaran					
m)	Menggunakan keterampilan fasilitasi terhadap para siswa					
n)	Menyusun Rencana Kerja (Action Plan)					

3. Pernyataan berikut ini adalah tentang tantangan yang mungkin Anda hadapi pada saat Anda mencoba mengintegrasikan teknologi dalam pembelajaran setelah Anda mengikuti pelatihan Intel Getting Started.

	Pernyataan	Ya	Tidak
a)	Anda tidak memiliki akses yang memadai pada sumber-sumber berbasis komputer		
b)	Anda tidak memiliki akses yang memadai pada internet		
c)	Anda tidak memperoleh perencanaan dan waktu persiapan yang cukup		
d)	Anda tidak memiliki kemampuan komputer yang cukup kuat		
e)	Anda tidak memiliki dukungan administrasi yang memadai		
f)	Anda tidak memiliki dukungan teknis yang memadai		
g)	Anda tidak memiliki dukungan instruksional yang memadai		

h)	Tantangan dan rintangan yang Anda rasakan <u>paling berat</u> adalah : **a - b - c - d - e - f - g** (Lingkari salah satu huruf)
i)	Sebutkan alasannya. Tulis jawaban di bawah ini.

4. Setelah Anda mengikuti pelatihan Intel Getting Started, seberapa bermanfaat produk yang diperkenalkan dalam pelatihan tersebut bagi pekerjaan Anda?

	Produk	Tidak meng-gunakan	Tidak ber-manfaat	Kadang ber-manfaat	Cukup ber-manfaat	Ber-manfaat	Sangat ber-manfaat
1	**Program Word Processing**						
a)	Lembar Asesmen (*Assessment handout*)						
b)	Rencana Pembelajaran Mingguan (*Weekly Lesson Planner*)						
c)	Leaflet (*Newsletter*)						
d)	Diagram						
e)	Sertifikat						
2	**Program Multimedia**						
a)	Gambaran Kurikulum (*Curriculum Preview*)						
b)	Siswa Minggu Ini (*Student of the week*)						
c)	Pelajaran Instruksional (*Instructional Lesson*)						
d)	Peraturan dan Ekspektasi Kelas (*Classroom Rules and Expectations*)						
e)	Buku Tahunan (*Yearbook*)						
3	**Program Spreadsheets**						
a)	Buku Nilai (*Grade Book*)						
b)	Inventaris Kelas (*Classroom Inventory*)						
c)	Denah Tempat Duduk (*Seating Chart*)						
d)	Piktograf (*Pictograph*)						

e)	*Roll Book*						

5. Apakah Anda membuat sendiri berbagai macam produk di bawah ini?

	Produk	Ya	Tidak
1	**Program Word Processing**		
a)	Lembar Asesmen (*Assessment handout*)		
b)	Rencana Pembelajaran Mingguan (*Weekly Lesson Planner*)		
c)	Leaflet (*Newsletter*)		
d)	Diagram		
e)	Sertifikat		
2	**Program Multimedia**		
a)	Gambaran Kurikulum (*Curriculum Preview*)		
b)	Siswa Minggu Ini (*Student of the week*)		
c)	Pelajaran Instruksional (*Instructional Lesson*)		
d)	Peraturan dan Ekspektasi Kelas (*Classroom Rules and Expectations*)		
e)	Buku Tahunan (*Yearbook*)		
3	**Program Spreadsheets**		
a)	Buku Nilai (*Grade Book*)		
b)	Inventaris Kelas (*Classroom Inventory*)		
c)	Denah Tempat Duduk (*Seating Chart*)		
d)	Piktograf (*Pictograph*)		
e)	*Roll Book*		

6. Di mana sajakah di sekolah Anda terdapat akses komputer?

Jawaban boleh lebih dari satu.

- ☐ Tidak ada akses komputer di sekolah saya
- ☐ Ruang kelas
- ☐ Lab. komputer
- ☐ Ruang Kepala Sekolah
- ☐ Lab. IPA
- ☐ Perpustakaan

7. Dimana sajakah di sekolah Anda terdapat akses internet?

Jawaban boleh lebih dari satu.

- ☐ Tidak ada akses internet di sekolah saya
- ☐ Ruang kelas
- ☐ Lab. komputer
- ☐ Ruang Kepala Sekolah
- ☐ Lab. IPA
- ☐ Perpustakaan
- ☐ Kantin

8. Seberapa mudah atau sulitkah untuk menetapkan jadwal di lab. komputer/media-center?

- ☐ Sangat sulit
- ☐ Sulit
- ☐ Mudah
- ☐ Sangat mudah
- ☐ Tidak tahu

9. Sudah berapa tahun Anda mengajar?

- ☐ < 3 tahun
- ☐ 3 – 9 tahun
- ☐ 10 – 20 tahun
- ☐ > 20 tahun

10. Menurut Anda, **SEBELUM** mengikuti Pelatihan Intel Getting Started, tingkat pengalaman Anda menggunakan teknologi (komputer) dalam pembelajaran adalah:

- ☐ **Expert User**: Anda sangat tergantung pada teknologi komputer sehari-hari dalam banyak aspek pekerjaan sebagai guru.
- ☐ **Advanced User**: Anda sering menggunakan teknologi komputer dalam bekerja sebagai guru.
- ☐ **Intermediate User**: Anda telah menggunakan teknologi komputer dalam beberapa pekerjaan sebagai guru.
- ☐ **Novice User**: Anda telah menggunakan teknologi komputer beberapa kali, tapi tidak untuk pekerjaan sebagai guru.
- ☐ **Never Used**: Anda tidak pernah menggunakan teknologi komputer sebelum mengikuti kursus Intel.

11. Menurut Anda, **SETELAH** mengikuti Pelatihan Intel Getting Started, tingkat pengalaman Anda menggunakan teknologi (komputer) dalam pembelajaran adalah:

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- ☐ **Novice User**: Anda telah menggunakan teknologi komputer beberapa kali, tapi tidak untuk pekerjaan sebagai guru.

☐ **Never Used**: Anda tidak pernah menggunakan teknologi komputer setelah mengikuti kursus Intel.

12. Sebagai tindak lanjut dari Pelatihan Intel, Anda telah melatih:
Jawaban boleh lebih dari satu.

☐ guru-guru dari sekolah Anda → **LANJUTKAN KE NO.13**
☐ guru-guru dari sekolah lain → **LANJUTKAN KE NO.13**
☐ tidak pernah melatih sama sekali → **SELESAI**

13. Berapa jumlah guru yang pernah Anda latih?

☐ 1 – 10 orang
☐ 11 – 20 orang
☐ 21 -30 orang
☐ 31 – 40 orang
☐ > 40 orang

Terima kasih kami ucapkan atas kesediaan dan kerja sama Anda dalam mengisi kuesioner ini.

ANNEX 5

INTEL IMPACT SURVEY

KUESIONER PARTICIPANT TEACHER

1. Tanggal Survey	
2. Nama Participant Teacher	
3. Jenis Kelamin	1. Laki-laki 2. Perempuan
4. Umur	……. tahun
5. Mata Pelajaran yang diajar	
6. Nama Sekolah	
7. Alamat Sekolah	
8. Kecamatan	
9. Kabupaten	
10. Provinsi	

PETUNJUK :
Untuk pertanyaan-pertanyaan di bawah ini, beri tanda " √ " (contreng) pada kolom/kotak jawaban yang tersedia.

1. Seberapa jauh Anda setuju atau tidak setuju sehubungan dengan pernyataan-pernyataan mengenai proses belajar dan mengajar di bawah ini.

	Pernyataan	Setuju	Tidak Setuju
a)	Saya menerapkan instruksi yang berpusat pada siswa untuk membantu siswa mempersiapkan diri untuk pasar kerja abad ke-21.		
b)	Saya lebih mendorong pemikiran kritis siswa sebagai tujuan utama instruksi ini daripada penguasaan fakta-fakta pembelajaran.		
c)	Saya menerapkan pola pembelajaran tutor sebaya dan kerja kelompok.		
d)	Saya mendorong siswa untuk berpikir kritis melalui proses meninjau kembali dan merevisi hasil kerja mereka.		
e)	Saya menerapkan metode dan pendekatan dalam pembelajaran melalui eksplorasi ide-ide dan materi secara aktif		
f)	Saya memilih dan menetapkan aktivitas siswa yang sesuai dengan tujuan jangka panjang untuk meningkatkan pemahaman dan keterampilan.		
g)	Saya menekankan dan memanfaatkan kelebihan yang dimiliki siswa untuk meningkatkan kemampuan belajar mereka.		
h)	Saya mendorong keaktifan dan penguasaan materi dengan memperhatikan minat siswa.		

2. Setelah Anda mengikuti pelatihan Intel Getting Started, seberapa sering Anda melakukan hal-hal berikut ini :

CATATAN:
Jawaban TIDAK BERLAKU dipilih hanya jika sebelum ikut pelatihan Intel, Anda TIDAK PERNAH melakukan kegiatan yang dimaksud.

	Kegiatan	Tidak berlaku	Tidak melakukan	Melakukan kurang dari biasanya	Melakukan sama dengan biasanya	Melakukan lebih dari biasanya
a)	Memanfaatkan teknologi untuk menciptakan pembelajaran yang lebih efisien					
b)	Memanfaatkan internet sebagai sumber belajar					
c)	Memanfaatkan internet sebagai alat belajar					
d)	Memanfaatkan internet sebagai alat untuk berkomunikasi dengan siswa					
e)	Memanfaatkan internet untuk pengembangan profesionalisme diri					
f)	Menggunakan teknologi komputer sebagai sumber belajar					
g)	Menggunakan teknologi komputer sebagai alat belajar					
h)	Menciptakan sarana produktivitas dan produk-produk teknologi (misalnya, leaflet atau daftar nilai)					
i)	Menggunakan pendekatan abad ke-21 dalam pembelajaran					

j)	Menerapkan instruksi yang berpusat pada siswa					
k)	Mendorong pemikiran tingkat tinggi pada siswa					
l)	Berkolaborasi dengan guru lain dalam pembelajaran					
m)	Menggunakan keterampilan fasilitasi terhadap para siswa					
n)	Menyusun Rencana Kerja (Action Plan)					

3. Pernyataan berikut ini adalah tentang tantangan yang mungkin Anda hadapi pada saat Anda mencoba mengintegrasikan teknologi dalam pembelajaran setelah Anda mengikuti pelatihan Intel Getting Started.

	Pernyataan	Ya	Tidak
a)	Anda tidak memiliki akses yang memadai pada sumber-sumber berbasis komputer		
b)	Anda tidak memiliki akses yang memadai pada internet		
c)	Anda tidak memperoleh perencanaan dan waktu persiapan yang cukup		
d)	Anda tidak memiliki kemampuan komputer yang cukup kuat		
e)	Anda tidak memiliki dukungan administrasi yang memadai		
f)	Anda tidak memiliki dukungan teknis yang memadai		
g)	Anda tidak memiliki dukungan instruksional yang memadai		
h)	Tantangan dan rintangan yang Anda rasakan <u>paling berat</u> adalah : **a - b - c - d - e - f - g** (Lingkari salah satu huruf)		

i)	Sebutkan alasannya. Tulis jawaban di bawah ini.

4. Setelah Anda mengikuti pelatihan Intel Getting Started, seberapa bermanfaat produk yang diperkenalkan dalam pelatihan tersebut bagi pekerjaan Anda?

	Produk	Tidak meng-gunakan	Tidak ber-manfaat	Kadang ber-manfaat	Cukup ber-manfaat	Sangat ber-manfaat	Sangat ber-manfaat sekali
1	**Program Word Processing**						
a)	Lembar Asesmen (*Assessment handout*)						
b)	Rencana Pembelajaran Mingguan (*Weekly Lesson Planner*)						
c)	Leaflet (*Newsletter*)						
d)	Diagram						
e)	Sertifikat						
2	**Program Multimedia**						
a)	Gambaran Kurikulum (*Curriculum Preview*)						
b)	Siswa Minggu Ini (*Student of the week*)						
c)	Pelajaran Instruksional (*Instructional Lesson*)						
d)	Peraturan dan Ekspektasi Kelas (*Classroom Rules and Expectations*)						
e)	Buku Tahunan (*Yearbook*)						
3	**Program Spreadsheets**						
a)	Buku Nilai (*Grade Book*)						
b)	Inventaris Kelas (*Classroom Inventory*)						
c)	Denah Tempat Duduk (*Seating Chart*)						
d)	Piktograf (*Pictograph*)						

e)	*Roll Book*						

5. Apakah Anda membuat sendiri berbagai macam produk di bawah ini?

	Produk	Ya	Tidak
1	**Program Word Processing**		
a)	Lembar Asesmen (*Assessment handout*)		
b)	Rencana Pembelajaran Mingguan (*Weekly Lesson Planner*)		
c)	Leaflet (*Newsletter*)		
d)	Diagram		
e)	Sertifikat		
2	**Program Multimedia**		
a)	Gambaran Kurikulum (*Curriculum Preview*)		
b)	Siswa Minggu Ini (*Student of the week*)		
c)	Pelajaran Instruksional (*Instructional Lesson*)		
d)	Peraturan dan Ekspektasi Kelas (*Classroom Rules and Expectations*)		
e)	Buku Tahunan (*Yearbook*)		
3	**Program Spreadsheets**		
a)	Buku Nilai (*Grade Book*)		
b)	Inventaris Kelas (*Classroom Inventory*)		
c)	Denah Tempat Duduk (*Seating Chart*)		
d)	Piktograf (*Pictograph*)		
e)	*Roll Book*		

6. Di mana sajakah di sekolah Anda terdapat akses komputer?

Jawaban boleh lebih dari satu.

- ☐ Tidak ada akses komputer di sekolah saya
- ☐ Ruang kelas
- ☐ Lab. komputer
- ☐ Ruang Kepala Sekolah
- ☐ Lab. IPA
- ☐ Perpustakaan

7. Dimana sajakah di sekolah Anda terdapat akses internet?

Jawaban boleh lebih dari satu.

- ☐ Tidak ada akses internet di sekolah saya
- ☐ Ruang kelas
- ☐ Lab. komputer
- ☐ Ruang Kepala Sekolah
- ☐ Lab. IPA
- ☐ Perpustakaan
- ☐ Kantin

8. Seberapa mudah atau sulitkah untuk menetapkan jadwal di lab. komputer/media-center?

- ☐ Sangat sulit
- ☐ Sulit
- ☐ Mudah
- ☐ Sangat mudah
- ☐ Tidak tahu

9. Sudah berapa tahun Anda mengajar?

- ☐ < 3 tahun
- ☐ 3 – 9 tahun
- ☐ 10 – 20 tahun
- ☐ > 20 tahun

10. Menurut Anda, **SEBELUM** mengikuti Pelatihan Intel Getting Started, tingkat pengalaman Anda menggunakan teknologi (komputer) dalam pembelajaran adalah:

- ☐ **Expert User**: Anda sangat tergantung pada teknologi komputer sehari-hari dalam banyak aspek pekerjaan sebagai guru.
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11. Menurut Anda, **SETELAH** mengikuti Pelatihan Intel Getting Started, tingkat pengalaman Anda menggunakan teknologi (komputer) dalam pembelajaran adalah:

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ANNEX 6

INTEL IMPACT SURVEY

KUESIONER KEPALA SEKOLAH

1. Tanggal Wawancara	
2. Pewawancara	

IDENTITAS

1. Nama Responden	
2. Jenis Kelamin	☐ Laki-laki ☐ Perempuan
3. Umur	☐☐ tahun
4. Jabatan	
5. Nama Sekolah	
6. Alamat Sekolah	
7. Kecamatan	
8. Kabupaten	
9. Provinsi	

PETUNJUK :
Untuk pertanyaan-pertanyaan di bawah ini, lingkari kode jawaban yang sesuai atau tulis jawaban pada tempat yang tersedia.

1. Apakah Bapak/Ibu menggunakan komputer atau peralatan TIK dalam pekerjaan sehari-hari di sekolah?
   1. Ya
   2. Tidak

2. Apakah Bapak/Ibu menggunakan komputer atau peralatan TIK juga di rumah?
   1. Ya
   2. Tidak

3. Bagaimana pendapat Bapak/Ibu tentang peranan Teknologi Informasi dan Komunikasi (TIK) dalam kegiatan pembelajaran di sekolah ini?
   1. Sangat penting
   2. Penting
   3. Kurang penting
   4. Tidak penting

4. Menurut Bapak/Ibu, apakah penggunaan TIK di sekolah dapat meningkatkan produktivitas guru atau staf lainnya di sekolah ini?
   1. Ya
   2. Tidak

5. Sejak kapan sekolah ini mulai menggunakan TIK dalam kegiatan pembelajaran?
   Tahun ……

6. Menurut Bapak/Ibu, bagaimana antusiasme guru-guru di sekolah ini mengikuti pelatihan Intel?
   1. Sangat antusias

2. Antusias
3. Kurang antusias
4. Tidak antusias

7. Apakah Bapak/Ibu mendorong guru-guru untuk mengikuti pelatihan Intel atau pelatihan sejenis?
   1. Ya
   2. Tidak

8. Apa bentuk dukungan yang Bapak/Ibu atau sekolah berikan terhadap guru-guru untuk mengikuti pelatihan Intel/TIK?
   1. Pemberian ijin
   2. Pemberian fasilitas
   3. Pemberian dana
   4. Semua 1, 2, dan 3
9. Apakah sekolah mempunyai program peningkatan kapasitas guru khususnya dalam hal penguasaan TIK untuk pembelajaran?
   1. Ya → **KE NO. 10**
   2. Tidak → **KE NO. 11**

10. Jika 'ya', apa bentuknya? Sebutkan!

LANJUTKAN KE NO. 12

11. Jika 'tidak' mengapa? Sebutkan alasannya!

12. Sekolah Bapak/Ibu telah menerima bantuan komputer dari DBE3. Bagaiman kondisi komputer-komputer tersebut sekarang?
    1. Semua baik
    2. Sedikit (kurang dari separuh) yang rusak dan tidak bisa dipakai
    3. Sebagian besar (separuh atau lebih) rusak dan tidak bisa dipakai
    4. Semua rusak

13. Jika ada komputer yang rusak, langkah perbaikan apa yang Bapak/Ibu ambil?
    1. Diperbaiki sendiri oleh staf sekolah, bila kerusakannya ringan
    2. Dibawa ke tempat service, bila kerusakannya parah
    3. Tidak diperbaiki karena tidak ada biaya

14. Apakah sekolah memiliki atau mengalokasikan anggaran khusus untuk perawatan/perbaikan/pembelian peralatan TIK?
    1. Ya
    2. Tidak

15. Apakah sekolah melakukan diseminasi internal atas pelatihan Intel sehingga semua guru mendapatkan pelatihan TIK yang sama?
    1. Ya → **KE NO. 16**
    2. Tidak → **KE NO. 17**

16. Jika 'ya' sudah berapa kali dilakukan?

LANJUTKAN KE NO.18

17. Jika 'tidak', mengapa? Sebutkan alasannya!

18. Apakah sekolah melakukan diseminasi eksternal atas pelatihan Intel sehingga guru-guru sekolah lain mendapatkan pelatihan TIK yang sama?
    1. Ya
    2. Tidak

19. Sekolah ini telah menerima bantuan 10 perangkat komputer dari DBE3 untuk mengimplementasikan pelatihan Intel yang diikuti oleh para guru.

    a. Digunakan untuk apa saja komputer-komputer tersebut?

    b. Digunakan oleh siapa saja komputer-komputer tersebut?

Terima kasih kami ucapkan atas informasi yang telah Bapak/Ibu berikan.

ANNEX 7

INTEL IMPACT SURVEY

LEMBAR OBSERVASI GURU

IDENTITAS

1. Tanggal Observasi	
2. Nama Guru	
3. Jenis Kelamin	☐ Laki-laki ☐ Perempuan
4. Umur	☐☐ tahun
5. Mata Pelajaran	
6. Nama Sekolah	
7. Alamat Sekolah	
8. Kecamatan	
9. Kabupaten	
10. Provinsi	

1.	Proses Belajar Mengajar	Ya	Tidak	Keterangan			
a.	Guru memanfaatkan komputer hanya untuk mengajar						
b.	Guru mendorong siswa memanfaatkan komputer untuk belajar						
c.	Guru memanfaatkan internet sebagai salah satu sumber belajar						
				Perangkat Lunak yang Digunakan			
				MS Word	MS Excel	MS Power Point	Lain-lain (Tuliskan)
d.	Guru memanfaatkan bahan ajar berbasis TIK buatan sendiri						
e.	Guru memanfaatkan bahan ajar yang bukan buatan sendiri						

Catatan:

	Nama	Tanda tangan
Observer		

ANNEX 8

INTEL IMPACT SURVEY

LEMBAR OBSERVASI
LABORATORIUM KOMPUTER

IDENTITAS

1. Tanggal Observasi	
2. Nama Laboran	
3. Jenis Kelamin	☐ Laki-laki ☐ Perempuan
4. Umur	☐☐ tahun
5. Nama Sekolah	
6. Alamat Sekolah	
7. Kecamatan	
8. Kabupaten	
9. Provinsi	

No	Objek Observasi	Hasil Observasi		
1.	Jumlah Komputer	☐☐ unit		
2.	Kondisi Komputer	Baik : ☐☐ unit	Rusak: ☐☐ unit	
3.	Daya Listrik, Tegangan	☐☐☐☐ Watt	☐☐☐	
4.	Stabilizer	☐ Ada	☐ Tidak ada	
5.	UPS (Uninterrupted Power Supply)	☐ Ada	☐ Tidak ada	
6.	Printer	☐ Ada	☐ Tidak ada	
7.	Ketersediaan software Antivirus	☐ Ada	☐ Tidak ada	
8.	Jaringan Internet Memadai	☐ Ya	☐ Tidak	
		Ya	Tidak	Dokumentasi
9.	Ada Pemeliharaan/Perawatan computer secara rutin	☐	☐	
10.	Penanggung jawab Laboratorium Berlatar belakang TI	☐	☐	
11.	Ada Log book/form administrasi	☐	☐	
12.	Ada Jadwal Penggunaan Laboratorium	☐	☐	
13.	Ada Peraturan Laboratorium	☐	☐	
14.	Jaringan Internet Memadai	☐	☐	Bandwidth : ……. kbps

Catatan:		
	Nama	Tanda tangan
Observer		
Laboran		