



## Case Study

**King Edward VII (1)  
Primary School  
Taiping, Perak,  
Malaysia**

Intel® Teach Program



“ KEPS VII (1)’s success story had stemmed from teachers, school administration, pupils, parents, government education department, and Intel. Each has their part to play. If one does not cooperate, things will not turn out as expected. Cooperation from all these parties has led to the success of Intel 1 : 1 e-Learning program in KEPS VII (1).  
I am very grateful ”

Abdul Habib bin Alapitchay  
Headmaster  
King Edward VII (1) Primary School

# The Right Chemistry For Success

Nurturing essential 21<sup>st</sup> century digital skills for the workforce of tomorrow, the Ministry of Education Malaysia (MOE) in collaboration with Intel Malaysia launched the School Adoption project: 1 : 1 e-Learning on April 24, 2007<sup>1</sup>. One of the pilot schools that shone in the project was King Edward VII (1) Primary School (KEPS VII(1)) in Taiping, Perak. Their accomplishment was hallmarked when Ustazah<sup>2</sup> Fatimah Mamat, an Islamic Studies teacher and the school’s Intel coordinator, together with three pupils were put on stage at the 16<sup>th</sup> World Congress on Information Technology (WCIT) on May 19, 2008 in Kuala Lumpur, Malaysia to personally share their daily use of Intel-powered Classmate PC (CMPC) experiences with the Intel Chairman himself, Dr Craig Barrett<sup>3</sup>.

## Challenges

- Faced limited supply of CMPCs and ICT infrastructure with increasing demand from parents and pupils to enter the MOE-Intel 1:1 e-Learning class.
- Lack of knowledge, confidence and competency on ICT skills among teachers in facing pupils who are more IT savvy.
- Logistic and technical support problem and the reluctance of teachers to increase the integration of ICT and 21<sup>st</sup> century essential learning skills in all subjects.

## Approach

- Set criteria in the selection of pupils for the MOE-Intel 1:1 e-Learning class.
- Improve all teachers’ abilities to use innovative pedagogies and emerging technologies in the integration of ICT and 21<sup>st</sup> century essential learning skills into all subjects.
- Inclusion of CMPCs usage into time-table and management of CMPCs for uninterrupted daily usage.

## Benefits

- Pupils become more motivated, confident and independent as they engaged in meaningful learning while acquiring more knowledge and being exposed to outside world.
- The teachers’ and pupils’ creative integration of ICT and 21<sup>st</sup> century skills in learning have gained recognition and awards from district to international level.
- Increase in teacher-pupils interaction in learning and more efficient time management.

<sup>1</sup> At the initial phase, Intel Malaysia donated CMPCs to 10 classrooms in pilot schools in 10 states.

<sup>2</sup> Ustazah is a name given to a female Islamic religious teacher.

<sup>3</sup> <http://elearn.moe.edu.my>. MOE- Intel School Adoption Project 1:1 e-Learning.



# From Didactic To Digital Learning In Islamic Studies

## From Didactic To Digital Learning In Islamic Studies

Undaunted and committed. Despite “everyone’s thinking that an Ustadzah does not know how to use ICT in Islamic Studies”, Fatimah has successfully overcome the formidable task of changing the mindset of the teachers. She has imbued them the knowledge to integrate ICT and 21<sup>st</sup> century essential learning skills in their subjects as well as in her own Islamic Studies. Unperturbed by deeply rooted didactic teaching style in Islamic Studies and the scarcity of digitized teaching materials, she strongly believes that it is not impossible. “If you don’t want to accept ICT, to open and see, you will not get anything. As educators, we are aware that our pupils will be facing with something more modern and new. If we are not prepared ourselves, how are we going to teach them? It would even be more difficult to help them. They will be left behind especially in this era, full of modern technology.”

It all started two years ago, when she was asked for assistance to prepare slides and unit plans by the school’s former Intel Teach coordinator. Armed with some ICT knowledge gained during her university days, she was more than happy to assist as “I am really interested in ICT and I take the initiative to follow any ICT events and look for opportunities to learn more.” Her zest led her to be selected for the Intel Teach Essential Course version 10. Not long after, Fatimah took over the role of Intel Teach coordinator in September 2007 when her predecessor was transferred to another school.

Fatimah was further inspired when she could reap the many benefits of integrating ICT using the CMPC in teaching Islamic Studies. She was able to make learning more meaningful and time efficient. “When Muslims

want to recite the al-Quran<sup>4</sup>, we have to perform *wuduk*<sup>5</sup>. When asked to do so, these boys(10 year-olds) would run all over the place. It was hard to control them. Instead, I asked them to do an online Quran recitation and this surprisingly saved a lot of time.” She claims that by having individual CMPC, it reduced pupils’ need to share with others, and at the same time increased teacher-pupil interaction and “they become more independent and ICT savvy.” However, she laments the different levels of ICT skills among pupils demands more effort and time in planning the lessons. It requires “a lot of patience” and personal sacrifices in terms of time and money to do research. For example, “when I teach al-Quran, I cannot refer to any website. I have to certify its authenticity first.” The lack of suitable information on the online learning portal (Zoom A<sup>6</sup>) that the school was using prompted her in developing her own teaching contents on al-Quran, using the knowledge and skills she gained from Intel Teach module.

On one hand she felt highly stressful and shocked but on the other deeply honored, when asked to represent the schools in Malaysia at WCIT. The world wanted to know the uniqueness of her effort in integrating Intel Teach into her Islamic Studies lessons. “I found it hard, having to train the pupils.” Since then, she was overwhelmed by “many pupils who are eager to show their capabilities in the hope being selected in the future.” Despite the limelight, she modestly claims that from her personal experience, “Intel Teach Program is very easy. Do not be afraid and as Dr Craig said, ‘Computer is just a tool’ .”

## Smart Partnership Makes KEPS VII (1) Smarter

In tandem with the need for a knowledgeable, skilled and innovative human capital to drive a



“... for me, ICT can be integrated in all subjects, it is a matter of attitude. . . If possible, I want my pupils to be content developers and not only content users.”

Fatimah Mamat  
Islamic Studies Teacher  
King Edward VII (1) Primary School

### King Edward VII (1) Primary School Taiping, Perak, Malaysia

Established in 1883, it was first named “Central School”. It was the first English school in Malaysia and took the present name in 1905. It is an all-boys national school located in the heart of Taiping, Perak, Malaysia. Currently, the school has 853 pupils, 54 teachers and 26 classrooms. The school motto is Magni Nominis Umbra, meaning, “Greater than before”.



knowledge-based economy<sup>7</sup> as espoused in the Ninth Malaysia Plan, the Ministry of Education (MOE) launched the National Education Blueprint, 2006-2010 in January 2007<sup>8</sup>. It recommends the need to intensify efforts in the provision of ICT facilities and infrastructure to schools, review the existing school curriculum, and increase the teaching and utilisation of ICT in schools, teacher education and institutions of higher learning.

The Honorable Minister of Education, Datuk Seri Hishammuddin bin Tun Hussein acknowledged that the cooperation of agencies outside the Ministry of Education forms the "critical success factor in the National Education Blueprint". The one smart partnership between MOE and Intel Malaysia through the Intel Teach Essential Course<sup>9</sup> has bridged the digital gap between how to use ICT and create meaningful learning for both teachers and students<sup>10</sup>.



"In books, pupils get minimal ideas. They could develop their own ideas, but they may be afraid of Internet. However, KEPS VII (1) is dedicated to train pupils right from the early years. We want pupils from KEPS VII (1) to be Internet savvy when they leave us."

Abdul Habib bin Alapitchay  
Headmaster  
King Edward VII (I) Primary School

Another significant step in creating knowledge workers to drive Malaysian economy forward in the age of information is the Smart Partnership Program towards Making All Schools Smart<sup>11</sup>. One of the initiatives under this programme is the MOE-Intel School Adoption Project, which is a part of the Intel World Ahead Program. Preliminary results on the project show that learning has become more collaborative and connected to the outside world and that the CMPCs provide teachers and pupils the freedom to access information and resources beyond the textbooks<sup>12</sup>.

### 1:1 e-Learning: A Viable Innovation For Meaningful Learning

As one of the three primary schools selected for the pilot Intel School Adoption project, the headmaster, Abdul Habib bin Alapitchay found that the project has boosted the school's image. Many parents clamored each year to register their child in the school and pupils were competing to enter the 1:1 e-Learning class. However, in order not to deprive other pupils of ICT in learning, two computer laboratories were made available to them. At the inception of the project, the school's ICT was not in "tip-top"

condition but "we never sit and wait. We always think positive and do positive things". Proactively, the school planned scheduled maintenance services to enjoy continuous learning process without interruptions. Classroom timetable was meticulously planned to avoid clashes in CMPC usage while expanding integration to all subjects.

On a separate occasion, when pupils in the e-Learning class were asked on what they think of using CMPCs, they candidly responded "it's cool", "like it very much", "allow me to use the Internet" and "learn many things". In Fatimah's considered opinion, 1:1 e-Learning provided her "a new dimension for better education."

When the Intel Education was introduced, it made many teachers uncomfortable. The lack of ICT knowledge and competency became the main obstacle in the initial implementation of Intel 1:1 e-Learning. According to the headmaster, the integration of ICT in classroom would require "teachers' cooperation" and in order to motivate the reluctant teachers, he convinced them that "Intel had provided us with the materials and learning modules so we have nothing to lose".

The less ICT savvy teachers were assisted by the buddy support system. Whenever possible, Fatimah spared her time to attend classes with the teachers and provided on-spot guidance and solutions. Fatimah through her own effort translated selected Intel Teach modules into simple Bahasa Malaysia reference manuals so as to lessen the burden of the teachers and increase their receptivity to integrate Intel Teach modules in their lessons. She said, "I share my ICT knowledge with them a little bit at a time, something like retailing, to show the teachers that Intel Teach is actually very easy."

Rashidah, a Bahasa Malaysia (national language of Malaysia) teacher, commented that it was mentally challenging to face the pupils who were more advanced and ICT savvy than her. However with constant support from the school and coupled with her own "we must always be

<sup>4</sup> Al-Quran is Holy Scripture of Islam.

<sup>5</sup> *Wuduk* means to wash oneself before prayer and reciting the Holy Quran. Online Quran recitation does not require a Muslim to perform *wuduk*.

<sup>6</sup> Zoom A is an interactive learning through internet. See <http://www.zoom-a.com>

<sup>7</sup> Malaysia. (2006). *Ninth Malaysia Plan 2006-2010*. Kuala Lumpur: Perancangan Nasional Malaysia Berhad.

<sup>8</sup> Ministry of Education. (2007). *Educational Development Master Plan, 2006-2010*. Kuala Lumpur: Educational Planning and Research Development.

<sup>9</sup> <http://anyconnection.com/intelteach>

<sup>10</sup> Chang Lee Hoon, Siow Heng Loke, Lee Siew Eng (2007). Evaluation of Intel<sup>®</sup> Teach programme in Malaysia teacher education institution 2007: Uncovering the best known model of implementation. University of Malaya. Report for Intel MCS Sdn. Bhd;

<sup>11</sup> <http://elearn.moe.edu.my>. MOE-Intel School Adoption Project 1:1 e-Learning.

<sup>12</sup> Project Report MOE-Intel School Adoption Project Phase 1. Ministry of Education and Intel Malaysia in <http://anyconnection.com/intelteach>.

in the know" attitude, she managed to overcome her fear. "After Intel Teach, I know how to operate the program (PowerPoint\* and Words\*) better". and "now I know what Movie Maker\* is and I even used it for my *Anak Perak*<sup>13</sup> project with guidance from Fatimah." said Rashidah. The advantages of Intel Teach Program were also experienced by Zuraini Akmar bt Dato' Hj Zailani and Ariffin bin Taib. According to Zuraini, a Civic and Citizenship teacher it had increased her ICT knowledge and interest. Ariffin, a Mathematics teacher claimed that the program had made teachers "more ICT skillful and indirectly helped to lighten both teachers and pupils learning burden. For example, assignments can be done instantaneously and teachers can give instant feedback."

Despite the success of Intel 1:1 e-Learning program at KEPS VII (1), Fatimah is still hopeful that the program could make impressive impact if it could remain for a longer period. In order to sustain its presence, Fatimah suggests that the school continues to award students who excel academically as well as in ICT. To help teachers gain more ICT skills alongside with exposure to Project-Based Learning (PBL), she proposes more Intel Teach courses. Her goals in wanting the 1:1 e-Learning program to benefit more pupils

are collectively shared by all teachers interviewed including the headmaster. As such, the school is planning to set up an online system so that "all can benefit from the networking with other learning institutions".

The headmaster believes that 1:1 e-Learning program has positioned the school to have better competitive advantage whereby pupils could obtain more information and ideas effectively and efficiently. The headmaster observes that pupils who have used Intel 1:1 e-Learning program become more ambitious, competitive and they are more diligent because of the desire to be selected for the Intel class. He was extremely proud when KEPS VII (1) was invited to WCIT and Fatimah was chosen to "become Intel's worldwide showcase model and KEPS VII (1)'s success story was broadcasted worldwide."

He credited the success and recognition awarded to the school was singly attributed to the Intel 1:1 e-Learning program. He hopes that this program will continue for a long time as it has become an additional benchmark for the Perak's schools in ICT initiatives. Currently, "KEPS VII (1) is the benchmark for sports among Perak schools, but now the school has an additional benchmark for its ICT prowess."



<sup>13</sup> Anak Perak project is a state competition on developing multi-media material. The school was placed third in the competition. The school submitted a Year 4 English topic - Come Rain or Shine project with the aim of exposing pupils about the elements of weather. The project used the TabKids 3.0, GIMP 2 and Audacity combined with the Window Movie Maker software. The project was created by pupils from MOE-Intel 1:1 eLearning class.

### Intel® Education Initiative

The Intel Education Initiative is Intel's sustained commitment to prepare all students, anywhere, with the skills required to thrive in the knowledge economy by improving teaching and learning through the effective use of technology and advancing math, science, and engineering education and research. Through a sustained public-private partnership with educators and governments in more than 50 countries, Intel works with international organizations and governments at an international, national and local level and invests approximately USD100 million per year in education programs adapted to address the needs of each country to advocate for 21<sup>st</sup> century educational excellence through policy work and awareness efforts.

- For more information, visit : [www.intel.com/education](http://www.intel.com/education)
- For more information on the Intel Teach Program, please visit : [www.intel.com/education/teach](http://www.intel.com/education/teach)

This document is for informational purposes only.  
INTEL MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS DOCUMENT.

Copyright© 2008, Intel Corporation. All rights reserved. Intel, the Intel logo, Intel Education Initiative, and Intel Teach Program are trademarks of Intel Corporation in the U.S. and the other countries.

\* Other names and brands are the property of their respective owners.

1208/HH/ACE/XX/PDF 321177-001EN

