

Feature

# ***SMK Dengkil the***



**joins**

# **technology revolution**

Pioneer schools of the MDC's 'Adopt-A-School' programme take on the technology revolution and come up roses.

**T**HEIRS WAS A TRADITIONAL SCHOOL located far from where the wave of technology swelled, and they need not have fathomed how it could change their lives. However, all were in for a rude shock when the Information Age literally landed at their doorstep.

The Multimedia Development Corporation (MDC) adopted both the Dengkil primary and secondary schools as its pilot project under the 'MDC Adopt-A-School Programme' (see sidebar: About Adoption) in June 1998. Dengkil (district pop: 70,000) is situated approximately 10km from the headquarters of the Multimedia Super Corridor in Cyberjaya and neighbours Putrajaya, the new federal administrative centre. These schools were chosen as experimental test beds for smart school concepts (see sidebar: What is a smart school?) and best practices to complement the efforts of the Ministry of Education (MoE) towards a radical reform in the education sector.

Currently enjoying hardware and software support from the MDC, government bodies and the private sector, the school is expected to be self-reliant when the five-year period ends in 2003. Teachers and the community had to adapt to change - fast. Initially, the teachers feared the computer but their first few steps have proven to be giant leaps for Dengkil Secondary School (SMK Dengkil).

## **The School And Its Army**

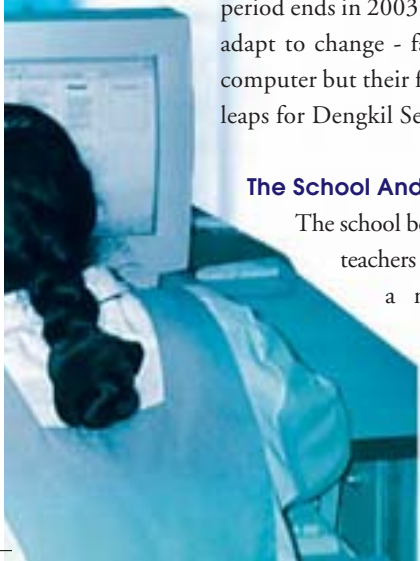
The school began with only one classroom and four teachers in 1967 and thirty years later, it is now a multicoloured structure standing conspicuously against a stretch of

palm oil estates. In the school, one notices thought provoking and inspiring quotes hanging overhead in corridors and walls, hand painted with familiar icons from Windows desktops. Notice boards in the canteen proudly display pin-ups of the school's vision and mission statements and strategic direction. It speaks volumes of the many hands and hearts that have been hard at work.

Someone had to do the preaching that others would follow. Najat Ahmad Marzuki, the MDC coordinator for the Dengkil Project, talks about the change catalysts on the ground: "They are what I call our jewels - devoted and dedicated. They helped get the 'buy in' from their fellow teachers." She goes on to say that they started the 'ripple effect'. Subsequently, other stakeholders began moving to the forefront to render their support.

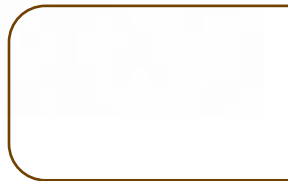
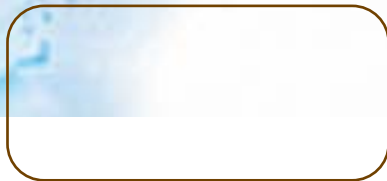
"No teacher dared to go for the Basic IT Literacy course organised by the MoE back in September 1998 - the eight of us who did, came back and worked on setting up the IT committee," says Nazilah Mohd Yusof, one of the two IT coordinators of the SMK Dengkil. Her pleasant and sunny disposition belies her high aptitude for complex matters.

Nazilah, alongside Zurita Shamsuddin and four other teachers form the IT Committee that is charged with running the ICT programmes of the school. They each wear a different hat in the committee and some don more than one. The IT committee is part of the Steering Committee (comprising all stakeholders in the project: the community, the school, the private sector, board of governors, education authorities and the MDC). They meet two to five times annually, to chart their progress and to iron out the creases.





Feature



A pristine computer lab is nestled on the corner of the first floor. This is the pride and joy of the school where their technology assets - twenty-two PCs, two servers, an LCD Projector, Smart Board and milling machine amongst others - are put to use. The school's awards are displayed here and the lab is kept under lock and key. It is difficult to imagine this facility accommodating the ICT needs of 1,470 students, eighty-four teachers plus support staff.

In the middle of the school sits a beautiful monument, the handiwork of teachers to commemorate the Global Schools Network (GSN) programme (see sidebar: GSN) - a spin-off project launched in November 1998 to link schools worldwide.

**A Breath of Success**

On May 12, 2000, Malaysia stepped up to receive the High Notes in Education Award from the Washington Symphony Orchestra for the Global Schools Network programme. This isn't the only feather in SMK Dengkil's cap. It was also honoured as one of Malaysia's Schools of Hope last year.

Barely four years ago, only 5 per cent of students owned home computers compared to the current 25 per cent; only half the teachers did back then, but now all do. Nazilah attributes this to the community service sessions that kicked off in 2000 in an effort to change the mindset of the society. Folks of varying age groups received basic ICT training in word processing, spreadsheets, web design and e-mail. With 10 sessions a year (40 participants in each), the activity continues until today.

"After meeting computers," says Nazilah, "many secured loans to buy their own machines despite being underprivileged."

According to Nazilah, less than 10 per cent of the teachers in the school were excited about ICT. "Those of us who had

foundation training were not very confident." Nonetheless, it proved enough to teach the students, basic IT skills and interactive communication, and even gain certification. "Once there were signs of success, it boosted our morale."

Her eyes sparkle as she announces, "The first batch of 34 students who underwent the optional Cambridge Starter Awards in ICT (by Cambridge International Examination (CIE)) were successful (22 merits and 12 passes). To date, 672 students have undergone this sponsored programme, an extracurricular activity held after school hours, which began in 1999. Another 265

attempted the examination last year. It was an easy sell with students - they're very enthusiastic about technology even if they're grappling with reading and the English language." As for academic progress, she quips, "The most obvious is English language development - especially GSN students who acquired at least a B grade in the recent lower secondary examinations."

The change in the attitude of the teachers is rather promising - they're now very much IT literate. "Many feared it, but we remained close to them and they came around in the end." Nazilah reflects upon an interesting moment when one of the very senior 'non-believers' approached

her discreetly, almost whispering, "I don't want to be left behind. Please coach me." She cherishes the moment.

Dr Mohd Majid Konting, Chairman of the Parent Teacher Association (PTA) of SMK Dengkil since March 1998, remembers when his wife used to advise him to be cautious when driving past the 'haunted' village of Dengkil in the wee hours. A smile breaks behind his voice as he says, "There was a stigma attached to our *kampung* (village) because of the low socio-economic standing of its inhabitants

**About Adoption**

Adopt-A-School is an MDC community programme. Its pioneer project aimed at converting two neighbouring rural schools into smart schools over time based on the smart school conceptual blueprint, was codenamed the Dengkil Project. Also a social re-engineering drive, it was implemented by the private sector.

This successful model was replicated last year at a premier urban-centred school, (Sultan Abdul Hamid College) Kolej Sultan Abdul Hamid Shah in Alor Setar, Kedah. Titled SAHC- MSC Smart School, it was initiated by the old collegians.

A fourth school - (Kuala Ketil Secondary School) SMK Kuala Ketil, Kedah, will be next, in 2002. Proposed under the E-Smart Learning initiative, it is a special project supported by the Ministry of Energy, Communications and Multimedia.

The adoption period for all three projects will end in 2003. However, there are indications that this programme may spill over to the region.



Nazilah Mohd Yusof, one of the two IT coordinators at SMK Dengkil is a tireless advocator for IT literacy at the school.

(mostly farmers or miners). It was difficult to get support from local authorities who were especially wary of *lalang*-infested (a type of tall grass) schools, but then we started raising eyebrows by gaining international recognition for our achievements. It became much easier to mobilise resources and support after that."

A member of the PTA since 1997, the father of three is a firm believer in the course of the Dengkil schools. His youngest child attends the primary school; his wife, a teacher in the secondary school where his eldest daughter studies.

"It's a family affair. I could have sent them elsewhere but I pledged my confidence here and lead by example."

Moving towards financial independence, the PTA, state politicians and the community lent their muscles to organise a fund-raising dinner in November last year. Proceeds of the dinner were deposited in a kitty: the Smart Partnership Fund, created to finance incidentals and maintenance of the ICT programmes.

### Whither The Information Age?

The numerous ICT training courses that the teachers have undergone certainly adds colour to their resumes. "Some have been 'pinched'; others have moved to set up their own businesses in the ICT industry," comments Dr Majid. While this may be a healthy problem to have, staff turnover and recurrent training are costly affairs.

Maintaining the technical systems of the lab falls squarely on the shoulders of the IT Committee. Hardware glitches can sometimes take forever to suss out. Time is precious, and the key players have all sacrificed much of theirs. Teaching on weekends and holidays isn't exactly fun.

In Dr Majid's words, "We have many catalysts of change: from the aborigines to the folks at the ministry, to MDC with its vision and infrastructure support and corporate sponsors. But without the sacrifice of the teachers (round-the-clock hours is no rarity), it would never have been possible."

Now that the gaps in the teachers' confidence levels are closed, the tricky part is sustaining their enthusiasm and motivation.

It takes time to convince parents to participate in the ICT development of the school because they have trouble comprehending the significance of knowledge. Knowledge is intangible, as Dr Majid puts it: "A farmer can see a factory and relate it to industrialisation, but how do you show him the Information Age?"

But when the school Internet connection is broken and teachers communicate with their global counterparts from home, you know that you're blessed with the knowledge worker. ●

### What is a Smart School?

- A learning institution that has been systematically reinvented in terms of teaching-learning practices and school management to prepare children for the Information Age.
- Planned in stages nationally to meet the requirements of the Multimedia Super Corridor (MSC) in line with the MoE.
- Objectives are to produce a thinking and technology literate workforce, democratise education, increase participation of stakeholders, provide all round development of the individual, provide opportunities to enhance individual strengths and abilities.

### Global Schools Network (GSN)

- Mooted by Tan Sri Dato' Dr Othman Yeop Abdullah, the executive chairman of MDC.
- A synergistic effort undertaken by MDC, MoE and the private sector.
- Involves both the primary and secondary schools in Dengkil.
- Officially launched in November 1998 - its objectives are to create a world class network of schools globally for the purpose of sharing educational resources, ideas and experience, to be a hub and resource centre of information and knowledge dissemination and to support a knowledge culture.
- Schools currently active on the network are from USA, Japan, England, Canada, Hawaii, Norway and New Zealand.
- Activities include interacting with e-pals (exchanging information about each other's culture), comparing craft works (by physically mailing them abroad) and video and teleconferencing sessions.