

## **Gayndah State High School**

For rural Queensland-based teacher Mark Harm, a traditional day is both non-stop and hands-on. Harm, who is head of the technology teaching department at Gayndah State High School, spends most days moving around between the classroom, sportsgrounds, the school's farm and overseeing vocational study placements. By using an HP iPAQ Pocket PC, he has created an efficient system to organise his week, plan lessons, and manage his student assessments - all on the fly.

Harm is one of a group of 800 teachers using HP iPAQs in Queensland as part of an initiative called the ICT (Information and Communications Technology) Explorers Project, rolled out by the Queensland Department of Education and the Arts (DEA). The project involves teachers from all over Queensland - reaching as far as the Torres Strait Islands to the outback western plains, to metropolitan Brisbane.

The project uses HP iPAQ 3970 and 5550 Pocket PCs in conjunction with a learning support strategy that utilises web communities, chat rooms and email discussion lists. It has enabled teachers to move from traditional, paper-based classroom management to more efficient, secure and reliable electronic teaching and working methods. The project has also promoted the role of technology in learning and established fertile ground for future innovation. For many teachers in the project, the HP iPAQs have become indispensable management tools, carrying information from class rolls, academic records and reports. The HP iPAQs provide a one-stop location for notes, events, files and ongoing tasks, and have become a great time-saving device to streamline their busy and complex schedules. The HP iPAQs also provide teachers with continuity of documents and email between their home and school computers.

### **Business challenges**

With more than 35,000 teachers, 1,286 schools and over 490,000 students, the Queensland Department of Education and the Arts is responsible for a massive community that is dispersed over vast geographical distances. Given the size of the education community, access to information and communication technologies is vitally important. The Department places a strong emphasis on giving both teachers and students exposure to emerging technologies and the opportunity to participate in technology-based learning.

The work performed by teachers is varied and information intensive. In addition to their teaching responsibilities, teachers have to contend with a full diary of extra-curricula events, meetings and a significant amount of class management, reporting and administration responsibilities.

Brisbane-based teacher Simone Coogan, who is also a participant in the program, said: "My schedule at Kedron State School is full and busy. I am on the run switching from teaching a class, to going to a staff meeting or planning a lesson in any one day. The amount of paperwork, folders to carry and my diary was physically burdensome and, at times, unreliable. Any technological assistance to help simplify my job and improve my efficiency is most welcome."

### **How HP helped**

The ICT Explorers Project team selected the HP iPAQ Pocket PCs for the project. The two models chosen were the HP iPAQ 3970 and the HP iPAQ 5550.

Carol Hawkins, Queensland Department of Education and the Arts, Senior Project Officer, said: "Apart from performing well and being loaded with features, the HP iPAQ's had the most preferred security system with an 8-digit alphanumeric pin which enabled peace-of-mind security of data, which is a critical consideration for the Department."

"We were interested to see what innovations and ideas could be generated by using the technology, and the HP iPAQs provided the best flexibility and versatility in terms of functions and applications. The teachers own their PDAs, and this has encouraged them to use the devices for both personal and professional tasks. This has accelerated adoption and encouraged experimentation and new developments."

## **Value delivered**

Once making the commitment to electronic rather than paper-based diary systems, it didn't take the teachers long to realise the versatility and value of their HP iPAQs and to customise and extend the possibilities beyond the typical management and administrative applications. By equipping teachers with the HP iPAQs the Queensland Department of Education and the Arts was able to promote the use of technology for learning as well as encourage teachers and students to embrace the knowledge economy.

For teacher Simone Coogan, her HP iPAQ is not only saving her time but enables her to create new ways to teach and engage with students.

"The calendar and task list are great tools for organising my week's activities and class lessons," said Coogan. "In my extra role as curriculum co-ordinator, I go to lots of meetings, and I use the iPAQ to take notes and upload the minutes to our intranet for the other teachers or parents. The device has great potential; I plan to incorporate voice recording for meetings and integrate sound files and digital photography for an ad campaign project with the students."

"The iPAQ was really easy to use and getting the hang of writing with the stylus on the screen was quite quick. I do use a foldout keyboard as well, and have found this a great way to engage with some students who are reluctant writers, by allowing them to use the iPAQ, which is new and exciting for them. We even use the iPAQ for problem solving games," said Coogan.

Mark Harm has also embraced the potential of the iPAQ and developed a range of database applications for his device using the software package Visual CE Enterprise Edition from Syware. One of these applications is a Loans Manager programme helping teachers keep track of classroom items such as books and data projectors. He is currently developing a Unit Planner.

"With a unit planner application, I will be able to plan an entire teaching unit, breaking it down into individual lessons that I can download to the iPAQ and use to teach the lesson," said Harm. "After the lesson, I can upload notes or changes back to my PC. And, at the end of the unit, I'll have a complete record of what was planned, as well as what actually happened, along with notes and records about the students' performance and progress."

According to Carol Hawkins, the students have also responded with great interest and approval. "We have a couple of class sets of PDAs that rotate around classes which the students can use for a term. This is an important element of our ongoing programme of getting students to engage with emerging technologies and participate in computer-based learning," she said.

"Overall, the HP iPAQs have proved more than a great organisational tool, they have been a catalyst for future innovations. The ICT Explorers Project has been a very successful programme which has validated our commitment to exploring how emerging technologies can influence learning and teaching," Hawkins added.

## Summary

**Industry:** Education

**Solution:** Teachers across Queensland are using HP iPAQ Pocket PCs to improve organisational efficiency and promote the use of technology in learning and education. In addition, they are developing applications, extending its use beyond an administration and management tool to be a teaching tool.

**Hardware:** 800 HP iPAQ 3970 and iPAQ 5550.

**Software:** Microsoft Office for Pocket PCs, Visual CE Enterprise Edition from Syware.

**Challenge:** To explore and promote emerging technologies in teaching and education and deliver a tool for teachers to improve organisation efficiency and access to information technology.

**Benefits:** Moving from paper-based diary and class management systems to the portable iPAQs has improved organisational efficiency, exposing teachers to information technology and improved communications. It has also created a community of users sharing ideas and developing new innovations and ways to integrate technology into learning and education.

### About the Department of Education and the Arts, Queensland

The principal functions of the Department are to:

- set the direction for education in Queensland
- manage the state education system
- develop and implement government arts and cultural policy and programs
- support non-state and higher education portfolio responsibilities
- administer arts and cultural funding and capital works programs.