Case Study
Intel® Atom™ Processor Z2760
2 in 1 Devices
Performance, Flexibility and Mobility
Education



Learning without limits

Charles La Trobe College promotes Classroom of the Future with Intel® Atom™ processor Z2760-powered 2 in 1 devices to enable a rich, collaborative learning environment for its students



"The Intel® Atom™ processor Z2760-powered Acer W510*
2 in 1 devices provide flexibility that is not available in traditional notebooks.
The flexibility of use allows students to easily share their learning and help each other with learning tasks, as it is much easier to show another student something on a tablet than on a notebook. This solution indeed provides a model for future devices in the ongoing college 1:1 program."

– Nathan Moore Leading Teacher, Classroom of the Future Charles La Trobe College



Charles La Trobe College (CLTC) is a multi-campus school located in the Heidelberg area in Melbourne, Victoria, Australia. CLTC focuses on personalized learning, which entails building educational programs that suit the interests, needs, and abilities of individual students to help them realize their full potential. CLTC sits within a multi-cultural, multi-faith, economically and socially diverse environment, recognizing engagement with the community and promotion of diversity as a valuable part of school life. In its commitment to bringing quality education to its students, CLTC has collaborated with Intel and other collaborators for a project called Classroom of the Future, which aims to improve teacher practice and promote college-wide utilization of the latest technological aids in teaching and learning.

Challenges

- Move from teacher-centric to student-driven learning. Enable shift that will allow teachers to take on the role of facilitator, and allowing the students thrive in a collaborative learning environment.
- Promote information and communications technology (ICT) usage college-wide. Allow students to access different technology mediums for learning in a way that fits their needs, so as to help them master high-level critical thinking, problem-solving and collaborative skills.
- Establish CLTC as a forward-thinking institution. Position CLTC as an institution devoted to
 providing the latest educational tools designed to make learning more collaborative and interactive.

Solutions

- Deploy Acer W510* 2 in 1 devices running on Intel® Atom™ processor Z2760. Promote student-centered learning and teaching through the performance and flexibility of a tablet and laptop in one form factor.
- **Develop Classroom of the Future.** Work with Intel to develop a 2 in 1 device-powered classroom that inspires the next generation of learners.

IMPACT

- Improve educational outcomes through ICT usage. As computers become more mobile and connected, they allow CLTC to shift from a basic ICT and PC lab environment to a true eLearning environment.
- Enhance student connection through 2 in 1 devices. Allow students to harness 2 in 1 technology to promote collaboration and sharing in the completion of learning tasks, while enabling students to make easy connections from school to their home life.
- Support independent learners and the development of 21st century skills. Promote in 1:1 eLearning model where each teacher and student has a dedicated 2 in 1 device as an ideal way to integrate technology into the curriculum and maximize its benefits.

 Today, learning institutions are beginning to move from teacher-centric to student-driven

learning, allowing educators to take on the role of facilitator and help their students manage their time and take more control of their learning. This means students can access different mediums for learning in a way that fits their needs and interests, while allowing them to master high-level critical thinking, problem-solving and collaborative skills.

This student-centric shift in learning is made possible through the widespread utilization of ICT. Robust ICT enables teachers and students to connect with resources, experts, other schools and students easily and more

conveniently, which greatly enriches the classroom and learning experience.

Over the last 12 months, CLTC has been investing heavily in ICT infrastructure to support student-centric eLearning. "CLTC sees ICT as playing a key role in supporting student learning and providing for anywhere, anytime collaborative learning," related Nathan Moore, leading teacher, Classroom of the Future, at CLTC.

In support of this vision, CLTC has worked on a Classroom of the Future project to inspire the



2 in 1 devices powered by Intel® Atom™ processor Z2760 provide Charles La Trobe College students excellent flexibility and performance in enriching their eLearning experience

next generation of learners and help create a rich, collaborative learning environment for its students which aims to support:

- Improved educational outcomes
- Student-centered learning and teaching
- Independent learners and the development of 21st century skills
- 1:1 eLearning and ICT integration in the classroom
- 1:many eLearning and ICT integration in the classroom
- · Access to information and content experts
- Collaboration and encouraging creation

Bringing the 1:1 eLearning experience to the classroom

Explained Moore, "The flexibility of a touch device is a great bonus for the students and allows them to do things they couldn't do with a traditional notebook. It allows students to use technology in situations and environments that they hadn't before."

To meet CLTC's requirements, Intel and Acer introduced the Acer W510 2 in 1 devices, which run on Intel Atom processor Z2760. Acer W510 provides a tactile kinesthetic user experience, which is increasingly important for learners who have grown up with smartphones. Students can easily adapt to the touch-enabled 2 in 1s in school and use them effectively to support their learning experience. CLTC also finds the long battery life of the 2 in 1s can last a whole school day, removing the concern of running out of battery power during classes.

While students already have access to their own netbook, they prefer the flexibility and touch screen of the Acer W510 devices. Students use them in science experiments to document their work and to capture video, still images and voice recording as part of their learning. They also use them in their ongoing

computer programming projects. Students like to use them collaboratively in paired and small group work to share learning and demonstrate how to use software resources.

The school uses educational software from the eduSTAR program, which are made available through the state government. The software is running on Windows operating system and the Acer W510 2 in 1, running on Windows, provides the compatibility needed to use the software. The school also uses applications from Intel® Education Software (IES) in the 2 in 1s. This set of applications are selected by Intel based on educational and technical evaluations, and come pre-loaded as part of the Intel® Education Solution. It aims to help students develop through rich and interactive applications, empowers educators with tools to manage the classroom, and enables IT to help keep students and technology safe and secure from malware and loss. With the combination of IES and 2 in 1, students can be more creative in capturing and presenting their ideas. For example, they will be able to embed time lapse video captured with the 2 in 1 into their presentations reporting on their science experiments. Thus, CLTC plans to increase usage of the Intel Education Software on the 2 in 1s in future.

Enabling flexible learning outside classrooms

In tablet mode, students can easily carry the Acer W510 2 in 1 devices outside of the classroom to a variety of learning environments and can sit or lie down easily with the device. While providing flexibility that is not available with traditional notebooks, 2 in 1 devices enable future usage models in the ongoing college 1:1 program.

"Students like the touch capabilities and often switch between keyboard and touch

Lessons Learned

Intel supports education transformation worldwide with a powerful combination of programs, technology, and other resources that are adapted to best serve local needs. Intel has invested over USD1 billion in 70 countries to help transform education, and give people opportunities to learn and succeed.

during lessons. The flexibility of use means that students can easily share their learning and help each other with learning tasks, as it is much easier to show another student something on a tablet than on a notebook," shared Moore.

"The advice provided by Intel allowed us to understand the importance of a 2 in 1 device and the opportunities that it would present. Through the Classroom of the Future program, we have been able to receive support from Intel to obtain the devices and to ensure the software would function as needed. In our college we have deployed the Acer W510 devices and netbooks for years 5 and 6, and will also be available for other year levels to use. We would like to use a touch-enabled 2 in 1 (with an Intel® Core™ processor) for years 5 to 12 as budget allows," explained Moore.

Find a solution that's right for your organization. Contact your Intel representative, visit Intel's Business Success Stories for IT Managers (www.intel.com/itcasestudies) or explore the Intel.com IT Center (www.intel.com/itcenter).





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All performance tests were performed and are being reported by Charles La Trobe College. Please contact Charles La Trobe College for more information on any performance test reported here. Battery life may vary depending on hardware, software, system configuration and operating conditions.

No computer system can provide absolute security. Requires an enabled Intel® processor, enabled chipset, firmware and/or software optimized to use the technologies. Consult your system manufacturer and/or software vendor for more information.

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