

HHERN NEWS

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Connected to HHERN? Take advantage, here are some ideas from other AARNet connected schools:



Polycom APAC Special Events, together with Tenix Questacon Maths Squad, hosted an innovative virtual learning event using AARNet's Polycom RMX4000 high definition video conferencing bridge. 46 students in Years 9 and 10 from The Scots College in Bellevue Hill, NSW and Abbotsleigh Girls Grammar School in Wahroonga, NSW (both AARNet connected schools) participated in pre-organized geometry, algebra and tessellation activities. AARNet's National Video Conferencing Services provided dedicated support to the event which is one of several events being organised by Polycom APAC Special Events in conjunction with AARNet.

Doing something interesting on the HHERN Network?

Let us know so we can include in future editions of HHERN News!

Interactive Whiteboards pave the way for Future Learning!

It's a well-known fact that chalkboards are now relics of the past, fit for a museum, but it is a little known fact that whiteboards are heading that way as well. Thanks to advances in technology, ultra hi-speed media rich internet access to academic learning has become possible, with Interactive Whiteboards capturing students' imaginations and leading the way for future education.

Students of the Southern Highlands Christian School (from Prep to Year 12) now have access to the smartest technology on the market. Having made an investment into HHERN with access to AARNet last year, the school has now provided each Junior School classroom with an Interactive Whiteboard (IWB) and signed up with "Clickview" to provide streamed educational media from around the world to its portable devices and classroom computers.

For a new generation of children entering school, many of whom are already "ICT" literate, the introduction of IWBs has really caught their imagination! Suddenly, they are engaged by the power of the mouse, the computer tablet or remote control! With one push of a button both teacher and student can interact on the IWB – highlighting text, selecting correct answers, working in groups or individually.



IWB technology with live streaming video bring to life reports and stories from the Queensland floods.

"With hi-speed internet access and tools such as Clickview and IWBs, students enjoy access to a world of information and resources, quite literally at their fingertips," said Principal, Peter Jamieson. He continued, "Education is all about engaging children in ways which capture their imaginations and motivates them to learn. We have certainly seen a huge increase in class participation and enthusiasm since the implementation of the IWBs. Students of all ages are actively involved in lessons using this technology."

Gone are the days where a child at the back of the classroom loses concentration and ends up staring out of the window. The class teacher receives 100% involvement from students when using the actiview, a system recording student responses and displaying them graphically on the IWB.

Parents of SHCS students were recently invited to an information evening where a demonstration of these numerous technological advances took place. Parents used actiview, responding to a viewing of 80's Aussie rock band 'Midnight Oil' on the IWB. Parents were given the opportunity to interact with the IWB, as their children would in class, and could see for themselves, how the recent investment into technology has enhanced learning.

"This technology is already in daily use throughout the school and we've had some very positive feedback from teachers and pupils," said Mr Jamieson, "by embracing this technology we are putting our school and our students at the forefront of education in the Southern Highlands. Membership to HHERN and AARNet has certainly opened a world of opportunities for our students."

HHERN provides communication services to connect educational institutions to the Australian Academic and Research Network (AARNet). HHERN aggregates the institutions under HHERN's membership with AARNet. This sharing allows schools and institutions to connect at a lower cost and best of all, education data from AARNet is free!

For schools, the formula is simple: total dollar costs to HHERN divided by the number of students. The cost per head is reduced as we add schools and students.

For non-school institutions an estimate of network usage is determined and a fee is then put into the formula which again reduces the participation costs.

The simple aim of HHERN is to provide exceptional educational Internet access that would otherwise be cost prohibitive.

HHERN is made possible by the support and co-operation of Australian Bio Resources (an operating entity of the Garvan Institute of Medical Research www.garvan.org.au), AARNet, Wingecarribee Shire Council and Ace Internet Services.

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Ace connects Illawarra Schools in preparation to join HHERN

Early this year Ace Internet Services installed wireless equipment in Cordeaux and Tongarra Campuses of ICS then linked via Knights Hill, see photograph to the right, as the first step in providing HHERN connectivity.

"The schools required a stable high speed network connection between them. We used the skills and technology we have deployed in the Highlands where we have had great success in providing cost effective, high speed, wireless network solutions," says Chris Jay, an engineer with Ace, seen in the photograph from the installation at Cordeaux below.



"A number of technical difficulties will need to be overcome to link the schools in the Illawarra. The Knights Hill tower being used is not line of site to the Oxley Tower so a relay point will need to be found somewhere between. We already established a number of possibilities to achieve this link and we will obviously need to make sure that the outcome provides value to both HHERN and the schools involved," says Chris.

We will bring you more information as this project progresses as four other schools have expressed interest in participating in the HHERN project across the Illawarra.

Chevalier - E-Learning with confidence

The partnership between Chevalier College and HHERN is proving to be a great benefit to the College. The high speed microwave link to the Oxley Hill transmitter provides network connection with more than 100 times faster upload capacity than the old ADSL link. This has provided Chevalier with access to a state of the art network superior to that available to most Australian city high schools. Additionally, the network has been provided without the expense of obtaining an optical fibre link to Chevalier's physical location.

Previously, using the ADSL configuration, the service slowed noticeably when more than 3 classes attempted to connect. It is now common for more than 20 classes to connect simultaneously without delay. The improved service has seen a growth in the use of Web 2.0 sites including school WIKIS, YouTube resources, Mathletics and AARNet video conferencing. The WIKIs have proven to be a particular benefit to students who are able to access resources provided by teachers from home. Usage has increased to such a degree that, recently, a redesign of student logins was undertaken in order to streamline the service further.

AARNet - Polycom partnership

Connected Schools and the Bradman Museum will be able to take advantage of the partnership formed between Polycom and AARNet to deliver a range of video conferencing experiences to support education. "HHERN members will be in a prime position to take advantage of this technology. Education can now be delivered live to multiple sites in High Definition Video which is only possible because of the high speed HHERN network," says Allen Cupitt, managing director of HHERN.

New Polycom RSS and VMC equipment has been purchased by AARNet to support video conferencing based and stand-alone web casting to large audiences by unicast and multicast with recording options. Customers are assisting in the testing and the service is expected to go live mid 2011.



Questacon science staff during live video tutorial.

HHERN brings the AARNet IGLEw to the Highlands



Nick Cross, Manager of Education Outreach for AARNet, said, "The IGLEw is designed to provide students with transformative learning experiences that enrich their understanding on complex concepts in an easy-to-understand way. We believe in supporting students' learning agenda through interactive exploration which delivers greater depth of understanding."

Hosted on school grounds over two weeks, many hundreds of students from Chevalier College and Southern Highlands Christian School had the opportunity to learn with a narrated tour of the universe via the American Museum of Natural History and NASA's Digital Universe Atlas. This included 1080-pixel high-definition video feeds through a fish-eye lens in real time to bring the curriculum come life through an interactive learning experience.