



# The Computerworld Honors Program

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## Final Copy of Case Study

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US*

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**ORGANIZATION:**  
Department Of Education South Australia

**ORGANIZATION URL:**  
<http://www.decs.sa.gov.au/>

**PROJECT NAME:**  
DECS Saba Centra Project

### PROJECT OVERVIEW

The South Australian Department of Education and Children's Services serves more than 175,000 K-12 students, and their parents and teachers, in a state that is twice the size of Spain and which is largely "outback." Many students live hundreds of kilometers from the state's major population center of Adelaide. And while some students are isolated from others due to geography, still others are isolated due to special needs, medical issues or other reasons. In short, these are students for whom educational field excursions to municipal zoos or the sea are not normal options. For many, isolated on a family ranch, even sharing their work face-to-face with classmates and teachers is an impossibility. Replacing outdated, static-ridden one-way radio broadcasts via the Flying Doctor Service network, DECS' eLearning project was launched in 2002 to offer truly interactive and dynamic education to students anywhere – bringing them in a virtual sense, through a web-connected PC, right into a classroom in Adelaide or Port Augusta. The project has continued to expand and to be updated, and has grown in its capabilities as the underlying technology has grown in its capabilities. The project's technology foundation, Saba Centra, is a real-time web conferencing and collaboration platform that delivers a virtual classroom environment. It was selected because its interactive user environment is the closest you can get to a real classroom – right up to being able to "raise your hand" to ask a question. With multiple simultaneous video streams, instructors can engage live with students to create a dynamic classroom experience. In addition to video and audio conferencing, slides, multimedia, whiteboard and application sharing capabilities, South Australia's students and teachers engage in chat, surveys and even virtual laughter. Given the remoteness of many of the students in the project, and the vast geographies involved, there were concerns regarding bandwidth and accessibility. Saba Centra solved this issue through its HD VoIP capabilities, and this made it practical and cost-effective to extend the project virtually anywhere – including places where eLearning had not been cost-effective before. In one recent milestone application (12/09), students thousands of kilometers away from Adelaide logged in to watch giant pandas, on loan from China to the

Adelaide zoo, in a virtual field trip – complete with Q&As with curators conducted via text chat. Even with more than 200 sites connected during peak usage, DECS' e-schooling officials were "very satisfied with the performance" of the system. As for adoption, the project has been from the start, and continues to be, enthusiastically embraced by students, teachers and parents. In addition to virtual excursions to the zoo, Antarctica and fishing trawlers a hundred miles off the coast, the project has become an everyday part of enabling the school system to better serve the state's hugely successful Premier Reading Challenge program, which has popular athletes read to students over Saba Centra as part of encouraging children to read at least 12 books per school year.

## **SOCIETAL BENEFITS**

Children are a society's greatest resource. The interactive environment provides students and teachers with a collaborative method of learning. Students who never before interacted with other students now participate collaboratively and learn as a team. Likewise, students can virtually 'travel' to many locations to learn about local or special topics.

## **PREVIOUS PROJECT UPDATED/EXPANDED?**

The project was updated in March 2009 with new infrastructure (servers) installed to support extending the use of Saba Centra to allow DECS to deliver more concurrent usage and large scale events (eg Pandas in Adelaide Zoo, March 2010, Premier's Reading Challenge – APPENDIX 1) . The project began in 2001 with a pilot for 25 geographically remote and isolated students at School of The Air. The project now serves all 600 DECS schools its 20,000 teachers and 170,000 students. DECS is in full scale implementation.

## **PROJECT IMPLEMENTATION COMPLETE?**

Yes

## **PROJECT BENEFIT EXAMPLE**

DECS' project has delivered enormous benefits to students, teachers and parents alike. And it has become a highly effective community and socialization tool as well. In terms of learning outcomes, the project is:

- Motivating students to participate and learn.
- Strengthening student autonomy and personal initiative while fostering collaboration.
- Enabling ease of interaction and acquisition of knowledge
- Serving not just remote students, but also special needs students and those facing extended absences due to personal circumstances. "Imagine a student working in isolation, who never gets the chance to share his or her work with classmates or see a teacher face-to-face," said Roger Edmonds, manager of e-schooling services, DECS. "From the moment we deployed, we saw immediate improvements in the way students collaborated with one another." In terms of teacher benefits, the project is:
- Reducing travel time for teachers, thus giving them more time for other tasks.
- Enabling teachers to reach students in inspiring and engaging ways.
- Attracting more metro teachers to eLearning sessions.
- Providing a convenient way to share guest speakers and experts with wider groups of students. Plus, teachers are now able to better collaborate with each other. According to Yvonne Murtagh, project officer, Online Learning, DECS, "We regularly take advantage of Saba Centra to have teachers share teaching tips and curriculum ideas in afterschool sessions." In terms of parental and community/socializing benefits, the project is:
- Increasing parental Internet literacy as they help their children.
- Encouraging more interactive parent and student meetings.
- Enabling more dynamic and informative school assemblies. In addition, Scouts now meet in a Virtual Scout Hall on the Internet, pre-schoolers now have their own online



community, and student supervisors have formed a self-help community online. The project is also being leveraged to spread messages on such key topics as healthy eating, road safety and cyber safety to students across South Australia. The ease with which much of these benefits have been accomplished is a major benefit in itself, particularly as DECS continues to expand the program. "It's been said that some of the best learning occurs outside the classroom," said Edmonds. "Anywhere we can take a laptop with wireless connectivity, a video camera, and microphones, we can create a truly interactive field excursion for our students." But learning doesn't stop there. DECS records all its webcasts, edits them as needed, and uploads the results into a content management system that provides controlled access to any teacher within the DECS community across South Australia. Hence, in addition to the thousands of students, for example, who got to see the giant pandas "live" from the Adelaide zoo, thousands more who missed the live event watched an edited recording later – a recording that can easily serve as the centerpiece for a learning session on endangered species, for instance.

## **IS THIS PROJECT AN INNOVATION, BEST PRACTICE?** Yes

### **ADDITIONAL PROJECT INFORMATION**

DEC's project has aligned South Australia's educational system with the major emerging technology trends in education. These include:

- Personalized learning and learning environments, anytime, anyplace
- Collaborative learning experiences
- Making global connections
- Mobile learning

Ours is a world where students expect to be entertained and expect instant gratification, as if learning was a game. Well, if it works (and it does), why not comply? Today's students retain 90% of content shown in a video, compared to only 23% of audio, and less again with text. Again, when appropriate and feasible, why not comply? And students prefer parallel learning, rather than sequential, because they like to multi-task and they can draw cross-conclusions. Once again, why not comply? The system that South Australia's DECS has put into place enables all of the above on top of the obvious bedrock benefits around extended educational reach. In this respect, the students in the outback are, whether they know it or not, at the forefront of what is possible in education today. (See APPENDIX 3) Please also refer to the DECS Case Study at the Saba website: [http://www.saba.com/downloads/case-studies/saba\\_cs\\_decs.pdf](http://www.saba.com/downloads/case-studies/saba_cs_decs.pdf)