

CUSTOMER SUCCESS STORY

Polycom and ReefHQ Aquarium Deliver Interactive Virtual Learning Experiences Across the World Through the Power of Video

Industry

- Education

Application

- Real-time communication and collaboration across countries between students and marine biologists

Solution

- Polycom® RealPresence® Room solution, Polycom® HDX® 8000, enables ReefHQ Aquarium to present interactive educational video seminars to students of all ages

Results and benefits

- Stimulated classroom discussions on the rising ecological threat to the Great Barrier Reef
- Helped students appreciate the requirements for a healthy marine ecosystem and take action to protect the future of the reef
- Provided educational opportunities to students who may not otherwise be able to engage in their programmes



Virtual excursions: divers underwater have special communications gear and an underwater camera, providing live video link-ups to schools around the world.

Overview

ReefHQ Aquarium is using video to deliver “education without borders and knowledge without limits,” taking Australia’s Great Barrier Reef into classrooms all over the world, in true-to-life, high-definition sound and visuals. Using Polycom® RealPresence® Room solution, Polycom® HDX® 8000, the Aquarium’s underwater scuba divers are teaching students first-hand about the delicate marine ecosystem of the world’s largest living coral reef aquarium located in Townsville, North Queensland.

ReefHQ Aquarium’s Videoconferencing Programme brings the same rich educational experiences to students of all ages, taking them on exciting journeys underwater to observe a living coral reef ecosystem and the habitats and behaviours of reef creatures.

The programme has achieved great success and interest on a global scale. In the 2010/11 fiscal year alone, ReefHQ Aquarium conducted 164 video-enabled seminars to 5,855 participants across the world using Polycom video, from schools in Australia to university campuses in Malaysia, the USA, and beyond—equal to the number of students that they are able to reach and teach on-site.

As a Polycom content provider in the Polycom Content Access Programme since 2008, ReefHQ Aquarium joins other institutions that aid educators to enhance curriculums, connect with colleagues and peers, and expand classroom reach

In the 2010/2011 fiscal year, ReefHQ Aquarium conducted 164 video collaborations to 5,855 participants via Polycom video—equal to the number of students facilitated on site.

with live, relevant and culturally-rich interactive learning experiences. The real-time, personal interactions with their divers, who are experienced marine biologists, have stimulated many classroom discussions on the rising ecological threats to the Great Barrier Reef, and helped students appreciate the requirements for a healthy ecosystem and take action to protect the future of the reef.

ReefHQ Aquarium video collaborations

Since partnering with Polycom in 2008, ReefHQ Aquarium has video-enabled and shared many educational experiences with K-12 schools in Australia, Canada, Korea, Malaysia, USA and the UK, as well as with universities, where direct interactions with subject-matter experts enhance and ground advanced research. For example, in April 2012, the Aquarium collaborated with the Malaysian Research & Education Network (MYREN) to deliver an advanced programme of marine biology with the participation of students and faculty from 12 universities.

“With Polycom video solutions, we are now reaching more students in more countries, including some of the most remote corners of the world, in a much more engaging and interactive way,” says Fred Nucifora, Director, ReefHQ Aquarium. “Without video collaboration, we would not be able to bring the colours and sounds of marine life, and students would not get to see firsthand the issues affecting the Great Barrier Reef as easily as it happens now.”

As a key content provider for Polycom APAC Special Virtual Events, ReefHQ Aquarium has also been instrumental in hosting many live educational sessions and events over video, including World Ocean’s Day, World Environment Day, and World Earth Day.

For the past three years they have also played a key role in delivering keynote presentations over video for the Centre of Global Education and Taking IT Global Conference called “The Impact of Climate Change on Global Indigenous Communities.” As part of this conference, ReefHQ Aquarium brought indigenous community elders from North Queensland to a global audience from 14 countries.

The uses of video in education are varied and extensive and ReefHQ Aquarium takes full advantage of the technology. As a further demonstration of this innovative use of video to deliver more interactive and engaging virtual learning experiences, ReefHQ Aquarium recently used video as part of Tourism Queensland’s sales mission to New Zealand to bring the living reef into the Auckland War Memorial, which hosted one of the major trade events on the mission. They have also participated in global trade events, including the 2012 Yeosu Expo in Korea, an international event which aims to highlight the value and significance of the earth’s oceans with the theme of the event focusing on ‘The Living Ocean and Coast’, providing daily live video link-ups from the Australian Pavillion to ReefHQ



Learning made fun: virtually diving under water has got this group of students from Australia fully immersed in learning about marine life and ocean sustainability.



Polycom’s video collaboration solution helped ReefHQ Aquarium conduct virtual education programmes at the 2012 Yeosu Expo in Korea.

“The scope for delivering education has broadened greatly with advances in technology. Polycom’s video collaboration solutions have provided opportunities for ReefHQ Aquarium to contribute to school curriculums, offer training over distance, and provide access to our marine experts to improve awareness of environmental issues.”

Fred Nucifora, Director, ReefHQ Aquarium

Aquarium, reaching about 200 people per day during the expo which ran from May 12 to August 12. “The daily link-ups to ReefHQ Aquarium were a great promotional tool for Australia, not just as an exciting tourist destination, but also as a nation with strong research and environmental capabilities,” said Nucifora.

In tandem with the expo, ReefHQ Aquarium and Polycom collaborated with the Australian Federal Government to take the expo to remote schools in Korea, holding a special virtual education programme for four special education schools, broadcasting live from ReefHQ Aquarium in Queensland.

“This event had a profound impact on the students,” says Nucifora. “Without video collaboration, these students may never have had the opportunity to visit the Expo let alone the Great Barrier Reef. The reactions and joy on their faces was truly empowering.”

Curriculum expansion and education across borders

Around the world, schools are using Polycom video collaboration solutions for everything from distance learning to course development, virtual excursions to remote training. As a strong believer in promoting classrooms across borders and equity in education, Reef HQ Aquarium has simulated various link ups with schools and universities across the world using video. Such examples include:

- Using video conferencing to deliver virtual training to overseas student groups planning to go on study tours of Australia. Before setting out to Australia, the students benefitted greatly from the real-time video collaboration, by obtaining prior knowledge of the reef.
- Bringing the Great Barrier Reef live to remote students from the Australian outback to isolated regions of Alaska, providing equity in education. In cases where schools are not equipped with videoconferencing equipment, ReefHQ Aquarium coordinates with Polycom’s Live Virtual Events team and partners with local colleges and councils equipped with video collaboration equipment, in efforts to make their programmes accessible to students no matter their location.

- Providing educational opportunities to students who may not otherwise be able to engage in their programmes, such as residents of youth detention centres, children in extended hospital stays, and English-language students in Greece.
- Taking students from four rural primary schools in the Australian state of Victoria for World Environment Day in June 2012 on a virtual dive through the Coral Reef Exhibition, enabling them to get up close to a rescued turtle and learn how pollution is endangering their existence.

Programme development

The Asia Pacific Region is an emerging market for ReefHQ Aquarium, particularly for using Polycom’s video collaboration solutions as a training tool for staff involved in promoting the Great Barrier Reef, Queensland and Australia as tourist destinations.

In future development plans for the programme, ReefHQ Aquarium plans to extend its use of Polycom technology by incorporating both the green screen technology and content sharing into presentations. These enhancements will aid the Aquarium in exploring new programmes.

The future of technology-driven education

The students of today are the decision-makers of tomorrow, and this resonates with ReefHQ Aquarium. The organisation believes that technology will enable students to more freely access environments all over the world from the comfort of their classrooms, and that contemporary teaching developed in line with advancements in technology can foster more informed and globally-aware citizens.

“Students today have more options for education, both formally and informally. The scope for delivering education has broadened greatly with advances in technology and increased accessibility,” says Nucifora. “Polycom has provided opportunities for ReefHQ Aquarium to contribute to school curriculums, offer training over distance, and provide access to our marine experts to improve awareness of environmental issues. We need to remain flexible in our approach to cater for the diverse needs of students.”

Polycom solutions for education

Polycom's vision of collaborative education includes bridging teachers, instructors, students and content providers around the world to help people learn. Video technology provides rich, interactive, visual solutions that impact all facets of education from student administration to course development to curriculum delivery to content management.

Polycom offers a broad portfolio of video collaboration solutions specifically designed by educators for educators. These solutions bring High Definition (HD) video collaboration within reach of even the most challenged budgets, so every student can experience the resulting boosts in learning, engagement, teamwork, and collaboration.

Product listing

Polycom® RealPresence® Room solution

- Polycom® HDX® 8000

About Polycom

Polycom is the global leader in open standards-based unified communications and collaboration (UC&C) solutions for voice and video collaboration, trusted by more than 415,000 customers around the world. Polycom solutions are powered by the Polycom® RealPresence® Platform, comprehensive software infrastructure and rich APIs that interoperate with the broadest set of communication, business, mobile and cloud applications and devices to deliver secure face-to-face video collaboration in any environment.

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