



# The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

## Final Copy of Case Study

**YEAR:**  
*2012*

**STATUS:**  
*Laureate*

**Organization name:**  
Amrita E-Learning Research Lab

**Organization URL:**  
[www.aview.in](http://www.aview.in)

**Project Name:**  
Amrita Virtual Interactive E-Learning World

**What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?**

In India, we are lacking experienced, skilled faculties in almost every domain to impart quality education to students spread nationally. Thus the project was started to help the entire student community of India to get the best education possible, free of cost and without the barriers of distance, leveraging the ever-growing reliable Internet connection availability. Teachers also benefit by attending online workshops and improving their teaching skills. A-VIEW Class Room: Open Source E-Learning Tool connects all universities and colleges of the country free of cost. Both the collaborative as well as cooperative modes of learning are supported. A-VIEW not only ensures students continual access to course materials, but also helps to maintain their interest to keep them engaged and motivated in their learning process. The real-time collaborative multimedia e-Learning feature of A-VIEW reduces barriers related to technology, access, and time and is designed to benefit even the marginalized learners (migrants, homeless, people with learning difficulty, unemployed, those on low incomes, people with the lowest level of initial education, older people, etc.). A-VIEW has innovative ways of using technologies to enliven the teaching/learning process as well as empowering and ensuring users that they have the skills and understanding to make the technology work meet their needs of fulfilling individual and collective dreams. A culture of learning occurs where everyone is in a collective effort of understanding and gives the opportunity for users from remote regions to interact with experts, through video conferencing and workshops. For example, a national-level teacher empowerment program is being conducted twice in every year by IIT-Bombay using A-VIEW. More than 1,000 teachers from around 500 colleges were trained in a 2-week online workshop on DBMS in December 2010; around 32 nodal centres were set up nationally.

**Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.**

Any new technology is initially hard to adopt, especially for people in the developing countries. So A-VIEW has been made as user-friendly as it could get for addressing the need of distance education for people even in the rural areas of the country. For making it still easier for every person of any state in the nation, A-VIEW will be available in the local languages. The technologies used for making A-VIEW a state-of-the-art e-learning software are as follows: 1) Adaptive bandwidth usage to ensure optimum quality of service. 2) Multimodal student-teacher interaction: live, two-way audio/video transmission, crystal-clear live document sharing, multi-device-compatible white board and desktop sharing. 3) Education dissemination in the distance education mode using high-resolution multiple displays. 4) Focuses on the course being offered by premier institutes with support from MHRD for the benefit of other educational institutes 5) Students can continue learning at their own pace with the Recording and Playback Facility. 6) No proprietary hardware is needed. 7) Quizzes can be answered by students through mobile phones via SMS, as smart phones and mobile Internet are not common features yet in India.

**Please list the specific humanitarian benefits the project has yielded so far.**

The Project A-VIEW's motto is to break the barriers of geographical distance between teachers and students in any part of the country and make the best education free for all students in India ([www.aview.in](http://www.aview.in)). As part of the project, along with regular live classes through A-VIEW, Amrita E-Learning Research Lab, in association with the Ministry of HRD and IIT Bombay, has come up with programs such as the Weekly Interaction Program. In this program, various eminent personalities in the field of academia and corporate come online over A-VIEW to share their knowledge and ideas with all universities in India every week ([www.aview.in](http://www.aview.in)). Ask a Question Program: This is an exclusive online interactive program for all engineering students in India. Here any student in the field of engineering can come online through A-VIEW and interact with expert faculties at IIT Bombay to clarify their doubts ([www.co-learn.in](http://www.co-learn.in)). National Teacher Empowerment Program: A-VIEW is used by IIT Bombay to Train the Trainers online. More than 3,800 teachers at various institutions across the nation were trained through this program by IIT Bombay ([www.it.iitb.ac.in/~dbp/](http://www.it.iitb.ac.in/~dbp/)). Online Gurukul: This project aims at providing free tuition to all students in any subject online. The pilot phase of the project is in Kerala, covering career awareness for all arts and science college students in Kerala ([www.onlinegurukul.in](http://www.onlinegurukul.in)). A-VIEW Meeting: This project aims to provide free online meeting tools for all universities. Universities save on time and money. For universities that have different campuses spread across large distances, they can communicate without spending time on travel and arranging conference rooms (<http://aview.in/aview-meeting.php>).