

## IPSTAR Empowers Remote Classrooms with Interactive Distance Learning

The southern Thai province of Pattani has a rural population scattered throughout vast, mountainous and heavily forested lands with few telecommunication infrastructure in place. About 90 percent or 540,000 of its population live in the rural area, where most communities subsist through farming, fishing and tourism. People living in remote communities are often isolated due to the lack of telecommunication service – contributing towards the widening digital divide gap between the urban and rural areas.

### The Situation

Many rural schools in Pattani are simply beyond the reach of telecommunication network. It is not viable to rollout terrestrial infrastructure for the remote schools due to the high installation cost of copper wire. A Wireless Local Loop (WLL) that uses microwave radio transmission is also not suitable for very harsh terrain, or schools that are 20 kilometers away from the nearest Public Switched Telephone Network (PSTN) office.

Therefore, the concept of teachers and students enjoying fast, reliable and always-on broadband access to digital libraries has been considered unviable for many rural schools. But not until recently, when the isolated Wangkapor Pittayakom School has been provided with IPTV VoD and broadband Internet access via IPSTAR – through Sat-Ed's 'Education on Demand in Classroom' project.

### Distance Learning via IPSTAR

IPTV VoD delivers on-demand class contents via IP-based connection from Sat-Ed's digital libraries straight to the TV screens in the classroom. By using a simple remote control, teachers can navigate through a series of high-quality videos and students can answer on-screen questions. With push technology, video clip viewing can be paused, rewind, forwarded or stopped – resulting to a more flexible learning environment.

The impact of IPTV VoD to the teachers' instructional style has been dramatic. Instead of spending most of their time standing in front of the room and talking, teachers are now giving project-based activities; and instead of relying on textbooks, they are now directing students to research educational materials from the Internet. "One of the things I find exciting about IPTV VoD is that we are no longer time bound. We can now access and teach subjects anytime, anywhere. The fact that it's on-demand makes the learning environment more flexible than ever before. I want to change the paradigm of how higher education delivers instruction and I believe this is the technology to do it", an English teacher said.

High school student Suraiya Saong is also benefiting from the newly installed IPTV VoD and broadband Internet. She is now more attentive and engaged in the classroom discussions. Suraiya, who once said, "When I grow up, I want to be a doctor", is also acquiring new knowledge through IPTV VoD, especially on her favorite subject Science. In addition, she is now using broadband Internet to research more advanced topics on Science and to help her with the other subjects – such as English, Math and Arts.

Many remote students, like Suraiya, are benefiting from Sat-Ed's 'Education on Demand in Classroom' project. IPTV VoD and broadband Internet allow these students to access updated online educational contents that are oftentimes not available in their textbooks or in the school library. Sat-Ed's on-demand learning project really helps to change how education is delivered inside the classroom, to empower teachers with up-to-date contents, and to encourage students to become more interactive in learning.



### About Sat-Ed

Sat-Ed is currently delivering its project, 'Education on Demand in Classroom', to the remote schools in Thailand by using the cutting-edge technology of the IPSTAR broadband satellite. Aimed at improving the country's quality of education, this project provides remote schools with access to digital libraries via IPTV VoD and broadband Internet. For more information, visit [www.sat-ed.com](http://www.sat-ed.com).