

Satcoms linking rural schools in South Africa and Italy

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Rural schools reach out via satellite. Credit: ESA

Teachers and students from rural schools in South Africa and Italy are benefiting from an ESA-supported project that enriches education through satcoms.

Twelve schools with 6500 students in the Mpumalanga region of South Africa and the 60-pupil Comprehensive School of Tricarico-Calciano in

the Basilicata region of Italy faced similar disadvantages of having no Internet capability: few resources and limited access to information.

Sway4edu2, Satellite Way for Education, is improving this. ESA's Advanced Research in Telecommunications Systems programme and Openet Technologies in partnership with Luxembourg's satellite broadband operator SESTechcom Services are working together to close the digital divide.

Each school was equipped with satellite terminals, solar panels and batteries where needed, laptops, tablets, a projector with screen, and loudspeakers.

The setup provides Internet connectivity and access to eLearning for teachers and students, media content and other online monitoring tools and information.

The Singita Community Development foundation in South Africa is supervising the installation of the equipment, the provision of raw material for the online courses, and in collaboration with the Department of Education, the mentoring and training of 200 teachers in the effective use of the system.



Satellite terminals on SA school. Credit: ESA

The installation in the Basilicata region in Italy has the full backing of the Minister for Education, who sees the technology as a means of fostering cultural integration between schoolchildren and boosting language learning.

The first eLearning course for the South African teachers was released in March and a number completed the course to familiarise themselves with the technology and its benefits.

The system is also seen as a valuable tool for raising environmental awareness among rural communities. "One of the eLearning courses will assist teachers, and thereby their students, to foster awareness of the importance of preserving the local wildlife heritage, and of adopting a more sustainable approach to their own daily living," said Pam Richardson, Singita's Community Development Director.

"Game reserves across Africa are at risk and need the close collaboration of local communities to keep them safe. This course is seen as an important tool in achieving this."

Two satellite video-conferencing connections were established during the launch event on 17 June.

The first was between the Tricarico-Calciano school in Italy and the Babati Primary School in South Africa, which are now 'twinned' for the project.

The second connection was with ESA's Francesco Feliciani, at ESA's ESTEC technical centre in the Netherlands, for a live lecture about the Rosetta comet probe.

Educational activities using the video facility between the schools will introduce the students to very culturally different environments.

"ESA is delighted to promote the creation of cultural bridges between schools," said Francesco. "This is an exciting opportunity."

Provided by European Space Agency

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