

New tools for scientific learning in the EduSeis project: the e-learning experiment

A. Bobbio, L. Cantore, N. Miranda, A. Zollo

Abstract

The Educational Seismological Project (EduSeis) is a scientific and educational project, the main aim of which is the development and implementation of new teaching methodologies in Earth Sciences, using seismology as a vehicle for scientific learning and awareness of earthquake risk. Within this framework, we have recently been experimenting with new learning and information approaches that are mainly aimed at a high school audience. In particular, we have designed, implemented and tested a model of an e-learning environment in a high school located in the surroundings of the Mt. Vesuvius volcano.

The proposed e-learning model is built on the EduSeis concepts and educational materials (web-oriented), and is based on computer-supported collaborative learning. Ten teachers from different disciplines and fifty students at the I.T.I.S. Majorana technical high school (Naples) have been taking part in a cooperative e-learning experiment in which the students have been working in small groups (communities). The learning process is assisted and supervised by the teachers. The evaluation of the results from this cooperative e-learning experiment has provided useful insights into the content and didactic value of the EduSeis modules and activities. The use of network utilities and the Learning Community approach promoted the exchange of ideas and expertises between students and teachers and allowed a new approach to the seismology teaching through a multidisciplinary study.

Keywords

elearning;Jigsaw method;EduSeis web tools

Full Text:

PDF

References

DOI: <https://doi.org/10.4401/ag-3080>

Published by INGV, Istituto Nazionale di Geofisica e Vulcanologia - ISSN: 2037-416X

USER

Username
Password
 Remember me

MOST VIEWED

- OPERATIONAL EARTHQUAKE FORECASTING....
- ObsPy – What can it do for data...
- Twitter earthquake detection:...
- Magnitude and energy of earthquakes
- Comparison between low-cost and...

AUTHOR GUIDELINES





EARLY PAPERS

- [Vol 61, 2018](#)

FAST TRACKS

- [Vol 56, Fast Track 1, 2013](#)
- [Vol 57, Fast Track 2, 2014](#)
- [Vol 58, Fast Track 3, 2015](#)
- [Vol 59, Fast Track 4, 2016](#)
- [Vol 59, Fast Track 5, 2016](#)
- [Vol 60, Fast Track 6, 2017](#)
- [Vol 60, Fast Track 7, 2017](#)
- [Vol 61, Fast Track 8, 2018](#)

ARTICLE TOOLS

-  Indexing metadata
-  How to cite item
-  Email this article (Login required)
-  Email the author (Login required)

ABOUT THE AUTHORS

A. Bobbio
Istituto Nazionale di
Geofisica e Vulcanologia,
Sezione OV, Napoli, Italia

JOURNAL CONTENT

Search

Search Scope
All ▾

Browse

- [By Issue](#)
- [By Author](#)
- [By Title](#)

Journal Help

KEYWORDS

Central Italy
Earthquake GPS
Historical seismology
Ionosphere Irpinia
earthquake Italy Mt.
Etna Seismic hazard
Seismic hazard
assessment Seismology
UN/IDNDR earthquake
earthquakes historical
earthquakes
ionosphere magnetic
anomalies
paleoseismology seismic
hazard **seismicity**
seismology

NOTIFICATIONS

- [View](#)
- [Subscribe](#)

USAGE STATISTICS INFORMATION

We log anonymous usage
statistics. Please read the
privacy information for
details.

