

**Report from the 6th Workshop on
Multimedia in Physics Teaching and Learning
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European Physical Society - Division of Education
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Aims of the Workshop

Building on the tradition of the previous workshops on Multimedia in Teaching and Learning, this sixth edition focused on new trends and research results as well as on the presentation of experiences gained while developing, testing and applying elements in multimedia and computer aided physics teaching and learning. Special attention went to the standardization and exchange of resources between the different projects running in different countries.

Contributions

The workshop was organized at Ghent University by the CRIPE team (Center for Research and Innovation in Physics Education). It was attended by 42 participants representing 13 countries, with 20 active contributions and 2 invited speakers. The first invited speaker, Fred Goldberg (San Diego State University) gave an overview of recent developments and experiences accomplished in the U.S. His talks: "Constructing Physics Understanding: The Design of Pedagogical Simulators and their Integration into a Curriculum to Promote Learning of Physics" and "How Computer Simulators Can Provide a Bridge Between Students' Initial Models and Target Instructional Models of Physics Phenomena" set the tone for the workshop.

The second invited speaker, Gerd Kortemeyer (LITE Lab, Michigan State University) discussed the LearningOnline Network with CAPA as an open-source sustainable distributed instructional management system and content repository.

Most participants presented newly developed material and their experience with the implementation. The representatives from the Western European countries such as Germany, The Netherlands, Belgium, Greece and Italy showed their respective quite extensive multimedia projects. The availability of computers and the Internet is improving every day, which implicates that students become more and more confident with multimedia. How these tools are used becomes a very important issue in physics education research. A lot of participants emphasized the importance of this particular issue.

Next to the internet availability the improvement of bandwidth opens opportunities for projects with interactive video or remote lab exercises, as shown at the workshop.

A number of Eastern European participants (Bulgaria, Czech Republic, Poland, Slovenia, Ukraine) presented their recent developments of the use of multimedia for teaching in applied projects such as material physics or machinery engineering.

Discussions

A lot of topics were mentioned and discussed during the workshop and the final discussion. The participants agreed to hold on to the proven workshop concept and not to switch to a more traditional conference format, at least for the next few editions. It was unanimously agreed that presentations at future workshops should be of high quality in content as well as in presentation.

For multimedia products translating materials in different languages becomes an important issue and the language problem (transportability) should already be well considered from the very beginning. In addition the workshop recommends new projects should be organized in modular form, suitable for different levels of applications (university, school, in-service training, self-study).

Detailed information about the 6th edition of the workshop on “Multimedia in Physics Teaching and Learning” can be found at <http://cripe03.rug.ac.be/MPTL/programme.htm> where all contribution abstracts are available.

In 2002 the 7th workshop will be held September 23 – 24 at the Institute for the Physics of Matter in Parma, Italy. Updated information will be available at the URL: http://pen.physik.uni-kl.de/w_jodl/mmeuws.htm