Audio-visual resources and communication: a laboratory discipline for scientific popularization of Geosciences
Carneiro, C.D.R.¹ and Barbosa, R.²

¹University of Campinas, Campinas, SP, Brazil. Co-ordinator, Graduate Program of History and Teaching of Earth Sciences. cedrec@ige.unicamp.br
²Devry Metrocamp: Integrated Faculties of Campinas, Campinas, SP; Invited Teacher of the Graduate Program of History and Teaching of Earth Sciences. rbarbosa@ige.unicamp.br

This article describes the experience gained from a discipline named Communication and Audio-visual Resources for Science Teaching, taught in undergraduate and graduate courses of the Geosciences Institute of the University of Campinas, Brazil, for more than 20 years. Initially directed towards facilitating presentation of scholarly work by students and teachers, the design of the discipline has evolved with time; nowadays, it is an experimental space for the production of several types of artefacts such as videos, papers and presentations for popularizing Earth Sciences. The article describes and analyzes the trends of such a discipline and the trajectory chosen by a few students for developing their productions, taken as an example.

In past editions of the discipline, guidelines on how to write academic abstracts and papers were offered, so also techniques for preparing computer slides. Slowly, the discipline has opened new branches; today, it helps develop skills required not only for the production of scientific papers and oral presentation of new ideas or research results, but also videos, animation and so on. The specific objectives include acquisition of editorial and technical skills such as writing synthetic texts, which require a clear exposition of ideas to compose readable didactic resources. The technical skills are related to the full mastery of specific computer programs for: (a) oral presentation, (b) technical illustration, and (c) nice and high quality digital video editing and animation, considering a list of criteria. A few representative examples are critically discussed.

Figure 1a/1b. Some snapshots of a video made by a student of the discipline: A didactic glance of the Guarani Aquifer [1]
The authors emphasize, therefore, the relevance of scientific communication as a critical component that should be present in any area of research.

The change of ideas from the field of representation to the branch of animation and video promotes an increase in the complexity of communication not only in terms of audio-visual language, but also from the need of communication planning. On the other hand, it offers promising unlimited new opportunities. Audio-visual production has a great potential for scientific divulgation, a widespread trend in the information age, thanks to the expansion of Internet. A discipline dedicated to communication, supported by rigorous scientific guidelines, can become a laboratory for: (a) video production; (b) dissemination of scientific knowledge, and (c) technical exchange between the academic world and people in general.

References: