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Communication and the public understanding of geohazards

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The public requires information on geological hazards (geohazards), which includes volcanic eruptions, earthquakes, induced seismicity, tsunamis, landslides, subsidence, flooding, mining hazards, contaminated ground and problem soils. But how do geologists communicate the complexities of geology to an audience that often has no or little appreciation of the ground? This may be further compounded by language, cultural, political and historical barriers. The objectives of this paper are to provide an overview and to give examples of how geologists have become better communicators of geoscience information to the public [1]. In the past few decades there have been good and poor examples of how geological information has been communicated to the public and these will be further explored. There are now available publications to assist with communication of geological information [2]. Communication is a skill and therefore methods of effective communication can be learnt. To aid communication, the social and behavioural aspects of communication should be better understood by geologists. In addition, to the conventional 'face-to-face' method of communication, digital techniques including Geographic Information Systems (GIS) can facilitate communication and help convey and visualise the complexities of geology (Figure 1).

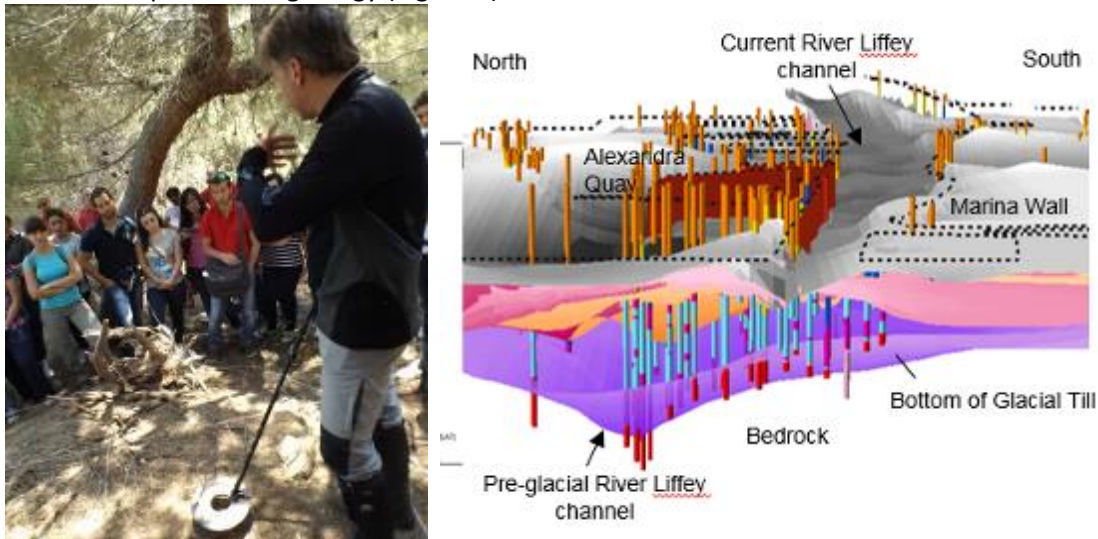


Figure 1. Different methods for the effective communication of geohazards to the public. (Left) Direct engagement and empowerment (MSc Forensic Geology, University of Messina, Sicily). (Right) Ground models and GIS for Dublin Port, Ireland (Source: Arup).

Once a geohazard has been identified by the geologist, the recipient of the geological information and audience must be considered. Consider then how to engage with the audience and the most effective communication channels, format and venue. The information may then be dispatched and transferred in a manner that is understandable, without the use of technical terms and jargon. Experiences shows that when the public are empowered, if they are informed about a geohazard and the levels of associated

risk, they may become better placed to understand, manage and mitigate the risks. The public must be given the opportunity to provide feedback and ask questions. Finally, if the geohazard is ongoing further meetings and engagement with the public should take place.

References:

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