



A multidimensional and interdisciplinary strategy for geo-hydrological risk reduction oriented towards minors

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One of the targets of the Sendai Framework is to reduce disaster damage to critical infrastructure and disruption of basic services, in particular educational facilities, developing their resilience. In this perspective, we involved 40 school (Central Italy) in a three-year project, which aims at assessing the real safety to which all the school occupants (students, teachers and auxiliary personnel) are subjected. This project was structured in three complementary lines of work: 1) improvement of the school buildings safety; 2) improvement of school occupants awareness; 3) improvement of the measures for the minors protection within the Territorial Civil Protection Plans. The first one consists in rapid and low cost instrumental surveys on built structures that are combined with the observation of all natural features possibly related to local geo-hydrological risks, as well as the ordinary habits and the planned behaviours in case of emergency. The compendium of the main results, which is represented by the Geohazard Safety Classification (GSC), and a list of technical recommendations, is useful to inform the official security managers that can implement the existing risk assessment documents of their school building and related emergency plans. The second line of work consists in increasing and improving the geological risks awareness of the students through both the involvement during the survey and the administration of questionnaires focused on the local geo-hydrological risk perception. Therefore, the questionnaires help to assess the current resilience degree that is included in the GSC definition and are conceived as a didactic instrument, since they allow students to reflect on these problems. All the questionnaires are calibrated for age groups. Some unbiased and expert school educators collaborated in assessing and testing them in advance. After the results delivery, a public meeting was held each year. All the interested teachers, concerned operators, security supervisors and school managers were involved. The goals of the meetings were: a) to explain the executed working methods, b) to have an open discussion about the priorities of school security, c) to convey ideas that will serve the professional growth of teachers and the process of transmission to students during their educational path in addition to the planned practice exercise like evacuations. Finally, since the full management of emergencies in a school must necessarily be linked to the territorial civil protection plans, the third line of work consists in verifying, in some sample municipalities throughout Italy, the minimum standards for the protection of minors during emergencies. This was realized opening a dialogue with the public administrations and looking for the presence of some specific "indicators" in their plans and operative activities. This analytical process had also the function: i) to sensitise the local institutions of adopting suitable measures for the protection of minors in emergency within the Civil Protection Plans; ii) to promote a culture of safety and risk prevention, in which children are considered active subjects; iii) to disseminate the contents of the already existing guidelines concerning the minors' rights; iv) to highlight good practices already experimented by institutions.