

Designing a Learning Table and Game Cards for Preschoolers for Disaster Risk Reduction (DRR) on Earthquake

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Abstract : Children are among the most vulnerable at the occurrence of natural disasters such as earthquakes. Most of the management and measures which are considered for both before and during an earthquake are neither suitable nor efficient for this age group and cannot be applied. On the other hand, due to their age, it is hard to educate and train children to learn and understand the concept of earthquake risk mitigation as matters like earthquake prevention and safe places during an earthquake are not easily perceived. To our knowledge, children's awareness of such concepts via their own world with the help of games is the best training method in this case. In this article, the researcher has tried to consider the child an active element before and during the earthquake. With training, provided by adults before the incidence of an earthquake, the child has the ability to learn disaster risk reduction (DRR). The focus of this research is on learning risk reduction behavior and regarding children as an individual element. The information of this article has been gathered from library resources, observations and the drawings of 10 children aged 5 whose subject was their conceptual definition of an earthquake who were asked to illustrate their conceptual definition of an earthquake; the results of 20 questionnaires filled in by preschoolers along with information gathered by interviewing them. The design of the suitable educational game, appropriate for the needs of this age group, has been made based on the theory of design with help of the user and the priority of children's learning needs. The final result is a package of a game which is comprised of a learning table and matching cards showing sign marks for safe and unsafe places which introduce the safe behaviors and safe locations before and during the earthquake. These educational games can be used both in group contexts in kindergartens and on an individual basis at home, and they help in earthquake risk reduction.

Keywords : disaster education, earthquake sign marks, learning table, matching card, risk reduction behavior

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