Training for Search and Rescue Teams: Online Training for SAR Teams to Locate Lost Persons with Dementia Using Drones

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Abstract : This research provides detailed proposed training modules for the public safety teams and, specifically, SAR teams responsible for search and rescue operations related to finding lost persons with dementia. Finding a lost person alive is the goal of this training. Time matters if a lost person is to be found alive. Finding lost people living with dementia is quite challenging, as they are unaware they are lost and will not seek help. Even a small contribution to SAR operations could contribute to saving a life. SAR operations will always require expert professional and human volunteers. However, we can reduce their time, save lives, and reduce costs by providing practical training that is based on real-life scenarios. The content for the proposed training is based on the research work done by the researcher in this area. This research has demonstrated that, based on utilizing drones, the algorithmic approach could support a successful search outcome. Understanding the behavior of the lost person, learning where they may be found, predicting their survivability, and automating the search are all contributions of this work, founded in theory and demonstrated in practice. In crisis management, human behavior constitutes a vital aspect in responding to the crisis; the speed and efficiency of the response often get affected by the difficulty of the context of the operation. Therefore, training in this area plays a significant role in preparing the crisis manager to manage the emotional aspects that lead to decision-making in these critical situations. Since it is crucial to gain high-level strategic choices and the ability to apply crisis management procedures, simulation exercises become central in training crisis managers to gain the needed skills to respond critically to these events. The training will enhance the responders' ability to make decisions and anticipate possible consequences of their actions through flexible and revolutionary reasoning in responding to the crisis efficiently and quickly. As adult learners, search and rescue teams will be approaching training and learning by taking responsibility of the learning process, appreciate flexible learning and as contributors to the teaching and learning happening during that training. These are all characteristics of adult learning theories. The learner self-reflects, gathers information, collaborates with others and is self-directed. One of the learning strategies associated with adult learning is effective elaboration. It helps learners to remember information in the long term and use it in situations where it might be appropriate. It is also a strategy that can be taught easily and used with learners of different ages. Designers must design reflective activities to improve the student's intrapersonal awareness.

Keywords : training, OER, dementia, drones, search and rescue, adult learning, UDL, instructional design

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