建構韌性防災校園與防災科技資源應用計畫

Program on Building Disaster Resilient Schools and Technology Application

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摘要

全球近 20 年來災害發生頻率快速升高且衝擊加劇,人類活動已證實對大氣、海洋 及陸地帶來暖化影響,造成世界各地許多極端天氣與氣候事件。面對氣候緊急狀態,必 須用更寬廣、全面性和跨領域的視野,藉由推動學校耐災教育,強化災害韌性,來減輕 災害所造成的危害。教育部自 2019 年起以「韌性建構,防災校園」為防災教育願景, 結合防災科技資源與創新研發,推動「以判斷原則的教育,取代標準答案的訓練」,期 落實「讓防災成為一種生活態度」。為達計畫目標,2021 年研擬直轄市及(縣)市防災 教育輔導團團員認證指引,辦理1場次團務交流會議、22場次團員實務工作坊,強化各 縣市輔導團自主運作能力;建置 635 所防災校園,達成校校皆是防災校園目標;持續輔 導 28 所特殊教育學校防災校園,辦理 28 場次特殊教育學校防災工作坊、8 場次特殊教 育學校防災知能研習課程、22 場次特殊教育人員防災研習、2 場次進階特殊教育增能研 習,深化特殊教育防災教育;串聯 31 所學校、139 個防災教育課程形成 8 大環境及防災 遊學課程路線,設計火山防災教育文宣,蒐集49份優良成果教案,彙整99件績優、優 選學校防災教育推動成果,發行 6 期《2021 防災教育花路米》與《2020 防災教育花路 米電子報》成果冊,推廣防災相關觀念與優化防災教育資源;辦理臺日防災教育實務經 驗交流論壇、防災校園大會師,並促成 85 件學校與產、官、學等跨單位之合作案,促 進跨國、跨校、跨單位經驗與資源交流;辦理2場次工作坊助教增能研習、2場次學校 防災業務工作發言人訓練、8場次國私立高級中等學校防災增能研習、22場次幼兒教育 人員防災研習,提升各類學校人員防災意識與知能;評估 22 縣市防災教育輔導團量能 與 50 所防災校園運作情形,提出精進改善對策與建議,落實韌性防災校園之推動。

關鍵詞:防災教育、韌性防災校園、防災科技、能力建構

Abstract

The frequency of disasters has increased and worsened dramatically. Human activity has caused warming effects among the atmosphere, oceans, and lands, which leads to extreme climate change in nations. In the face of climate emergencies, the country needs a broader, comprehensive, and interdisciplinary vision of disaster prevention and resilience. By promoting disaster risk reduction education (DRRE) in schools and strengthening disaster resilience, the damage of disasters can be reduced. The MOE has promoted DRRE since 2019 and takes "building stronger disaster resilient schools" as the vision. By combining resources like disaster prevention technologies and innovative research and developments, the MOE hopes to provide training on "more comprehension on judgment rules instead of rote learning" and "making Disaster Preparedness a part of our life." To achieve the project goal, the MOE developed a guideline for the municipal governments to establish the certification of local DRRE counseling groups in 2021. One group affair convention and 22 workshops helped local DRRE counseling groups enhance autonomous operation ability. There were 635 disaster resilient schools established to meet the target of making every school disaster-proofed. 28 special education schools were counseled to build their disaster resilience continuously, including 28 workshops and 8 training courses of DRRE were held. Deepening DRRE in special education, the project also held 22 DRRE training courses and two advanced training programs for special education teachers. 99 DRRE promotion results by quality Disaster Resilient Schools were gathered, 49 excellent DRRE teaching materials were collected, 6 DRRE e-papers with one annual achievement of 2020 were published, and a volcanic disaster prevention flyer was designed to elevate DRRE related concepts and resources altogether. Furthermore, eight environmental and disaster-resilient study routes linking 31 schools and 139 disaster prevention courses were planned. It also organized the 2021 Republic of China (Taiwan) and Japan Disaster Risk Reduction Education Practical Experience Exchange Forum and the 8th and 9th Gathering of Disaster Resilient School, and in addition, 85 collaborative projects among schools, governments, and corporations have encouraged the exchange of experience and resources across schools, units, and nations. To improve the disaster prevention ability of school staff, two DRRE teaching assistant workshops, two spokesman training programs, eight disaster prevention training events of national and private compulsory schools, and 22 disaster prevention training courses for kindergartens were held. Last, the project evaluated the DRRE counseling groups of 22 counties/cities and 50 disaster resilient schools to propose an improvement strategy so that the promotion of disaster resilient schools can be practiced.

Keywords: disaster risk reduction education (DRRE), disaster resilient school, disaster technology, capacity building.