

IVE、HKDI学生透过VR科技 助病人舒缓不适感

IVE and HKDI students develop pain management VR game



While smart healthcare picks up pace, the virtual reality technology (VR) begins to gain popularity in the healthcare sector. A group of teachers and students from the Hong Kong Design Institute (HKDI) and Hong Kong Institute of Vocational Education (IVE) collaborated with a medical institution in developing a system to relieve patients' pain during surgeries by adopting VR.

智慧医疗发展急速，虚拟实境 (Virtual Reality, VR) 技术在医疗领域有愈来愈多元的应用。由香港知专设计学院 (HKDI) 及香港专业教育学院 (IVE) 组成的跨学科师生团队，早前便联同医护机构，利用VR技术开发出一套疼痛管理项目，以缓解病人于手术时的不适。



这套名为「资优设计工作室：HKDI Well Being虚拟实境应用设计 - 疼痛管理」的项目，透过以潜水为主题的VR游戏，为患者于日间诊所进行的一些简单小型手术中，提供另类的减轻痛楚方式，从而减少使用麻醉剂所带来的副作用。HKDI超媒体高级文凭课程的学生更为游戏设计出四个场景，包括平静、放松、神秘及刺激的虚拟海底世界，以配合不同年龄病人的需要；而IVE医务中心营运高级文凭课程的学生则负责测试VR游戏的成效。结果显示，60%受测试对象表示VR游戏有助减轻痛楚。有份参与项目的同学均表示，项目不但让他们学以致用，更重要是可与业界接触，深入了解小型手术的流程，从而可从医护人员角度去优化测试流程，完善VR游戏的设计。

Named "HKDI Well-being - VR for Pain Management", the project seeks to offer an alternative to anesthesia in minor surgeries through a scuba-diving VR game, thereby lowering the risk of side effects from drug intake. To cater for the needs of patients from different age groups, students from HKDI's Higher Diploma in Transmedia Programme came up with four virtual scenes - calm, relaxed, mysterious and exciting - all of which simulate the underwater world. Meanwhile, students from IVE's Higher Diploma in Medical Centre Operations Programme were responsible for testing the effectiveness of the game in relieving pain. It turned out that 60% of the respondents agreed the game helped reduce pain. Participating students reflected that not only did the project put their knowledge into practice, but it also offered them the valuable chance to meet industry practitioners and get to know how minor surgeries are done. This allowed them to think from healthcare practitioners' perspective, conduct better testing and enhance the design of the VR game.