



International College of Prosthodontists
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Program Speaker – Ziyuan Zhu

Title

When Digitalization Met Dental Education

Abstract

Chinese dental education system includes the undergraduate program, master's program and doctoral program. In the past few years, to meet various demanding for oral healthcare, a three-year residency training program and a two-year specialist training program have been established and improved. The Lack of dentists and unequal distribution of educational resources are the mainly problems in Chinese dentistry. Nowadays digitalization plays an important role and is expected to improve Chinese dental education. The Immersive Digital Technologies consists of AR (Augmented Reality), VR (Virtual Reality) and MR (Mixed Reality). Augmented reality, which enhances the real world with digital twins and visual overlays, is an ideal tool for digital design of prosthodontic treatment plan. Virtual reality allows the student to submerge into a virtual dimension by using virtual dental trainer. Another virtualization of dental education in our college is virtual campus. Finally, there's mixed reality, which combines the capabilities of AR to overlay real objects with the VR-created digital world, for example, using Computerized Dental simulator to measure student's preparation digitally in real time. The implant dynamic navigation is also helpful mixed reality method for students in the specialist program. Meanwhile digital management mode greatly improves the efficiency of educational management of undergraduate education as well as that of residency training and specialist program. To improve the digitalization of dental education, the cost reduction of the information service and further development of infrastructures especially in the remote area is really important. In addition, Digital learning should be more about the human touch than just machines.

Biography

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Prof. Ziyuan Zhu is the Education Committee member of International College of Prosthodontics (ICP).

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