

Editorial

Integration of Digital Technology into Dental Education

Modern science and technology are making tremendous advances and changes in all aspects of dentistry. The rapid integration of technology has influenced the way we collect information for diagnosis and treatment planning and also dramatically changed the way we treat our patients. Same-day crowns, inlays, onlays and veneers are increasingly offered to increase productivity and provide convenience for the patients.

This trend in dentistry is also reflected by changes in digital teaching and grading tools that have been introduced recently.¹ Grading of dental students' operative performance and providing proper feedback for self-assessment to establish life-long learning are major issues to be addressed in dental education. Traditionally students receive feedback from instructors and their performance is evaluated by calibrated evaluators/faculty involved in the course. Usually a pre-established checklist is used and grades determined by adding points related to specific criteria.² The traditional way of providing feedback and grading a project has been a good method to establish communication with the students and understanding problems and issues encountered by students. However, the subjectivity and inconsistency among instructors has been pointed out to be a major drawback of this conventional method.^{3,4}

New digital technologies allow detailed computer imaging and comparison of students' projects to a 'golden standard'. Through this new technology, the requirements for technical performance and self-evaluation of the desired outcomes will be taught alongside the traditional teaching methods. However, there are still some limitations and disadvantages with the recent introduction of this technology that would have to be addressed in the future. First, the acquisition of the appropriate number of scanners and software to accommodate the class size is costly. Second, proper education of faculty and instructors is needed to use the new technology. Third, there are more information and data needed to evaluate the difference between the conventional teaching to the digital technology method.

With more studies and development on this new digital technology, it is expected that students will be able to establish an improved and more accurate understanding of the desired outcome, which will enhance the efficiency of teaching and contribute to a higher quality product. This should ultimately lead to a generally higher quality dental care.

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