INTRODUCTION

The 2020 COVID-19 pandemic has had a global impact on social change, highlighting the importance of technology and distance learning. Educators are utilizing technological innovation to teach dental anatomy and shift the course to one that supports distance learning and include technology to facilitate dental education and student assessment.

PURPOSE

The purpose of this study is to determine the effectiveness, efficiency, and student satisfaction of a 3D virtual tooth identification test given for a preclinical dental anatomy course.

METHODS & MATERIALS

1. **Participants:** First-year dental students (n=41) enrolled in a dental anatomy course took both traditional in-person instruction and the virtual 3D tooth identification test consisting of 25 test items. The test scores, average test duration, faculty time commitment, and user perception were collected and analyzed.

2. **Materials:** Pearson product-moment correlation coefficients were determined for the criterion measures including tooth identification test scores, final written examination and overall grade for the course.

3. **Results:** There was a positive correlation (p<0.05) for the course.

4. **Discussion:** The virtual 3D tooth identification was more efficient than the real tooth identification exam among physical specimens when evaluating faculty time commitment to conduct and grade the exam and the shorter time it took for the students to complete the exam.

CONCLUSION

This study also found that students felt that the virtual test did not accurately test their ability to identify teeth or evaluate their knowledge in dental anatomy competency.

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