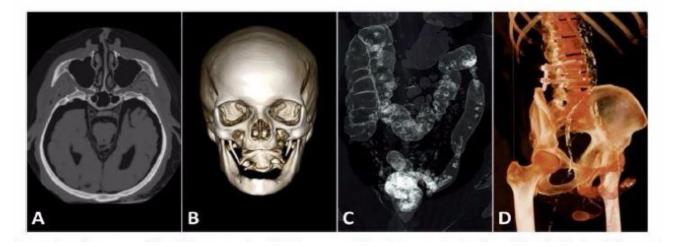
Anatomage Table Increased Student Anatomy Scores By Up To 27%

Measuring Learning Success In First-Year Gross Anatomy

Researchers from the University of Heidelberg, German Cancer Research Center, and Karlsruhe Institute of Technology recently published research focusing on the impact of the Anatomage Table. It was designed to measure the qualitative and quantitative success of radiologic imaging and 3D visualization in first-year gross anatomy courses at the University of Heidelberg Medical School.



Evaluation Of Virtual Technology In Courses

The 2 courses focused on were the Heidelberg Curriculum (HeiCuMed) of gross anatomy and another radiologic anatomy (RA) seminar. The HeiCuMed course is a more conventional anatomy course while the RA seminar used radiologic imaging such as CT scans and X-rays to teach gross anatomy. There were 3 specific cohorts of students that were evaluated quantitatively through a multiple choice anatomy examination. One group had access to CT workstations, the Table, and extra training in the RA seminar (CT + seminar group). Another group had additional training in the RA seminar course while the last group was only in the conventional anatomy course.

Quantitative & Qualitative Findings Of Cohort Analysis

Overall, the CT + seminar group achieved both higher and statistically significant scores compared to the conventional anatomy and RA seminar group of students. This cohort increased scores by 19.3% and 27.3% respectively when compared to those without CT scan training in the seminar and conventional anatomy course. Significant improvements were also seen when comparing the CT + seminar group to the other two groups with knowledge of the head and neck and extremities. This might be explained by the fact that intra- and extracranial anatomical structures are more complex in structure. Viewing these structures through virtual dissection may have resulted in more complete knowledge retention. Having access to CT cross-sections and virtual dissection tools may have also impacted students' knowledge of extremities and distal structures in the body.

References

Paech, D., Giesel, F., Unterhinninghofen, R., Schlemmer, H., Kuner, T., & Doll, S. (2016). *Cadaver-specific CT scans visualized at the dissection table combined with virtual dissection tables improve learning performance in general gross anatomy*. [Abstract]. European Radiology, 25(9). doi:10.1007/s00330-016-4554-5.

