REVOLUTIONIZING ANATOMY **EDUCATION: PAL 4.0 CASE STUDY**



Data gathered from Instructor Patricia Cobb, **Nicholls State University**



PURPOSE

This study explores Instructor Cobb's implementation of Practice Anatomy Lab (PAL) 4.0 into her Anatomy & Physiology course and its impact on academic achievement. Prior to PAL 4.0, students depended on self-labeled cell phone pictures of models for studying content outside of class, which resulted in inaccuracies and limitations in self-study. PAL 4.0 resources, including cadaver, anatomical model and histology images as well as interactive 3D models, were leveraged to empower students for success.

BEFORE LAB

Students were adequately prepared for in-person lab by utilizing PAL 4.0 and the following activities in Mastering A&P:

- Art labeling activities and A&P Flix animations
- Pre-lab video assignments such dissection videos

"PAL 4.0 was a huge asset in giving my students a strong foundation so they were ready to expand their knowledge in lab" - Instructor Cobb

DURING LAB

Access to PAL 4.0 and Mastering A&P assignments prior to lab time benefitted both the instructor and students by:

- Requiring less in-person lab dissection instructions

• Providing an in lab visual for concept reinforcement

AFTER LAB

Students had in person lab only 3 hours per week, PAL 4.0 benefitted students through:

- 24/7 virtual access to models they needed
- Models with correct perspectives and labeling

"I enjoyed all dissections and being able to use PAL 4.0 to look at real human examples of each structure that we looked at." - NSU student

"Students liked that PAL 4.0 gives them virtual access to the same models from lab so they can study them at home" - Instructor Cobb

RESULTS

85.82% Grade Avg.

Data from Instructor Cobb's Fall 2023 Anatomy and Physiology course outcomes corroborate PAL 4.0's efficacy. Student engagement with PAL 4.0 both in-lab and at home resulted in a class average of 85.82%, over three sections combined, an increase from the previous semester

without access to PAL 4.0. Student testimonials further attest to PAL 4.0's standing as a valuable tool that is essential for building a strong foundation in anatomy and physiology.



