Impact of Near-Peer Surgical Anatomy Teaching Program on Medical Student Self-Efficacy and Confidence: Learner and Teacher Perspectives

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Background: Clinical Anatomy Mentorship Program (CAMP) - a novel approach to teaching clinical anatomy. Developed and piloted by Class of 2021 M4s. Implemented into ACE.

Figure 1: main components of CAMP

M3 learner feedback

Increased confidence in OR:
“I cannot express enough how helpful CAMP were to my surgery rotation. It taught me high yield information, provided a much needed refresher on suturing, and all around calmed my nerves going into surgery. It calmed my nerves because it was an actual concrete, organized event that taught me about surgery. It made me feel prepared and like I had done my homework before the first day.”

Increased surgical confidence
Teaching surgical anatomy has deepened my knowledge of anatomical structures, which has enabled me to begin to think like a surgeon. I'm able to understand the why landmarks, surgical planes, and particular steps are so critical to a procedure. Instructing the suture practicum has not only helped me hone my own suturing knowledge and skills, but also taught me how to teach procedural skills. CAMP is the only opportunity I've had in medical school to formally learn how to [teach procedural skills].”

M4 teacher feedback

Establishing baseline anatomy knowledge:
“All the relevant anatomy was covered and the attendings I worked with were pleased that I came in knowing the anatomy/boundaries of the breast axilla. I felt that I had a good understanding of the main procedures I saw throughout the surgery clerkship because of CAMP.”

“Would recommend continuing this moving forward. By far the best didactic that I've experienced.”

Learning to be an educator
“CAMP has helped me learn how to design lessons to meet the level of my students' knowledge. Each group of students and each student is at a different level. Learning how to accommodate to each students' interests while keeping each engaged has helped me become a better educator.”

Methods & Results:
Quantitative Data (pre vs post-CAMP surveys):
M3 learners (n=107):
• Self-efficacy: t = 14.2, p<0.001*
M4 teachers (n=40):
• Self-efficacy t = 6.37, p<0.001*, effect size = 1
• Confidence in Teaching t = 2.47, p<0.05*

Qualitative Data:
Deductive hand-coding of open-ended short-answers organized into three main themes:
1. Learning (Figure 5)
2. Teaching (Figure 6)
3. Professionalism (Figure 7)