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## Effective eModule Design for First-Year Medical Student Anatomy Curricula

Taylor J. Kratochvil MS  
*University of Nebraska Medical Center*

Kaeli K. Samson MA, MPH  
*University of Nebraska Medical Center*

Kari L. Nelson PhD  
*University of Nebraska Medical Center*

Travis L. McCumber PhD  
*University of Nebraska Medical Center*

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# Effective eModule Design for First-Year Medical Student Anatomy Curricula

Taylor J. Kratochvil MS<sup>1</sup>, Kaeli K. Samson MA, MPH<sup>2</sup>, Kari L. Nelson PhD<sup>1</sup>, & Travis L. McCumber PhD<sup>3</sup>  
<sup>1</sup>College of Medicine, <sup>2</sup>College of Public Health, & <sup>3</sup>Department of Genetics, Cell Biology, and Anatomy, University of Nebraska Medical Center, Omaha, NE

## INTRODUCTION

**Background:** Historically, UNMC has not employed eModules to support cadaveric anatomy education. In 2018, an interactive eModule was developed to supplement the Distal Upper Limb (DUL) anatomy curriculum. This eModule was shared with first-year medical students as a supplemental resource for use on a voluntary basis with an attached survey.

### Purpose:

- 1) Evaluate learner perception of the eModule relative to other resources
- 2) Identify eModule content and features that students find valuable

## METHODS

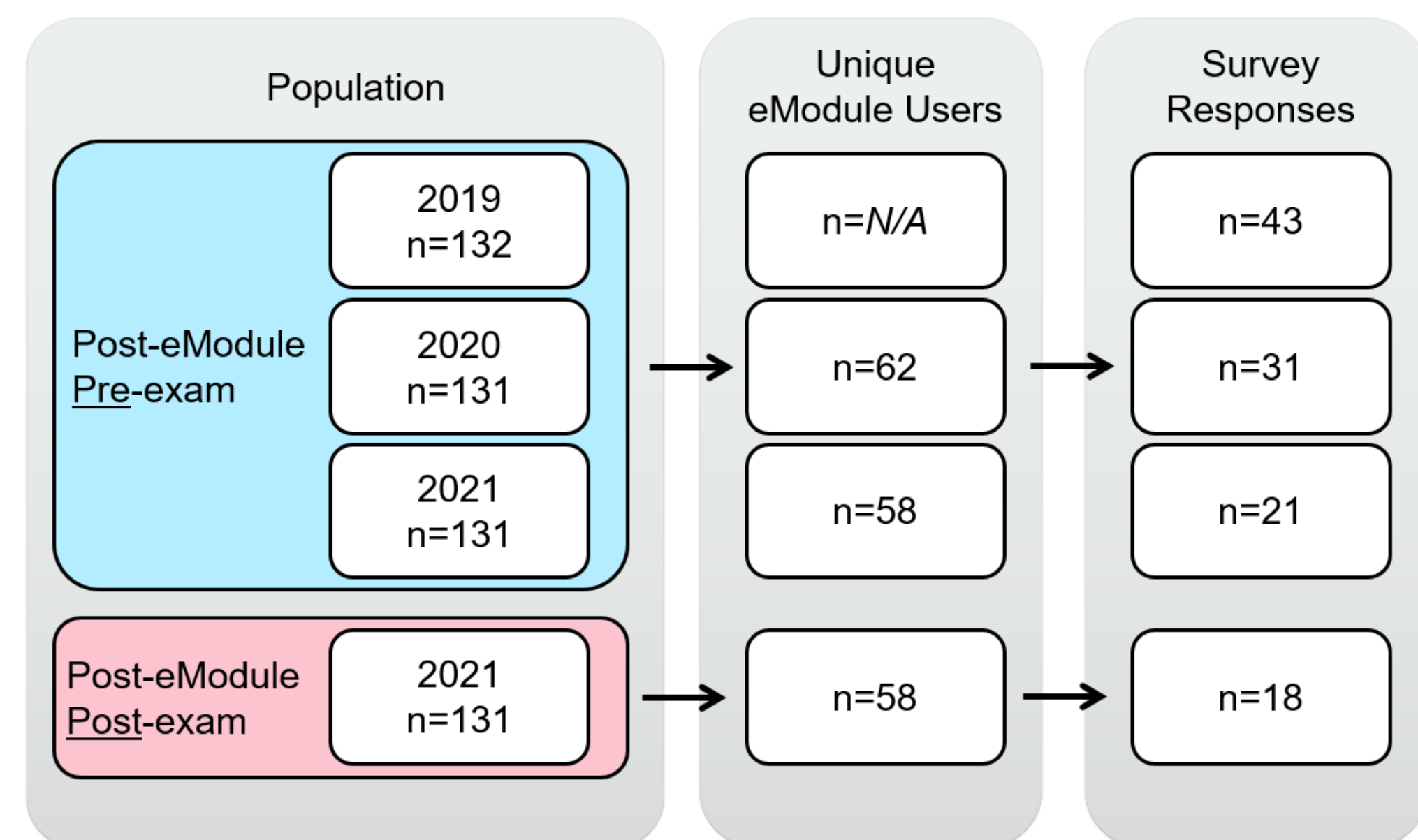


Figure 1. First-year undergraduate medical student population and survey participation.

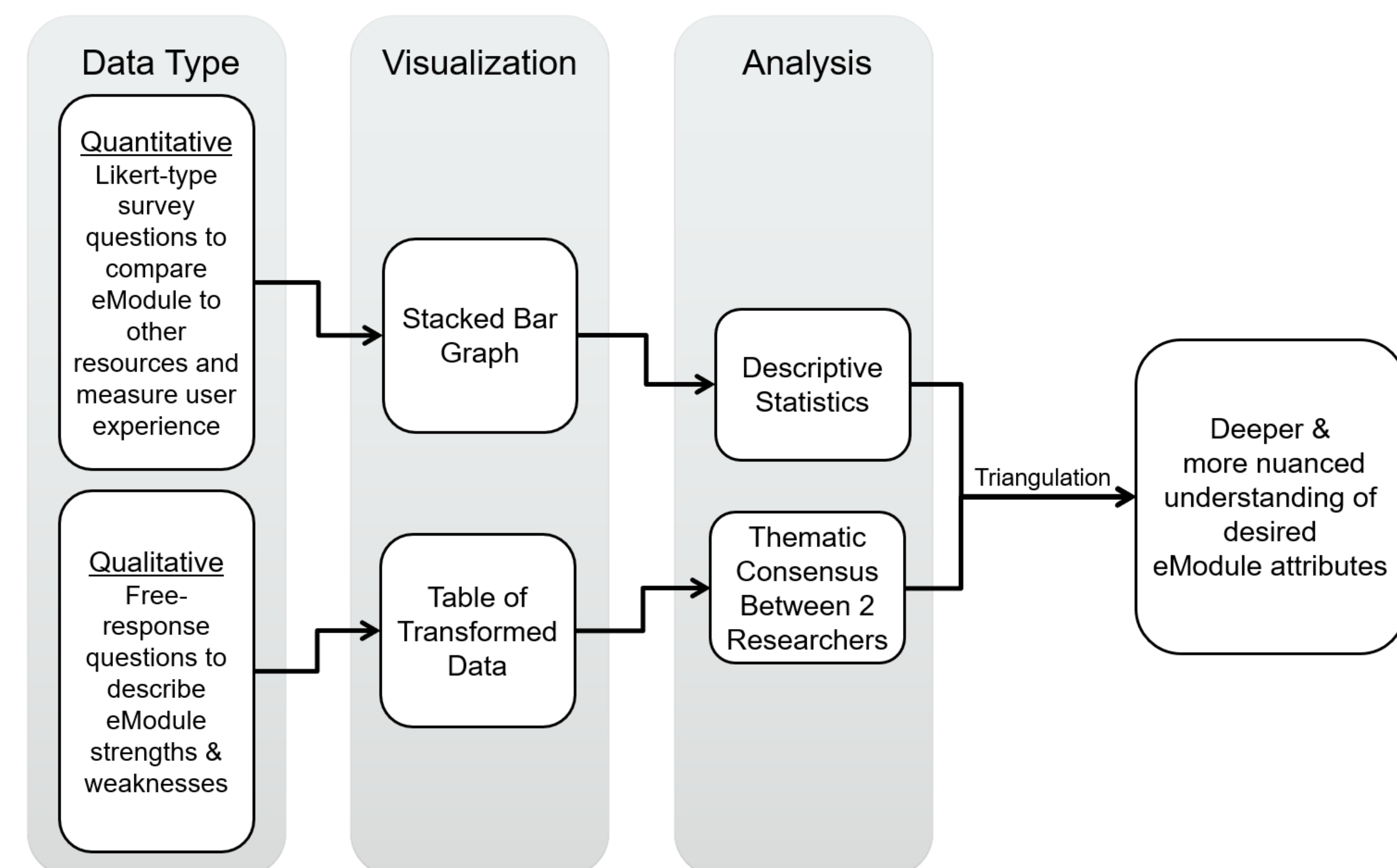
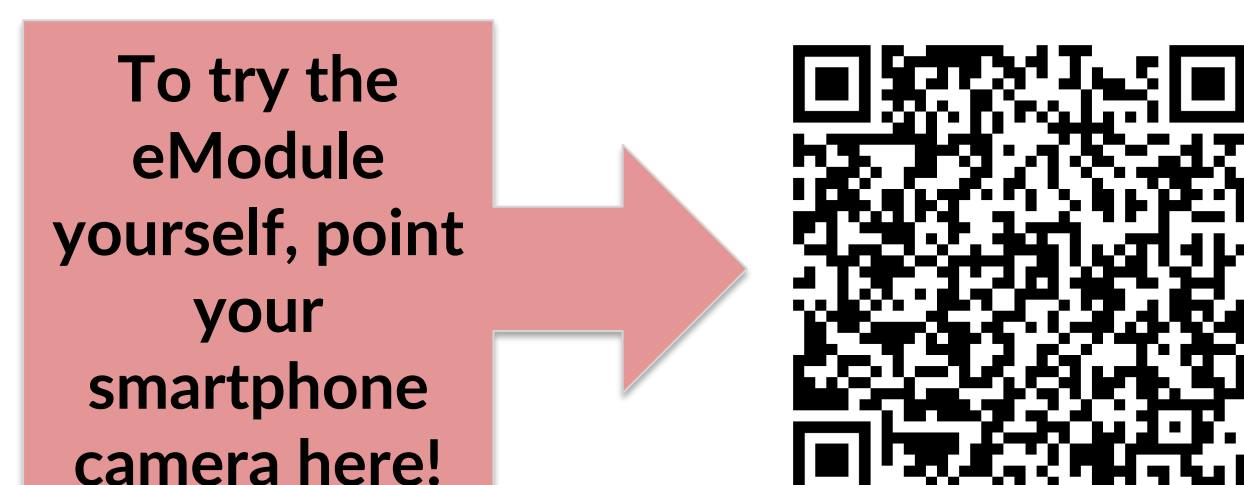
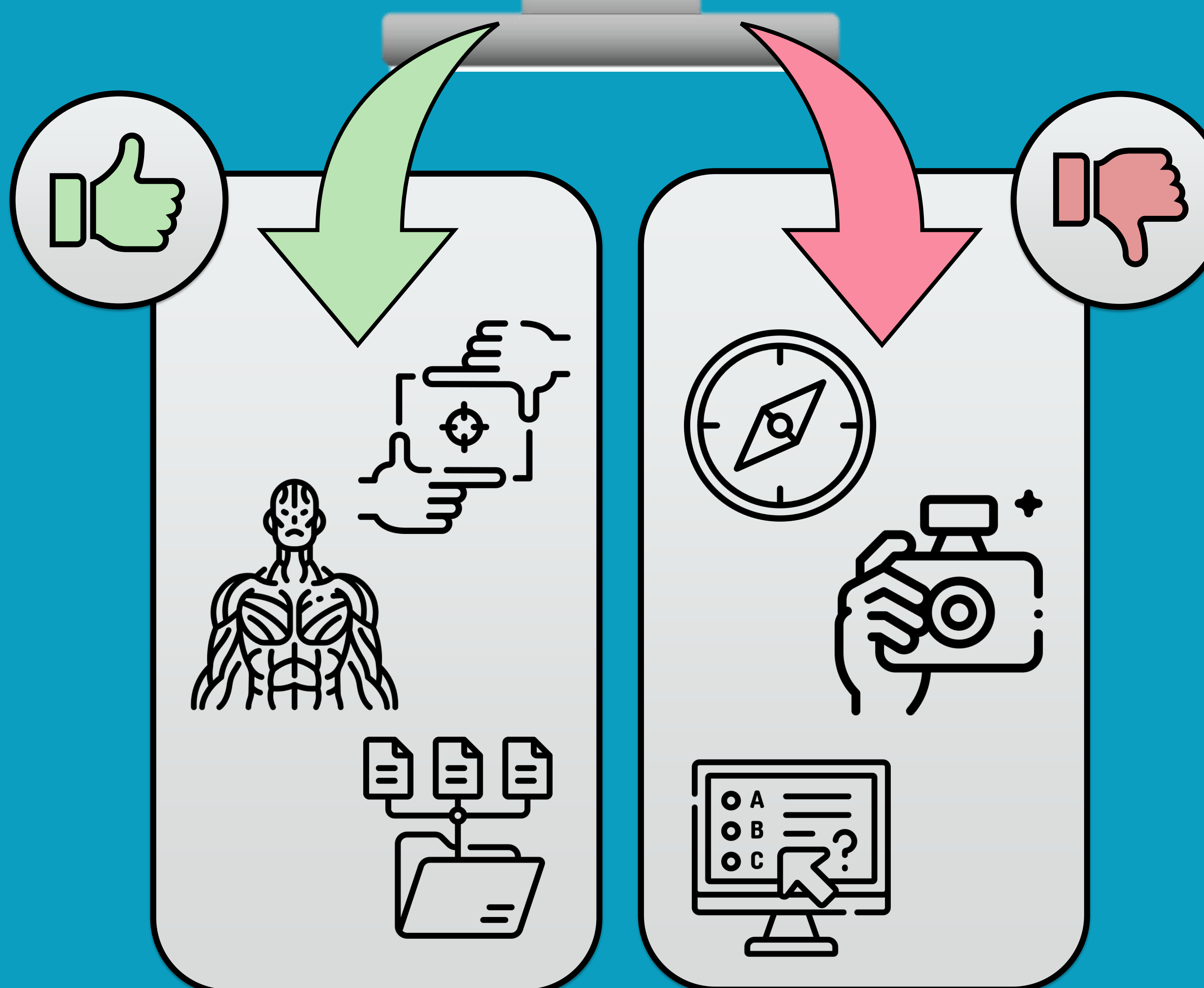
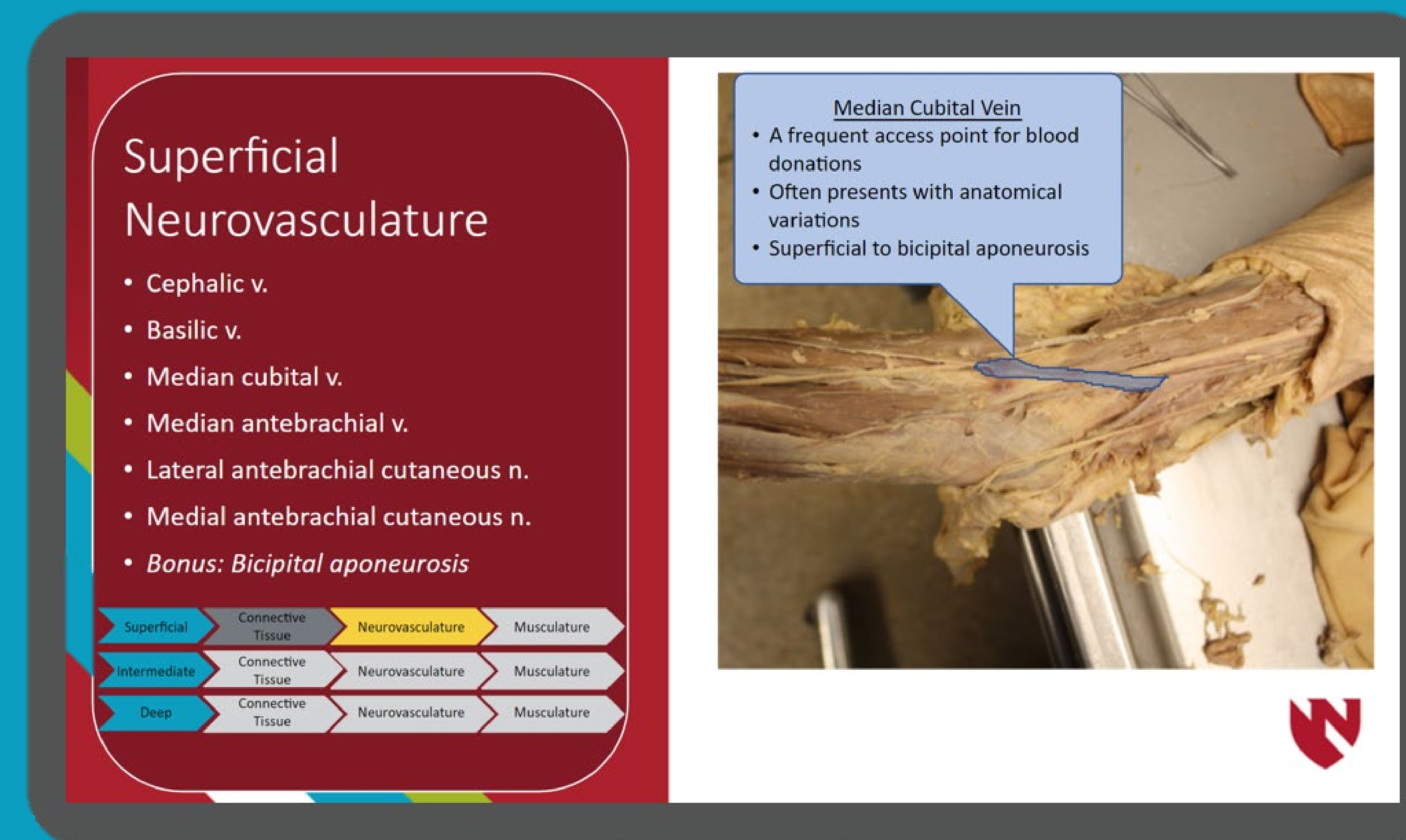


Figure 2. Procedural diagram for the development of survey content, production of schematic, and analysis of respondent feedback.

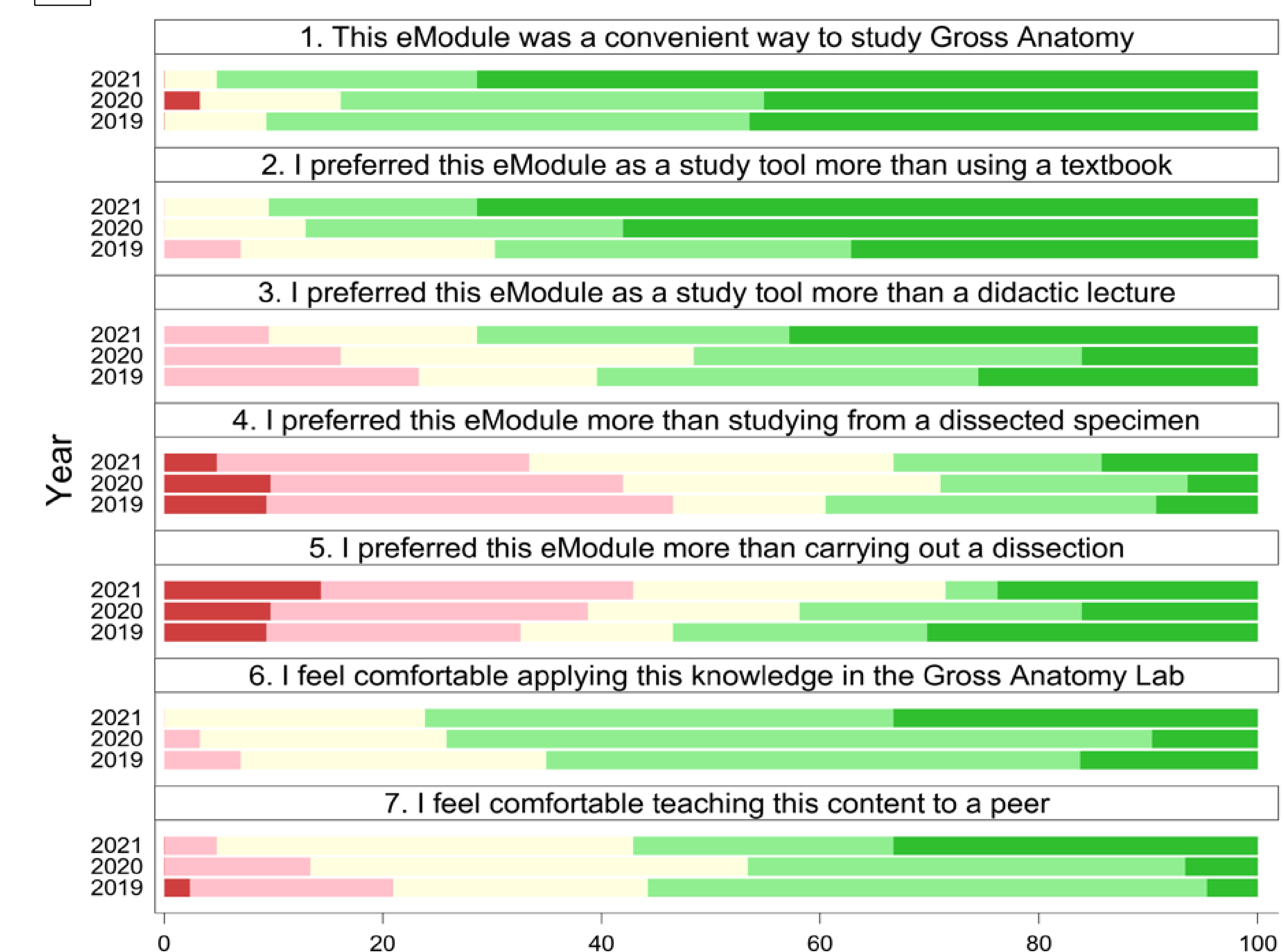


# Gross anatomy eModules are preferred by M1's, but need to integrate spatial orientation.



## RESULTS

### A Pre-Exam Responses to eModule Survey



### B Post-Exam Responses to eModule Survey

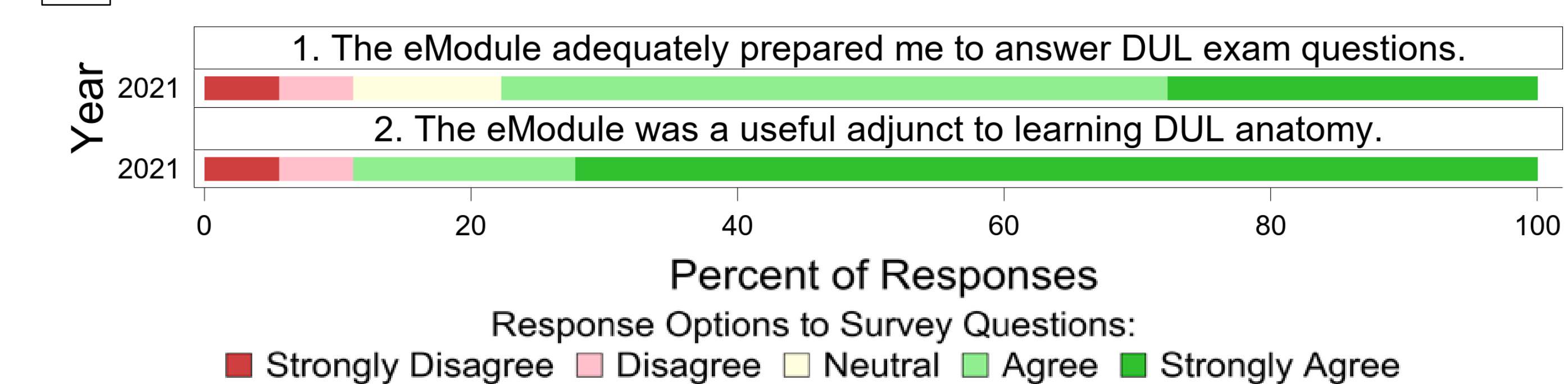


Figure 3. Likert-type survey responses. A) The majority of students responding to the post-eModule, pre-exam survey agreed or strongly agreed that the eModule was (1) convenient, (2 & 3) preferred in comparison to a textbook or didactic lecture, and (6) applicable to the gross anatomy lab. B) Greater than 75% of students responding to the post-eModule, post-exam survey agreed or strongly agreed that the eModule (1) prepared them for DUL eModule questions and (2) was useful as a learning adjunct.

Themes		Post-eModule Pre-Exam Count	Post-eModule Post-Exam Count
Beneficial Features	User Experience	4	1
	Convenient/Independent learning	5	2
	Term list to highlight	5	3
	Photos	11	9
	eModule Mechanics	3	2
	Consolidation/Organization of information	9	3
	Description Box	3	2
Deficient Features	User Experience	12	3
	Figure legend for orientation	15	0
	Section/Post-eModule summary slide (e.g. Clinical relevance)	3	1
	Photos	4	5
	eModule Mechanics	1	0
	Description Box	5	4
	Add action of muscle	2	0

Figure 4. Transformed qualitative data from free-response survey questions, both before and after the lab practical exam. Themes with ≥ 5 responses are highlighted by a darker tone.