

# EXPLORING THE OPEN ANATOMY EXPLORER (OPANEX): A WEB-BASED, OPEN-SOURCE VIEWER FOR THREE-DIMENSIONAL ANATOMICAL MODELS

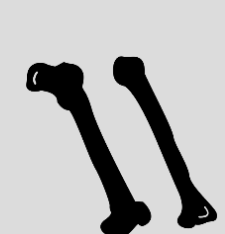
## BACKGROUND

## METHODOLOGY

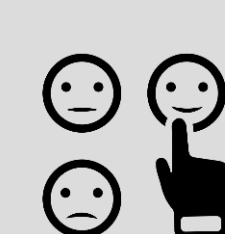
### OPANEX:



Web-based, open-source viewer for 3D anatomical models



Uploading, labelling, and spatial visualisation of in-house created 3D anatomical structures



September - December 2023: implementation into the osteology course + investigation of student perceptions

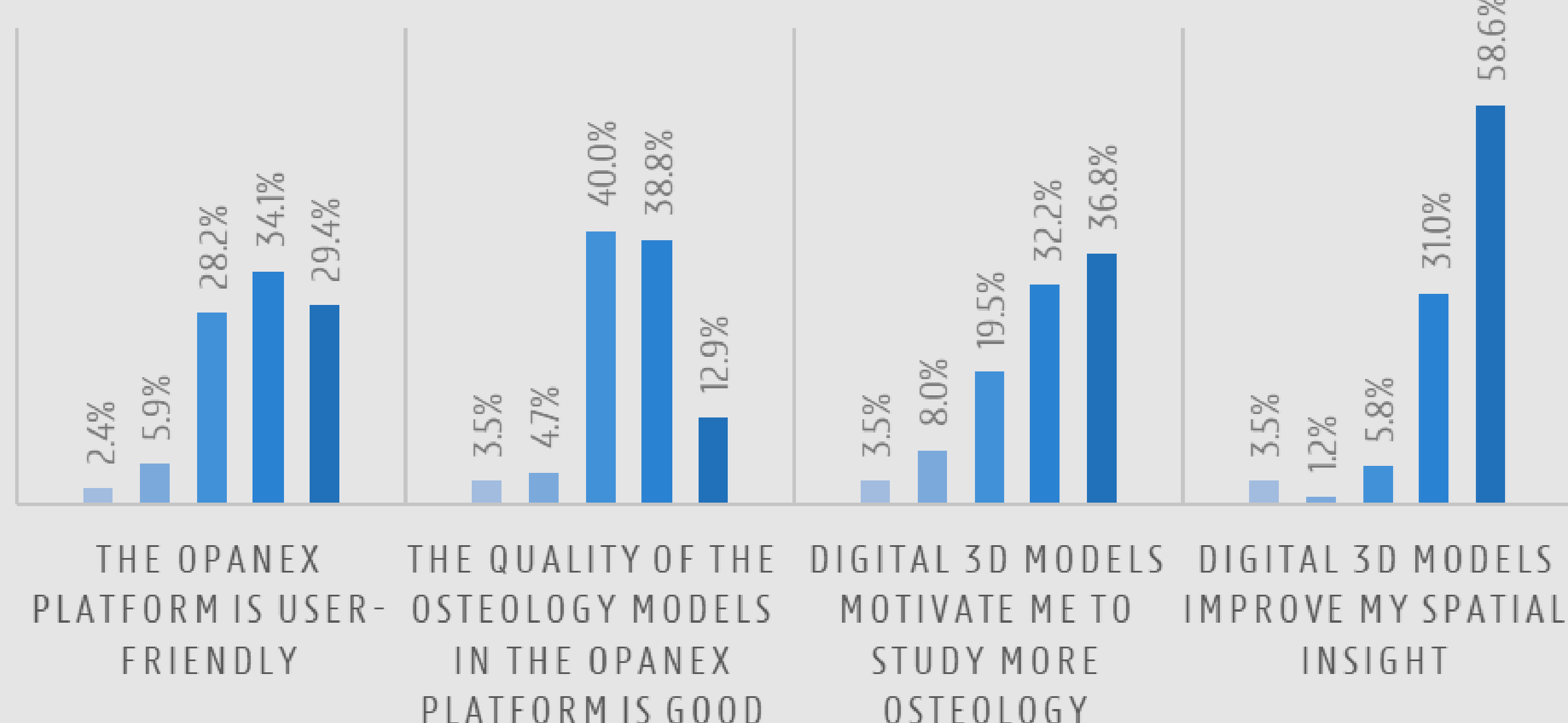
Post-examination survey among first-year students in Rehabilitation Sciences and Physiotherapy

- Demographics
- Course material usage and preferences
- Opinion on the use of digital anatomical models
- OPANEX user experience
- OPANEX areas for improvement

## RESULTS

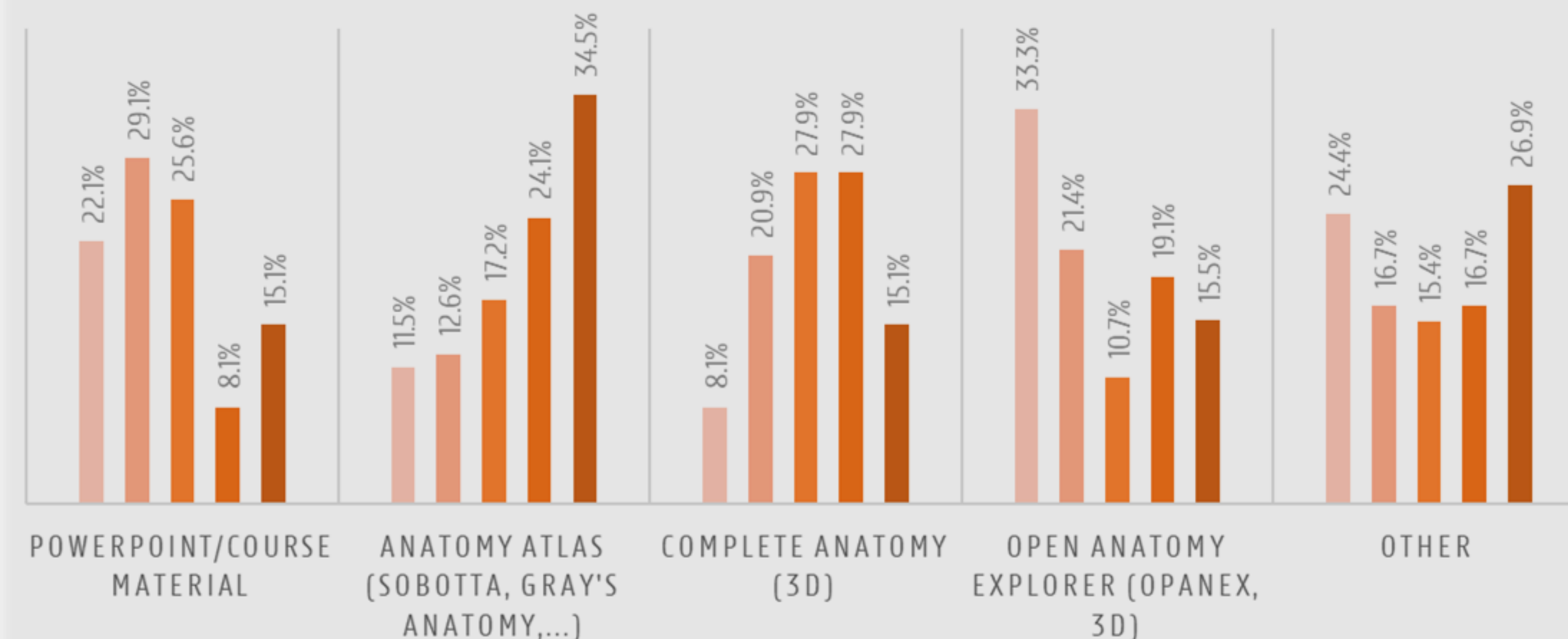
### OPANEX USER EXPERIENCE

Strongly disagree Disagree Neutral Agree Strongly agree



### PREFERRED STUDY MATERIAL

Fifth choice Fourth choice Third choice Second choice First choice



For **OPANEX**, students primarily valued the quality and realism (91,7%) of the bone models and the user-friendliness.

Regarding the use of **3D digital anatomy models**, the general consensus is favourable. A majority of students (89,6%) (strongly) agree that they improve spatial insight into anatomy and increase motivation to study osteology.

The **anatomy atlas** remains the most popular (34,5%) study material. **Three-dimensional applications** such as Complete anatomy (15,1%) and OPANEX (15,5%) both attract almost the same level of preference as the top choice among students.

## DISCUSSION

The survey demonstrated a significant amount of **interest** in the OPANEX platform.

Based on qualitative feedback, there is **room for improvement** regarding the orientation of structures, and the quantity and quality of the models in the platform.

## CONCLUSION



### Improvements:

- Anatomical structures: whole skeleton
- User-friendliness: easier orientation of structures, quizzes, search engine



### Further research:

- Effect on examination results
- Comparative research



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