

Traditions in Anatomy

Ana Hladnik & Zdravko Petanjek

University of Zagreb School of Medicine
Department of Anatomy and Clinical Anatomy
Institute of Anatomy „Drago Perović”



Symposium on Quality of Teaching Anatomy

Morphology 2024.

55th International Congress of Czech Anatomical Society

60th Lojda Symposium on Histochemistry

September 8–10, 2024

Telč, Czech Republic



UNIVERSITY OF
CAMBRIDGE



MUNI



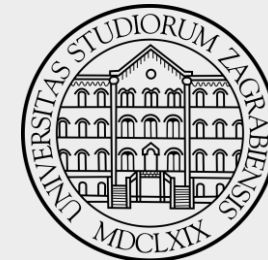
Erasmus+

Department of Anatomy and Clinical Anatomy
Institute of Anatomy „Drago Perović”

LEANbody



UNIVERSITY OF
CAMBRIDGE



MUNI

⇒ “Anatomy,” derived from the Greek, *anatome* - **to cut or cut repeatedly** - dissection has been an integral part of anatomy teaching through the history.

⇒ The **traditional human anatomy teaching** - in person lectures, cadaveric dissection laboratory and anatomy textbook.

⇒ Traditional lectures (teaching) are mostly based on knowledge transmission from lecturer to students - **IS THIS STATEMENT REALLY TRUE?**

- **Nowadays**, curricula shift towards forms of teaching based on knowledge construction by the students.



Erasmus+

LEANbody



**“Teaching oriented” –
Role of teacher is to teach.
Student’s “follow” teachers.**



**“Learning oriented” –
Role of teacher is to coach.
Teachers “direct and follow” student’s.**

⇒ Evidence-based and **student-centered strategies have shown to improve student engagement and interaction**: team-based learning, case-based learning, and flipped classroom – **WHAT IS THE COST BENEFIT?**

⇒ Present state:

- fewer teaching contact hours,
- increasing number of students,
- more diverse group of students.

⇒ Anatomists face the pressures of changing modes of medical education and assessment.



Erasmus+

June 2020,
Department of Anatomy,
School of Medicine, Zagreb

LEANbody





Erasmus+

LEANbody



- ⇒ Students' exam results and satisfaction rate - **online teaching cannot replace traditional teaching** -
- but combining online with face-to-face educational modalities could be efficient and successful.
- ⇒ Shifting from teacher-centered to a **highly effective learner-centered approach** - could **mitigate challenges** such as a shortage of anatomists and the excessive content in the anatomy curriculum.
- ⇒ **Traditional teachers' role** in medical education should not be underestimated - **role of modelling** is a widely acknowledged element of medical education associated with a range of beneficial outcomes:
- contributing to professional identity development and
 - a sense of belonging.



Erasmus+

LEANbody



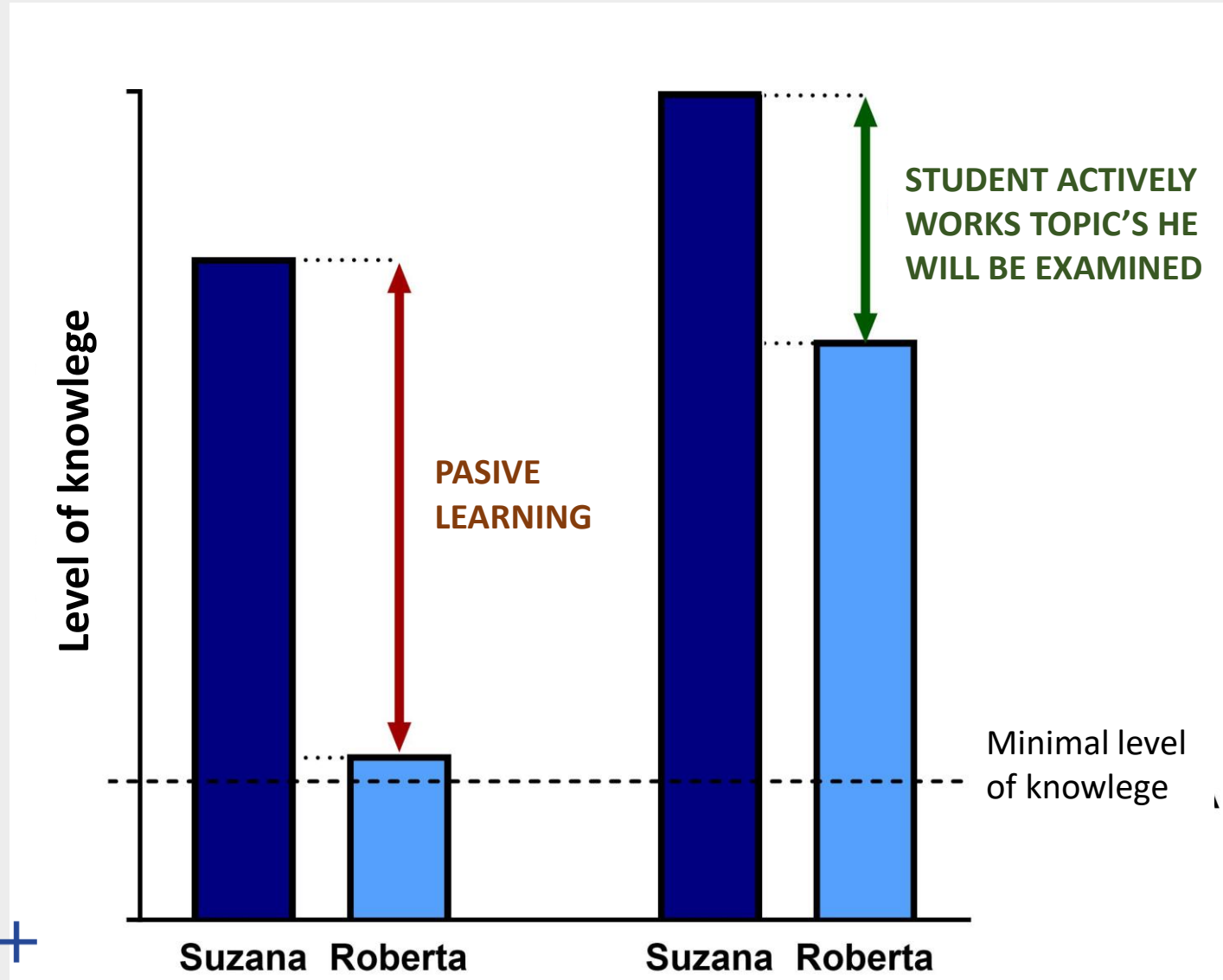
Who are our students?

- Suzana
 - **Highly motivated to learn as much as possible**
 - **Independently thinks deeply about the topic**
 - **Every teacher's dream**
- Roberta
 - **The motivation is to finish the studies, in principle with a minimum of effort**
 - **He thinks about what will be on the exam**
 - **Mostly passive in class (doesn't seem to show much interest)**

**active participant
in the learning process**

**pasive participant
in the learning process**

What will happen to Suzanne and Roberta?



- 11 anatomy teachers filled out the survey
 - three respondents from University of Zagreb,
 - three respondents from University of Pécs,
 - three respondents from Masaryk University,
 - one respondent from University of Cambridge,
 - one respondent from Karolinska Institut.

- 70% of respondents were medical doctors, while the rest were biologists or anthropologists.

- three respondents were also course leaders at their respective institutions.

Survey on Traditions in anatomy

- **Formal education on teaching methods/pedagogy -**
 - **only about one third** of the respondents claimed to have it.
- **Workload** - varied significantly between respondents:
 - from **180 hours to over 1000** hours per year,
 - minimum workload for their position was - almost half of the respondents either did not know, or believed it was not defined.
 - all respondents who reported the existence of a minimum workload also reported **having substantially more actual workload** (some even three times over the norm).
- **Intended learning outcomes:**
 - most responded that the Anatomy course had ILOs at the level of the course,
 - at the level of individual teaching units, only half answered positively.

- **“I encourage interaction with my students during classes”**
 - all respondents considering it to be **completely or mostly true for them.**
- **Frustration with students’ knowledge and passivity -**
 - answers suggested a **relatively low level of frustration.**
- **How important is tradition:**
 - **70% is least important** aspect in Anatomy teaching,
 - **30% is still considered this to be quite important.**
- **Developing students’ professional attitudes to be the most important aspect in Anatomy teaching -**
 - 75% considered it essential, and other quite important.

Open-ended questions

- *“Describe how you structure your typical seminar in the Anatomy course”,*
- *“Describe how you structure your typical practical class in the Anatomy course”,*
 - **three respondents were not sure what the words “seminar” and/or “practical class” meant.**
- A common theme for **seminars** was that –
 - the teacher would have some kind of **introduction to the topic,**
 - they would do some kind of **summary or debriefing at the end.**

Open-ended questions

- **Practical classes were mostly equated with dissection -**
 - Some respondents gave detailed descriptions on how they structure the dissection, while others stated “we just dissect for 3 hours” or something similar.
- **“What challenges do you face as a teacher in the Anatomy course?”** - the answers varied among the respondents, though there were common themes present:
 - lack of preparation by students,
 - lack of consistency in applying certain rules or interventions,
 - struggling to achieve active participation of students in classes.



Ivan

Ana

Vedran

Maura

Marina



Erasmus+

LEANbody

Traditions in Anatomy

Ana Hladnik & Zdravko Petanjek

University of Zagreb School of Medicine
Department of Anatomy and Clinical Anatomy
Institute of Anatomy „Drago Perović”



Symposium on Quality of Teaching Anatomy

Morphology 2024.

55th International Congress of Czech Anatomical Society

60th Lojda Symposium on Histochemistry

September 8–10, 2024

Telč, Czech Republic



UNIVERSITY OF
CAMBRIDGE



MUNI

For the following statements, please choose how true they are for you.

● Not at all true ● Slightly true ● Moderately true ● Mostly true ● Completely true ● Not applicable

1. The level of my workload in Anatomy teaching is acceptable.

2. I structure my classes in accordance with intended learning outcomes.

3. I structure my exams in accordance with intended learning outcomes.

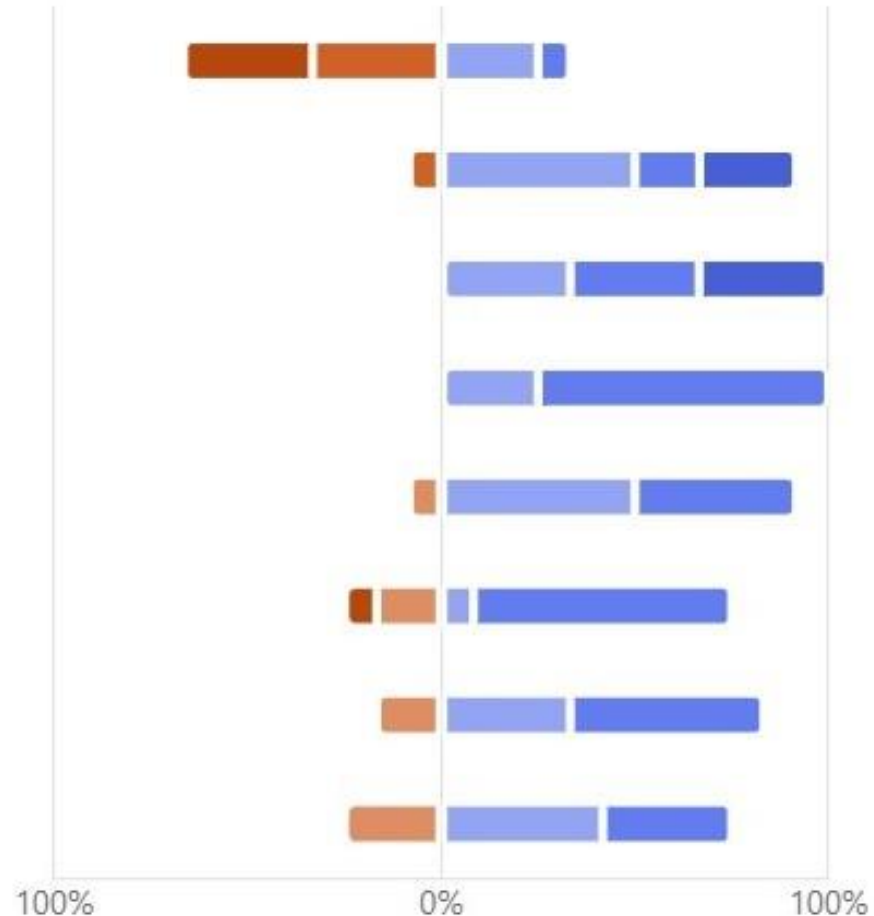
4. I encourage interaction with my students during classes.

5. I stick to the defined curriculum during my classes.

6. I encourage (motivate) my students to actively dissect during classes

7. I provide clinical context in my Anatomy teaching.

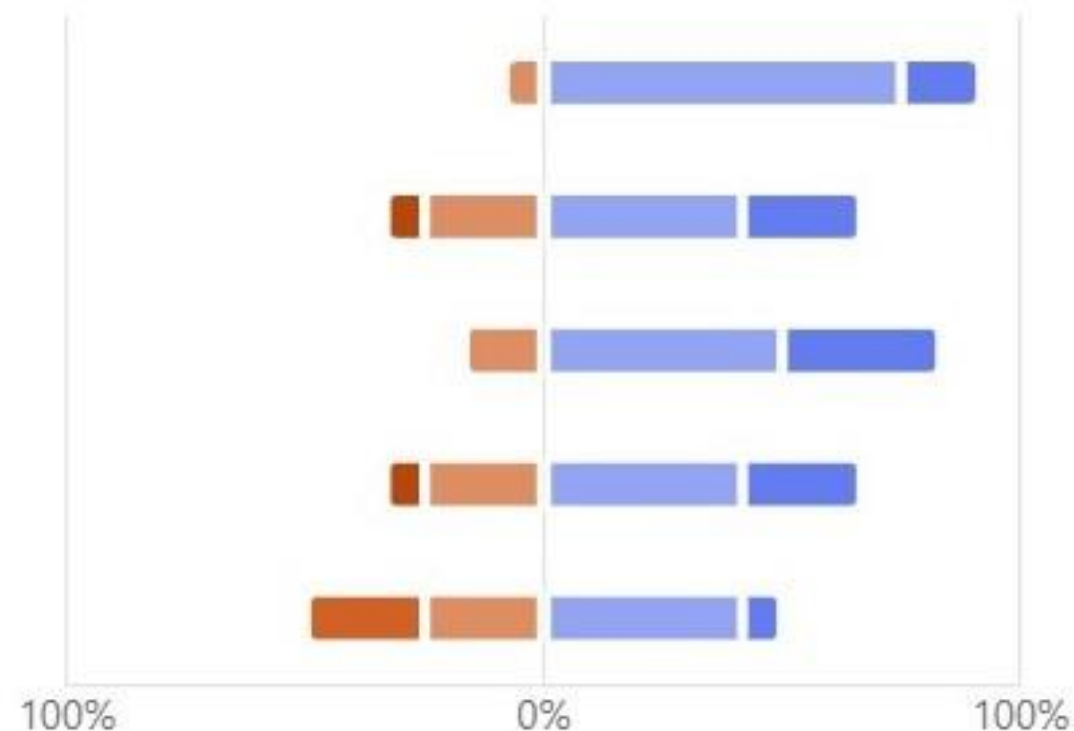
8. I recognize the multicultural characteristics of my students.



For the following statements, please choose how true they are for you.

● Not at all true ● Slightly true ● Moderately true ● Mostly true ● Completely true ● Not applicable

1. Students actively participate during my classes.
2. Students actively dissect during my practical classes.
3. Students observe anatomical specimens during my practical classes.
4. Sticking to tradition in Anatomy teaching is important in my Department.
5. Implementing novel methods in Anatomy teaching is important in my Department.



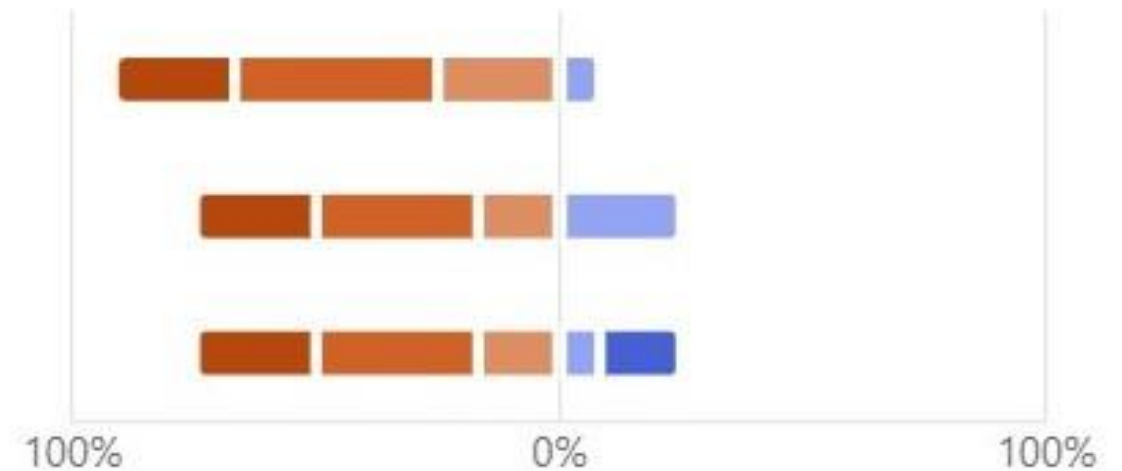
For the following statements, please choose how true they are for you.

● Not at all true ● Slightly true ● Moderately true ● Mostly true ● Completely true ● Not applicable

1. I am frustrated with my students' passivity during classes.

2. I am frustrated with students' knowledge during my classes.

3. I am frustrated with my students' knowledge on the final exam.



In the following questions answer how important these statements are for you as a teacher in the Anatomy course.

● Not important ● Slightly important ● Moderately important ● Quite important ● Essential

1. How important is sticking to tradition in Anatomy teaching?
2. How important is implementing novel methods in Anatomy teaching?
3. How important is students' active dissection in Anatomy teaching?
4. How important is developing students' professional attitudes in Anatomy teaching?
5. How important is clinical context in Anatomy teaching?
6. How important is it to appreciate the multicultural characteristics of students?

