



Erasmus+



Co-funded by
the European Union

ERASMUS+ Project LEANBODY -
2021-1-HU01-KA220-HED-000027542

LEANbody

Tempus Workshop, 27.11.2024. Budapest

Development of professional behavioural attitudes through learning anatomy

Dr. András Dávid Nagy M.D. Ph.D. Habil.

associated professor, University of Pécs Medical School, Dept. of Anatomy
consortium coordinator of **LEANbody** project

Disclaimer: Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the Foundation for the Development of the Education System. Neither the European Union nor entity providing the grant can be held responsible for them.



UNIVERSITY OF
CAMBRIDGE



MUNI

Problem to solve: Increased student numbers

globally in medical education

without proper **quality management**

of the learning process



Beliefs about teaching Anatomy

5.6. High failing rates indicate limitations in the capacities of individual **anatomists** to teach well.

5.7. High failing rates indicate widespread sociocultural or cognitive disadvantages among **students.**

5.8. High quality learning is the privilege of the skilled and hard working students, the **selection** of whom is the primary role of anatomy courses within the foundational years.

5.9. High quality learning must be provided for all university students.



“Good Anatomy teaching is a teaching which makes it **easy to be good** in Anatomy”



UNIVERSITY OF
CAMBRIDGE



MUNI

LEAN - management: discard waste + improve essentials to move forward

What is forward?

What is waste?

What are essentials?

How to improve essentials?

How to discard waste?



Professional Standards Framework (PSF 2023)

Advance HE works with individuals and institutions in higher education (HE) to provide students with an excellent learning experience. This is why we manage and lead the development of the Professional Standards Framework (PSF), a globally-recognised framework for benchmarking success within HE teaching and learning support.



UNIVERSITY OF
CAMBRIDGE



MUNI

Needs Analysis - 2021

LEANbody

- **high quality** of teaching anatomy
TOPIC1 (global standards)
TOPIC2 (professional behavioural values and attitudes)
- **high dropout rate** of students learning anatomy
TOPIC3 (teaching traditions)
- sustainability/**mental health** of teachers and students of anatomy courses
TOPIC4 (management of student centered pedagogy)
TOPIC5 (management of mental health of students and teachers)



UNIVERSITY OF
CAMBRIDGE



MUNI

Steps to work on each TOPIC:

1. list of selected **global documents** (papers, guidelines, published standards)
2. list of **local institutional documents** (guidelines, strategic plans)
3. comparison of local vs. international documents
4. clarification of ambiguous global terms, concepts, and local contexts
5. creating the first version of the glossary, to be updated monthly up until the end of the project
6. first draft of review paper
7. selection of the journal to publish paper
8. second draft of review paper
9. third draft of review paper
10. Finalize review paper



UNIVERSITY OF
CAMBRIDGE



MUNI

Project Results - PR1-3

- PR1

existing literature data on all 5 TOPICs
existing beliefs of participants on all 5 TOPICs
new summary (=theoretical study, pdfs, articles)

- PR2

new learning tools on all 5 TOPICs (=practical teaching methodology, a pdf)

- PR3

new online interactive teacher training module based on PR1-2 (EDUC Moodle)
e-Guidebook (=summary of PR1-2 with links, not interactive, a pdf)



UNIVERSITY OF
CAMBRIDGE



MUNI

Topic 1: Survey on Quality Standards of Medical Education



Topic 2: Survey on Development of Professional Values and Attitudes through Teaching Anatomy



Topic 3: Survey on Traditions in Anatomy (Individual Teacher)



Topic 3: Survey on Traditions in Anatomy (Course Leader)



Topic 5: Survey on Mental Health Management of Students and Teachers



Symposium Feedback





Symposium on Quality of Teaching Anatomy

9.9.2024. Telc,
Czech Republic



**Karolinska
Institutet**

13:30–13:35 Introduction

Dr András Nagy, University of Pécs

13:35–13:45 Quality standards of medical education

University of Pécs

13:45–13:55 Q&A/Discussion on the first presentation

13:55–14:05 Development of professional values and attitudes through teaching anatomy

Masaryk University

14:05–14:15 Q&A/Discussion on the second presentation

14:15–14:25 Traditions in Anatomy

University of Zagreb

14:25–14:35 Q&A/Discussion on the third presentation

14:35–14:45 Pedagogy in Medical Education

Karolinska Institute

14:45–14:55 Q&A/Discussion on the fourth presentation

14:55–15:05 Mental Health Management of Students and Teachers

University of Pécs

15:05–15:15 Q&A/Discussion on the fifth presentation

15:15–15:30 Final discussion and closing remarks

LEANbody



MUNI

Professionalism

- *‘Behaviours that support trustworthy relationships.’* Shapiro J. Confronting unprofessional behaviour in medicine. BMJ. 2018 Mar 7;360:k1025.
- *‘Professionalism in the medical field is the expression of responsibility to peers and to patients.’* Swartz W.J. Using gross anatomy to teach and assess professionalism in the first year of medical school. Clinical Anatomy. 2006 19:437-441.
- *‘a set of values, behaviours, and relationships that underpin the trust the public has in doctors’* Royal College of Physicians, 2005



Outcomes 1 – Professional values and behaviours

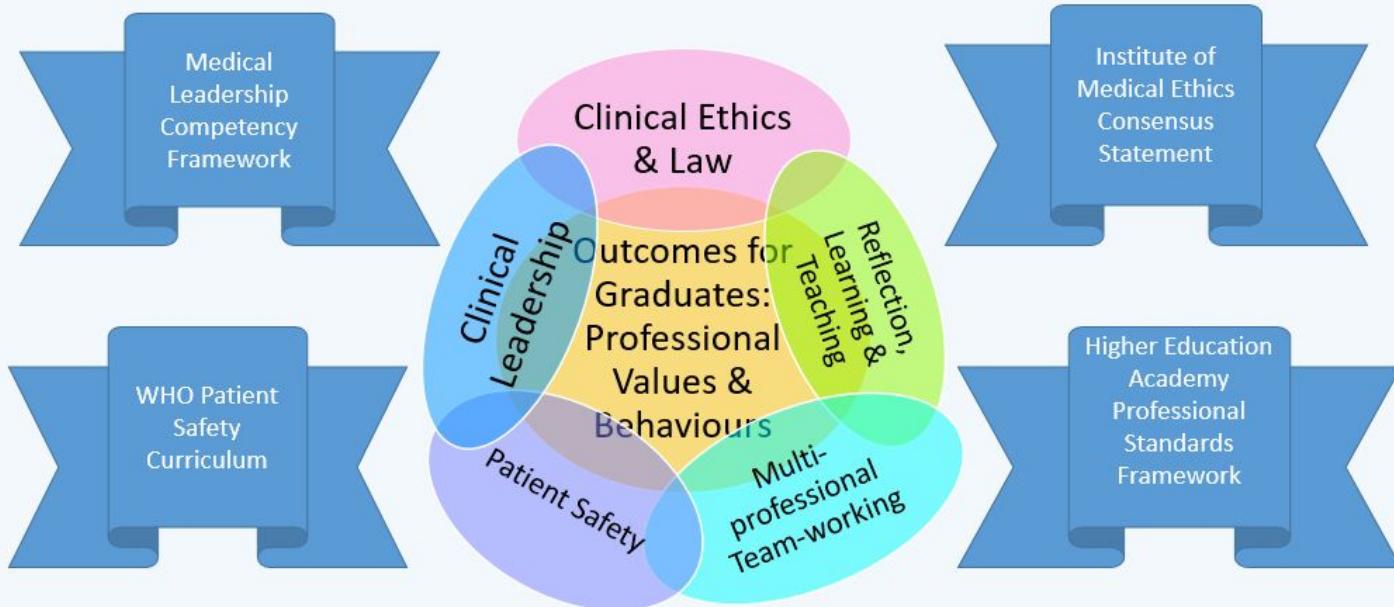


Outcomes 2 – Professional skills



Outcomes 3 – Professional knowledge





Professional Standards Framework (PSF 2023)

Advance HE works with individuals and institutions in higher education (HE) to provide students with an excellent learning experience. This is why we manage and lead the development of the Professional Standards Framework (PSF), a globally-recognised framework for benchmarking success within HE teaching and learning support.



UNIVERSITY OF
CAMBRIDGE



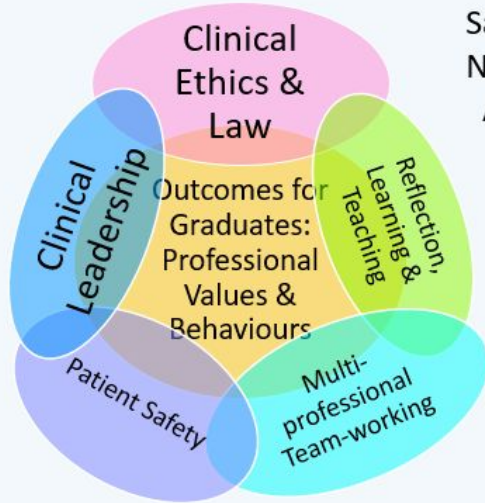
MUNI

Professional responsibilities in the DR

Respect for donors:

Treating the cadavers with dignity

Respecting donor confidentiality



Engaging with studies:

Satisfactory attendance

Notifying teachers if unable to attend

Actively engaging in learning

Accepting & acting on feedback

Working well with others:

Supporting and respecting peers



Emphasis on Professionalism

3 Key Outcomes: *General Medical Council*

Professional values and behaviours

- Ethical responsibilities to donors
- Tributes for committal & memorial services
- Effective teamwork in practical sessions

“Our donors sparked enthusiasm and demanded respect. They were our first patient and forgave us any mistake we made, only wanting to teach us more. They made us consider the reverence of human life and through their donation taught us of the trust all patients will give us. They gave us confidence and awareness, all without uttering a word.”



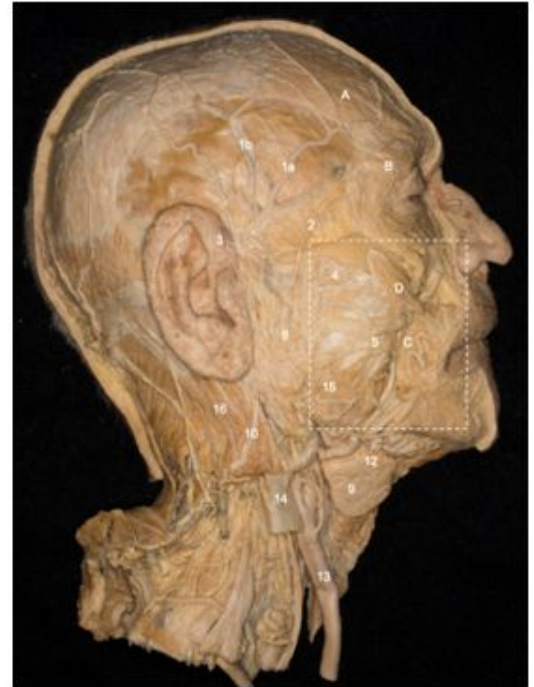
Emphasis on Professionalism

3 Key Outcomes: General Medical Council

Professional skills

- Communication in handovers
- Presentations in applied anatomy seminars
- Manual dexterity and haptic ability

“Prosecting gives you the time to tease out finer structures and finer anatomical details than you could ever hope to in the DR. Opening your toolbox on day one is enough to make any aspiring surgeon giddy. You will develop a feel for which instrument is best suited to each task – the satisfaction this gives is hard to put into words.”



Emphasis on Professionalism

3 Key Outcomes: General Medical Council

Professional knowledge

- Applying scientific principles
- Awareness of anatomical variations
- Surgical and radiological anatomy module

"The Surgical and Radiological Anatomy course has been the best choice I could have made. It has provided me with the foundations of surgical & radiological approaches, as well as the desire to pursue surgery as a career. The lecturers always referred back to the clinical importance of appreciating normal anatomy and variations in order to recognise pathology, which gave clinical context to the content."



Survey tool

- 5 parts
- 38 questions
- 16 participants (4 universities)

- Part 1 and 2 – manuscript
- Part 3 (**Teaching and Assessment of Medical Professionalism**) – presentation



*Does your **Medical School/ Faculty/College** provide any formal instruction and assessment of medical professionalism at the undergraduate level?*

-Cambridge – a course on medical professionalism, course “Medical Law and Ethics”, no formal assessment

-Zagreb – a course “Medical Ethics”, no assessment mentioned

-Pécs – “in courses as part of the curriculum”, no assessment mentioned

-Brno – no courses or the participants did not know

University (total No. of participants)	Yes	No	I don't know
Cambridge (3)	3	0	0
Zagreb (4)	1	2	1
Pécs (4)	1	1	2
Brno (5)	0	1	4

*Does your **Anatomy Department** provide any formal instruction and assessment of medical professionalism at the undergraduate level?*

Cambridge – no specification provided

Zagreb – ‘A few members of our Dpt have developed TLAs regarding professionalism’, ‘assessment of behavior in the cadaver room; student evaluation of teaching; open-ended questions regarding experiences’

Brno – ‘ethical practice, professionalism in relationships’ and ‘Ethical behaviour in the dissection room.’

University (total no of participants)	Yes	No	I don't know
Cambridge (3)	1	2	0
Zagreb (4)	4	0	0
Pécs (4)	0	3	1
Brno (5)	2	2	1

Do you think that medical professionalism is taught *informally* in your Anatomy Department, *e.g.* as part of the *hidden curriculum*?

Cambridge – ‘Students are given a lecture at the beginning of the course about professional values and behaviours, and anatomy demonstrators are role models in the dissection room to ensure that students act respectfully towards their donors.’

Zagreb – ‘students emulate their teachers - if the teachers do not behave professionally, the hidden curriculum is obvious - the students receive the message that professional behavior is not important’

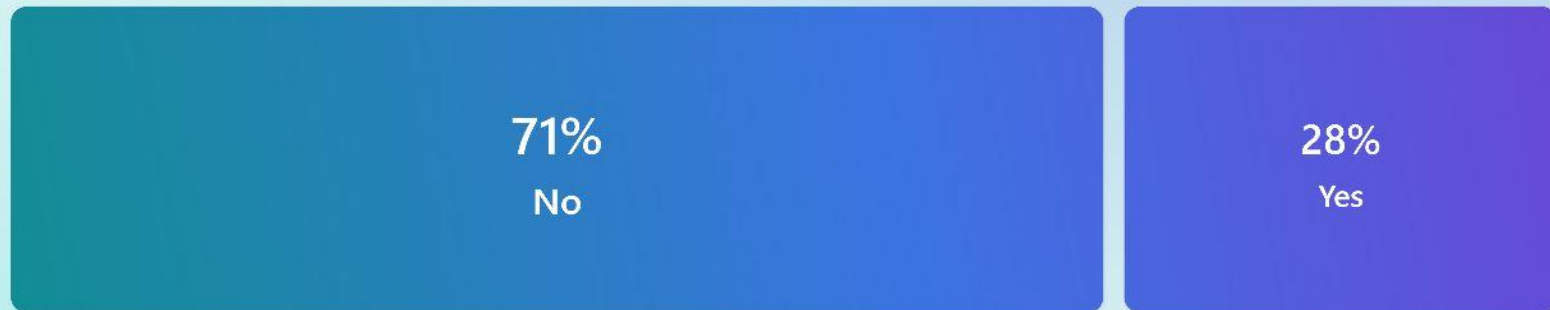
Pécs – ‘From the practice leaders... All the practice leaders are acting as a role model, they are crucial for the students in term of studying about professionalism.’

Brno – ‘... teachers, provide the "classic/old" way of teaching professionalism through our behaviour and conduct during the sessions (theoretical, practical, dissection). ‘



69 responses submitted

Have you heard about INTERNATIONAL QUALITY STANDARDS of medical education?



Results of the Needs-analysis



**Less than 10% of Central European anatomists
have heard about WFME standards.**

**Why should all anatomists know
about WFME standards?**

*“To improve quality of teaching anatomy.”
opinion of a Czech course organiser from MUNI*



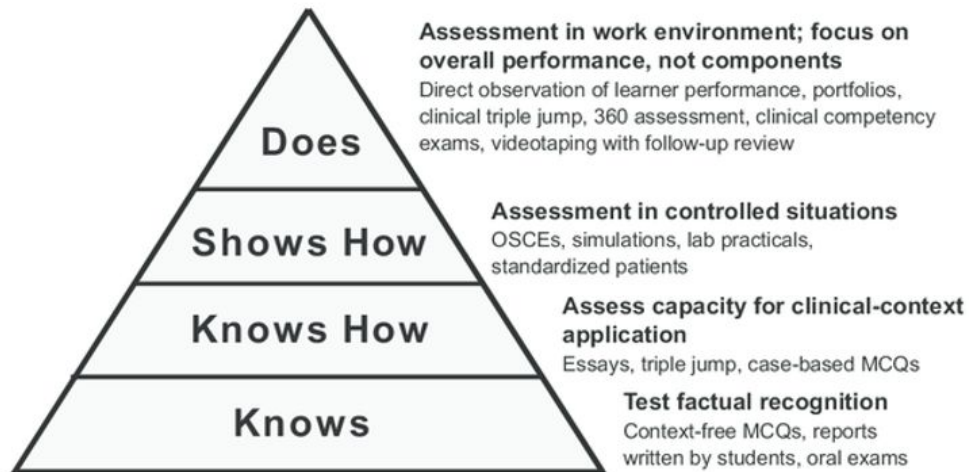
Questions for us to consider...

- How do I define professionalism? Why?
- What would I include in a list of 'professionalism competencies'?
- Which of those competencies should students develop in their anatomy course?
- How can I support students to develop those competencies?
- How can I check that students have developed those competencies?
- What would I include in a list of 'unprofessional behaviour'?
- What steps should I take to tackle unprofessional behaviour?

Teaching and learning professionalism

- 1. Didactic eg. legal responsibilities around confidentiality, privacy and social media use
 - Knowledge acquisition
- 2. Discursive eg. case-based discussion
 - Developing understanding and application
- 3. Reflective eg. portfolio of reflective writing
 - Evaluation, analysis, integration
- 4. Observation: The Hidden Curriculum
 - Can have a powerful effect on professional identity formation, not always positive!

Assessing professionalism: Miller's pyramid



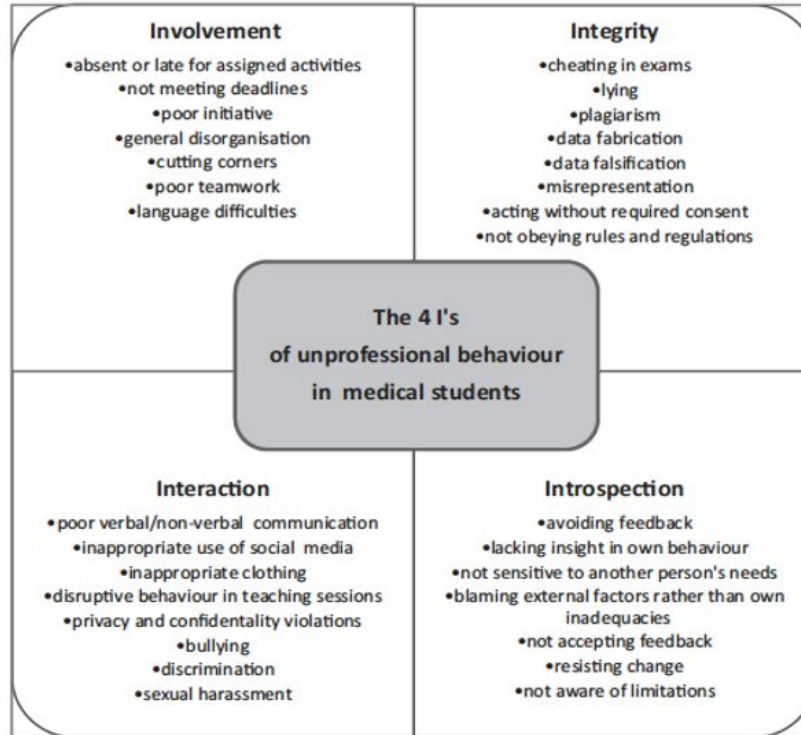


Figure 1. Four categories including 30 descriptors for unprofessional behaviours in medical students (Mak-van der Vossen et al. 2017).

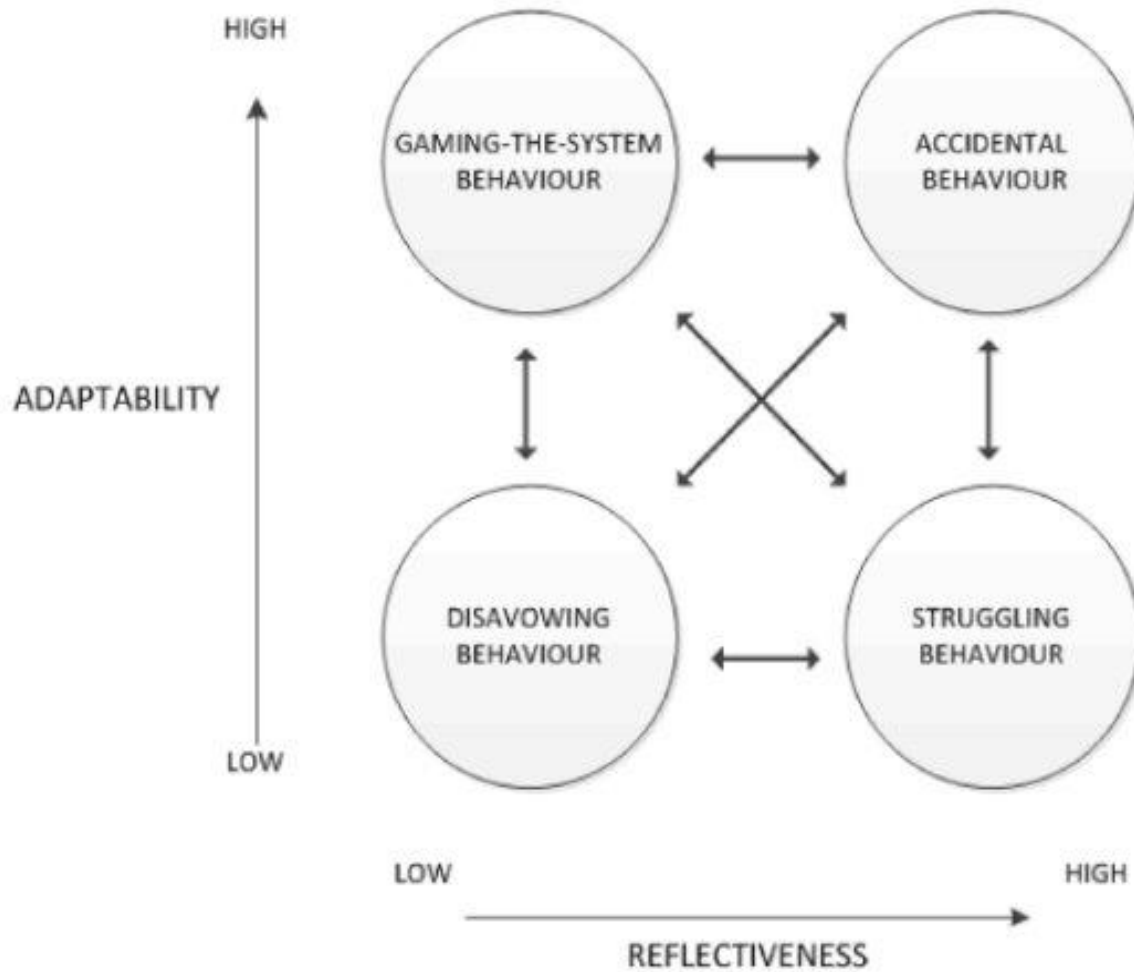


Figure 2. Profiles of unprofessional behaviour (Mak-van der Vossen et al. 2019).