Reflections on the Erasmus+ LEANbody project (October 2021 to October 2024)

Participating in the Erasmus+ LEANbody project, coordinated by Dr. András Nagy from the University of Pécs, Hungary, has been an extraordinary privilege. Over the three years of this project, I have gained invaluable insights and experiences that highlight the significance of collaboration between diverse institutions. The interactions with my anatomist colleagues from the University of Pécs, Masaryk University, and the University of Zagreb, as well as with educational experts from the Karolinska Institute, have been particularly enriching.

This article offers my personal reflections and perspectives following visits to the anatomy departments in Pécs, Brno, and Zagreb, along with my participation in the workshops and conferences organized as part of the LEANbody project. Additionally, I will discuss some of the broader and ongoing outcomes resulting from these collaborative endeavors.

Positive observations

As the Head of the Department of Anatomy at Masaryk University, I was pleased to observe the shared commitment among our partner institutions to maintaining high standards in anatomical education. During visits to the anatomy departments of the participating institutions, it became evident that many of their teaching and assessment practices align closely with our own. One of the most gratifying aspects was the shared recognition of the vital role of cadaveric dissection in medical education. Despite the financial challenges associated with this traditional approach, all participating institutions demonstrated a strong commitment to preserving it as an essential component of the curriculum.

At Masaryk University, we have always prioritized hands-on learning, and it was encouraging to see this mirrored at our partner universities. Given the trend in some medical schools, particularly in the UK, to move away from cadaveric dissection, it was reassuring to find that our colleagues remain steadfast in their belief in the pedagogical value of this method. The respect shown to donors by both staff and students was especially heartening, as was the opportunity to share insights about the establishment and management of body donation programs across different countries.

It was also fascinating to learn how the historical and cultural contexts of each institution have shaped their teaching philosophies and practices. The opportunity to engage with colleagues through regular online meetings, as well as in-person workshops and conferences, has been invaluable. These interactions not only facilitated the exchange of ideas but also laid the groundwork for enduring collaborations and mutual growth.

As we continue to build on these partnerships, I look forward to further exploring innovative approaches in anatomical education while preserving the traditions that have proven their value over time.

Perceived challenges

Many challenges associated with anatomy teaching have been thoroughly examined as part of the outcomes of this project, and various solutions have been proposed and tested to address them. From my perspective, one significant challenge lies in teaching large, diverse groups of students, including international students who often enroll because they were unable to secure admission to medical schools in their home countries. These students face additional hurdles, such as linguistic and cultural differences, alongside the demanding academic requirements of anatomy courses.

It was evident that the anatomy curriculum often includes a considerable amount of detail that might be considered non-essential, potentially overshadowing the focus on clinical relevance and application. Encouragingly, efforts are already underway to address this imbalance. However, the rationale for maintaining hands-on cadaveric dissection—particularly its value in fostering professionalism and other essential skills—did not always seem to be effectively communicated to students. Formalizing aspects of the hidden curriculum in these areas could be beneficial for both staff and students, ensuring greater alignment with educational goals.

As part of the project, educational concepts such as student-centred learning, constructive alignment, and the role of students as co-creators were introduced, as these were identified as gaps in current curricula. Pilot studies incorporating these principles have already been implemented, marking a positive step toward enhancing the educational experience.

At our institution, viva voce examinations remain an integral part of undergraduate assessments. Despite the increased student numbers, we have continued to use this method because of its effectiveness in evaluating depth of understanding and critical thinking. These oral examinations allow students to articulate their knowledge, engage in clinical reasoning, and demonstrate their ability to integrate anatomical concepts in real-time. While the subjective nature of viva examinations can pose challenges, careful structuring and standardization have mitigated these concerns. Furthermore, we have taken steps to support student wellbeing, ensuring that the pressure associated with this form of assessment does not negatively impact their mental health.

Additional beneficial outcomes

While the outcomes of the LEANbody project have been thoroughly documented elsewhere, there have been additional, unexpected benefits that have emerged beyond the scope of the original proposal. These outcomes would not have been possible without the collaborative relationships fostered through the project.

1. **COIL (Collaborative Online International Learning) Series of Clinical Anatomy Lectures**
   As organizers, Masaryk University had the privilege of initiating the COIL series in September 2021. The lectures, which are held weekly in October and November, have continued annually. Each session features a 30-minute lecture on a specific anatomical region, followed by a clinician from the host institution illustrating its clinical relevance. Last year, we were pleased to welcome students from Sumy State University in Ukraine, who greatly valued the additional input, especially in light of the ongoing disruptions to their education.
2. **Erasmus+ Staff Mobility Visits**
   Thanks to the relationships formed during the project, we were fortunate to have the opportunity to send two academic staff members, including myself, for internships at the University of Cambridge. Additionally, one of our academic staff members was able to undertake a long internship at the University of Pécs. These exchanges allowed us to gain firsthand insight into the anatomy teaching programs at these prestigious institutions, observe their course organization, and collaborate with their teams, enhancing our own teaching practices and strengthening international academic ties. In return, we were pleased to host an academic staff member from the University of Pécs at Masaryk University, where they had the opportunity to participate in our anatomy teaching program and observe our course organization.
3. **Collaboration Opportunities with Leading Institutions**
   The project has also opened up exciting new avenues for collaboration between Masaryk University, the University of Pécs, the University of Zagreb, the University of Cambridge, and Karolinska Institutet. Our partnership with the University of Cambridge, a top-ranking global institution, has been a tremendous privilege. We are particularly grateful for the kindness and support of Professor Cecilia Brassett, whose collaboration with our institution has been instrumental in enhancing our educational programs. Additionally, our close collaboration with Professor Zdravko Petanjek from the University of Zagreb has been invaluable. Professor Petanjek, along with his colleague Professor Ana Hladnik, visited our institution, strengthening the ties between our universities. This collaboration also led to the successful development of another Erasmus+ project, SCaLPEL, which focuses on the education of young surgeons. Furthermore, our ongoing fruitful collaboration with Dr. Amani Eltayb from Karolinska Institutet has been especially valuable. Dr. Eltayb's work on pedagogical publications, particularly related to innovative anatomy teaching

methods, has enriched our understanding of educational theory and practice. These collaborations have not only enhanced our teaching but have also fostered long-term academic relationships with leading global institutions.

I would like to extend my heartfelt gratitude to all those who contributed to the success of the LEANbody project. The results of this initiative go well beyond what was formally documented, with the true value lying in the lasting relationships, shared insights, and collaborative spirit that have emerged. We are particularly thankful for the generous support provided by the Erasmus+ programme, which made this collaboration possible and allowed us to explore new avenues of learning and development.

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