Facilitation of Learning (FoL) – ENPHE
Good Practice for Physiotherapy Education

1. Title of the Good Practice + Author(s) + e-mail:

Flipping the Classroom for Manual Skills classes

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2. Background & Rationale:

Why this approach?

- Traditional lecture-based teaching often limits hands-on practice time. By implementing a blended learning approach using the flipped classroom strategy, this limitation can be overcome.
- Students engage with theoretical content before attending practical sessions, allowing for more efficient use of in-class time to develop essential hands-on skills.
- This approach also enables teaching and learning to take place in the higher phases of Bloom's taxonomy, where applying, analyzing, and reflecting are central. The basic techniques and theoretical principles are reviewed by the student beforehand, so class time can focus on practicing, applying knowledge, and critically discussing techniques together with peers and instructors.
- As a result, the available time for active practice and personal guidance is significantly increased.

I categorise my case under the following theme (please tick the appropriate box):

☐ Clinical reasoning skills
☐ Learning between students
☐ Simulation-based learning
☐ Lack of motivation
☐ Tailored learning for student diversity
☐ Facilitation of online physiotherapy
☐ Self-regulation in physiotherapy learning (professional issues)
☒ Blended learning strategies
☐ Other: .....

3. Learning Objectives:

- Students will be able to prepare independently for practical sessions by engaging with pre-class digital materials, thereby enhancing their learning autonomy.
- Students will be able to apply theoretical knowledge actively during hands-on practice, focusing more on doing and practicing rather than only observing.
- Students will be able to give and receive structured peer feedback to foster critical reflection and collaborative learning.
- Students will be able to demonstrate proficiency in basic manual skills through supervised practice and practical exams.

4. Implementation & **Description of the Good Practice:**

In the first year of the Bachelor of Physiotherapy curriculum at Vrije Universiteit Brussel students are introduced to manual skills on extremities and massage techniques.

<u>Students receive before class</u>

- Pre-recorded video lectures (max 15min.)
- Reading materials: course with written out text per technique

→ These materials cover theoretical aspects of manual therapy and massage techniques

<u>During class</u>

- Interactive quizzes in the beginning of the practical sessions
- In-class sessions focus on hands-on practice, peer learning, and real-time feedback from instructors.
- +- 2 **hours of undisturbed practice**: Most class time is dedicated to supervised hands-on practice and skill refinement.
- 3-5 x demonstration during class 'sample exam'
    - Peer-feedback of students
    - Feedback of teacher

5. **Evaluation & Feedback:**

Students continuously receive oral feedback on their skills, both from peers and from the instructor, who actively circulates throughout the session. In addition, students who perform the demonstrations receive group feedback as well as individual feedback from the instructor.

This feedback is formative in nature (no grades are given, only qualitative feedback). At the end of the academic year, however, students take a practical exam, during which they receive a summative score from the instructor.

6. **Challenges & Solutions:**

- **Challenge:** Students may not engage with pre-class materials.
    - **Solution:** Incorporate low-stakes quizzes to encourage accountability.
    - **Solution:** Explain why we work like this
- **Challenge:** Some students may struggle with self-directed learning.
    - **Solution:** Provide structured study guides and periodic check-ins.

7. **Impact & Sustainability**

The flipped classroom promotes self-directed learning and active engagement, preparing students for lifelong professional development. Once created, pre-class materials can be reused and updated, making the approach efficient and scalable across cohorts and courses. By emphasizing peer learning and feedback, the model reduces reliance on continuous direct instruction, ensuring a flexible and sustainable teaching strategy within the curriculum.

The flipped classroom supports Environmental Physiotherapy by using reusable digital materials that reduce paper and resource consumption. It promotes efficient teaching practices, lowers the ecological footprint, and fosters sustainability in education.

8. References & Supporting Materials:

Røe, Y., Rowe, M., Ødegaard, N. B., Sylliaas, H., & Dahl-Michelsen, T. (**2019**). Learning with technology in physiotherapy education: design, implementation and evaluation of a flipped classroom teaching approach. *BMC medical education*, *19*(1), 291. https://doi.org/10.1186/s12909-019-1728-2

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If you have any questions about the template, please email: Matthias.eggermont@vub.be

Thank you in advance for completing the template and for your valuable input.

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