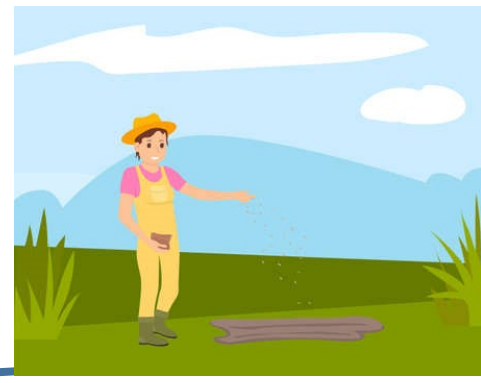


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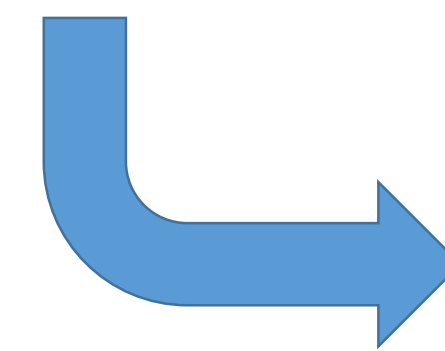
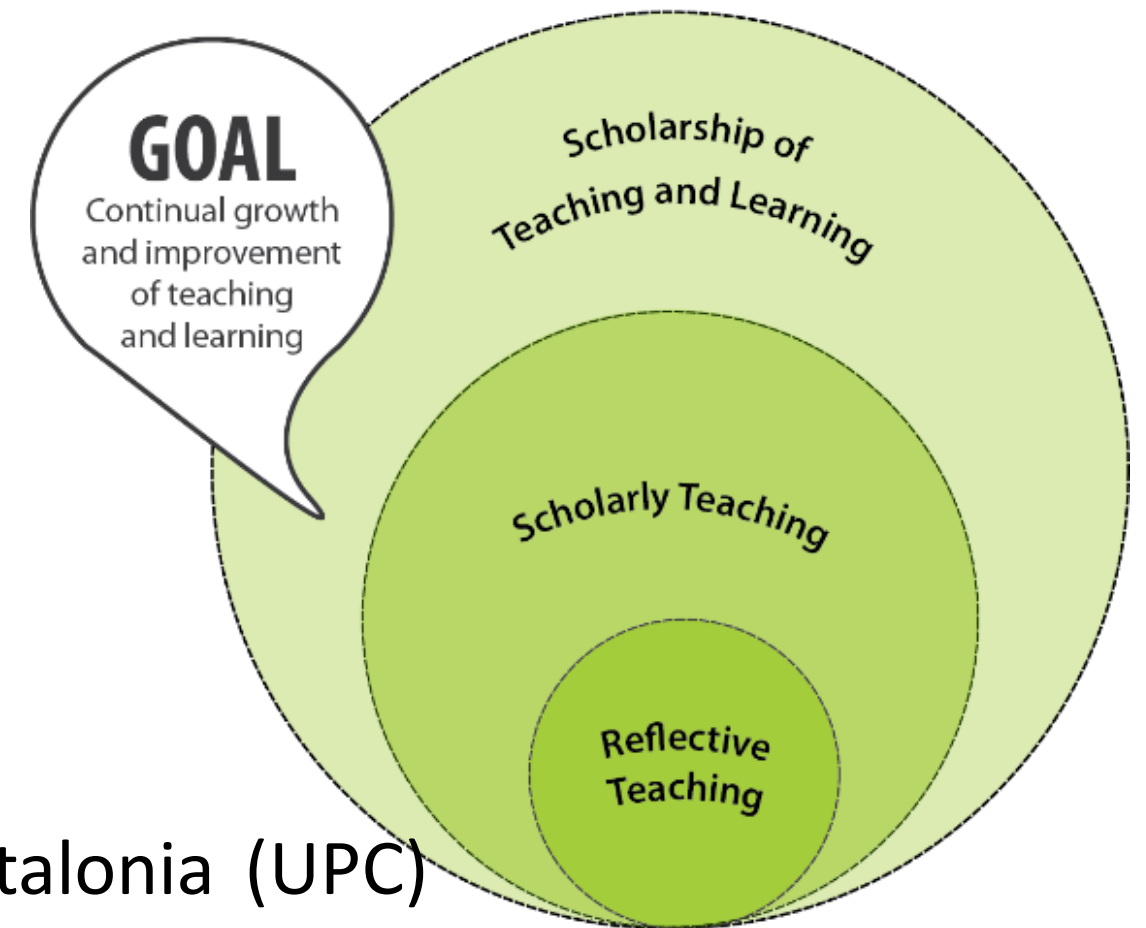


Seed of a new research line 'Physics Teaching for Engineers and Architects' at the Universitat Politècnica de Catalunya

WELCOME TO SoTL UNIVERSE: THE SCHOLARSHIP OF TEACHING AND LEARNING

The Scholarship of Teaching and Learning (SoTL) is **the systematic study of teaching and learning**; it involves identifying a problem, asking a question, gathering evidence, drawing conclusions based on that evidence, and making those findings public for the benefit of others.

SoTL INQUIRY/RESEARCH ON TEACHING



THE ACADEMIC FRAMEWORK: THE TEACHING INNOVATION AT THE UPC

The Strategic Plan 2022-2025 of the Technical University of Catalonia (UPC) includes between its main objectives of the Academic Politic the review and update of the teaching methodologies. **It aims to introduce innovative teaching and multilevel approaches.**

POSSIBLE PATNERS:

- ICE – UPC: Institut de Ciències de l'Educació
- Doctoral Program in 'Educació en Enginyeria, Ciències i Tecnologia'
- Professors and Researcher of Physics Department of UPC

Phases of Reto SoTL 'Physics Teaching for Engineers and Architects'

2022-2023

- Organization of The Day of Physics Teaching within the Physics Department of the UPC to present the Campus MDAD, the SoTL and the Reto SoTL (June 2022);
- Create a group of professors of the Physics Department of the UPC interested in carry on research on the teaching of the Physics for Engineers and Architects (different grades of participation);
- To contact with Doctoral researchers of the ICE Program;
- Identifying with the group the research questions for future research projects basis.

2024-2026

- Preparation of a 3-years research project in collaboration with professors and students and submission to ICE call for UPC innovative teaching;
- Identification of the pilot and the control groups for the analysis of the effect of the new methodologies;
- Start of the project;
- Two years project to follow the first year students until the end of their second university year.

2026-2027

- Analysis of the results;
- Presentations of the results into congresses and indexed journals related with Physics Education;
- Presentation of the results at the Teaching days organized by the Department, ICE-UPC and UPC;
- Looking for institutional support to promote the SoTL approach at UPC;
- Collaborating with others National and International groups for submitting new national or European research projects in this field.

THE CEMENT TO BUILD IT:

- Passion for our work and search for continuing improvements;
- Collaboration between experienced and young professors for the transfer of the knowledge and the introduction of innovative point of views;
- Thinking about the teaching as a living ecosystem continuously changing and accept it as a personal and university challenge.

