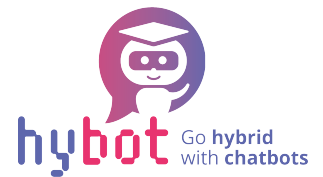




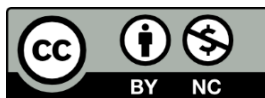
Co-funded by the  
Erasmus+ Programme  
of the European Union



hybot

Enhancing hybrid teaching in higher education through chatbots

## Hybrid teaching as a concept to connect students from different campuses at Katholieke Universiteit Leuven



This work is licensed under a **Creative Commons Attribution-NonCommercial 4.0 International License**. You are free to copy, share, adapt, use the material for non-commercial purposes, as long as you meet the following conditions:  
**Attribution:** You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests that Right to Remain endorses you or your use.  
**NonCommercial:** You may not use the material for commercial purposes.



Co-funded by the  
Erasmus+ Programme  
of the European Union

The creation of this resource has been partially funded by the ERASMUS+ grant program of the European Union under grant no. 2021-1-DE01-KA220-HED-000023203. Neither the European Commission nor the project's national funding agency DAAD are responsible for the content or liable for any losses or damage resulting of the use of this resource.



## INTRODUCTION

Before the COVID-19 pandemic, the Katholieke Universiteit Leuven was already exploring Hybrid Teaching to enable students from different sites to engage with each other and with the teacher. The use of Hybrid Teaching also enables a brand-new concept for Teacher Training.

## GENERAL CONTEXT OF THE HYBRID TEACHING PRACTICE

- Implementer: different schools at Katholieke Universiteit Leuven (Leuven, Belgium)
- Study program: Master of Teaching
- Lifetime: Ongoing since before the pandemic
- Reference: Based on the interview with Dr. Annelies Raes and the paper published in [https://edtechbooks.org/hyflex/hyflex\\_MTP\\_KULeuven](https://edtechbooks.org/hyflex/hyflex_MTP_KULeuven)
- Compiled and structured by Universidade Aberta

DR. ANNELIES RAES [annelies.raes@kuleuven.be](mailto:annelies.raes@kuleuven.be)



Image shared by Annelies Raes.

## INITIAL SITUATION

Katholieke Universiteit (KU) Leuven has different campuses spread around the country. Before the COVID-19 pandemic, the KU was already exploring hybrid teaching as a brand-new concept for teacher training in the scope of Master of Teaching programme enabling students from different sites to engage with each other and with the teacher. In this programme, students are allowed to follow certain courses, seminars, or projects at the location of their choice. The programme offers the possibility of engaging with learning face-to-face or remotely, with an option of blended learning. This approach makes the programme more accessible to students who combine the study process with their professional activities. Students have therefore the flexibility to choose the specific campus and their mode of participation in classes.



## CURRENT REASON

Nowadays, mainly caused by COVID-19, other programmes and courses at KU Leuven utilise the hybrid teaching space to deliver their teaching as this was found to be a good strategic decision to enable students to join their colleagues when they were either in lockdown or shielding.

## BENEFITS FOR THE STUDENT

The main advantage was flexibility provided to students to access learning as a significant part of students was located outside the main campuses. Students could choose to come to campus or follow the session remotely. Remote students were projected in the background which made them part of the classroom. They were given the opportunity to select different viewpoints from the classroom depending on the group dynamics. There was no significant difference in motivation or the grades between face-to-face and online students. Although, on-campus students tended to engage more with the teacher.

## OBJECTIVES

The introduction of hybrid teaching pursued the goal of enabling students to remotely engage with the lecture even when they were coming from different settings or when they had professional commitments.

## HYBRID TEACHING SCENARIO

Hybrid teaching has been mainly used in a lecturing-type format. Students could interact with the teachers and discuss with each other although it was more difficult to enable group work and discussions, especially when mixing online and face-to-face students. The full use of the room enabled the teacher to engage visually with all students, which was considered to be extremely valuable (s. Fig. 1).

## HARDWARE AND SOFTWARE USED

There were a few spaces designed and planned for hybrid teaching. The Hybrid Classroom started with Barco weConnect-based<sup>1</sup> research project that allowed for replicating a face-to-face session: remote students were in the background and could choose which camera view they wanted in the space depending on which camera they wanted to activate. Other rooms were more limited and used MS Teams.

---

<sup>1</sup> Barco weConnect is a software that supports virtual learning, hybrid teaching or further active learning solutions (<https://www.barco.com/en/product/weconnect>).



Fig. 1: Hybrid teaching scenario at KU Leuven (image shared by Annelies Raes).

## INTERACTION AMONG PARTICIPANTS

The teacher relied on the videoconferencing tool to engage with the students. In addition, activities and digital learning resources located in the university Learning Management System were deployed. Students were invited to engage with some formative assessment questions which helped the teacher assess students' understanding of the content taught.

## ASSESSMENT

Formative assessment was used to check students' understanding. Furthermore, there has been an investment in e-assessment in the University which was also impacting hybrid teaching scenarios. A link for further information can be found here: <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/assessment-and-feedback/online-exams>. A mix of assessments was practiced combining oral examinations via Skype, Blackboard Collaborate, Microsoft Teams with a test-based system named xToledo.



## STUDENT EVALUATION

Students from the programme Master of Teaching appreciated the flexibility that hybrid teaching was giving them, and preferred this method to traditional videoconferencing. However, the researchers found that students from other programmes were concerned that this model would harm them if they would chose to follow the course remotely.

## TEACHER EVALUATION

Teachers mentioned that the experience exceeded their expectations. Seeing the remote student as good as the on-site one was found to be an important benefit. Another relevant aspect was that students' names and answers on the quizzes and/or polls were visible on the screen, and this improved the interaction with the remote students. Those teachers that had experience with videoconferencing mentioned that the easing of unprompted interaction was one of the advantages of being in a hybrid virtual classroom. However, a teacher mentioned that the remote students might need to be reminded that they were in a formal classroom as they might lose this perspective when they were online.

## TRANSFERABILITY AND SUSTAINABILITY

The hybrid teaching model was applicable in other institutions although to replicate it in the full extent would be costly. There was a perception that the quality of the space influenced both, the quality of the learning and teaching, the motivation, and the perception of value. Being able to change the classroom views and share all remote students visually in the background as if they were physically seated, was considered an advantage but one that was difficult to replicate without investment.

To sustain the hybrid teaching practices, the need for professional development and pedagogical training of teachers should be mentioned as well as importance to redesign learning scenarios and activities for an environment that is different and challenging for both, students and teachers. This is why the KU Leuven team is involved in a new staff development programme on synchronous hybrid education, which is part of the Erasmus+ project DigiTeL Pro (Professional development in digital teaching and learning)<sup>2</sup>.

## GOOD PRACTICE ADVICE

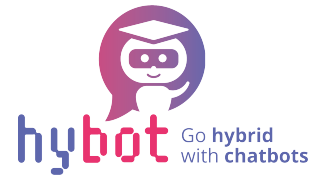
- Consider the quality of the space and the technology used,
- Reference to the research already published that helps understand better how the space operates.

---

<sup>2</sup> Learn more under <https://digitelpro.eadtu.eu/>.



Co-funded by the  
Erasmus+ Programme  
of the European Union



## FURTHER REFERENCES

- <https://digitelpro.eadtu.eu/outcomes>
- [https://edtechbooks.org/hyflex/hyflex\\_MTP\\_KULeuven](https://edtechbooks.org/hyflex/hyflex_MTP_KULeuven)  
<https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/assessment-and-feedback/online-exams>.