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## Structuring Conversations Around Course Design

Jacques LANARÈS

*UNIL, Switzerland, jacques.lanares@unil.ch*

Marc LAPERROUZA

*EPFL, Switzerland, marc.laperrouza@epfl.ch*

Emmanuel SYLVESTRE

*UNIL, Switzerland, emmanuel.sylvestre@unil.ch*

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# STRUCTURING CONVERSATIONS AROUND COURSE DESIGN

**J. Lanarès**

UNIL

Lausanne, Switzerland

**M. Laperrouza<sup>1</sup>**

EPFL

Lausanne, Switzerland

0000-0001-6316-254X

**E. Sylvestre**

UNIL

Lausanne, Switzerland

0000-0003-4575-7755

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## WORKSHOP ABSTRACT

Constructive alignment helps both students and teachers to achieve intended learning outcomes. The workshop proposes to introduce participants to the elements and mechanics of the pedagogical coherence canvas (PCC), a tool developed to improve constructive alignment throughout course design. Participants will familiarise themselves with the process by applying it to the design of a course or training. This hands-on workshop will help participants to develop a practical understanding of how to use the PCC to design a course following constructive alignment principles.

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<sup>1</sup> Corresponding author: M. Laperrouza: [marc.laperrouza@epfl.ch](mailto:marc.laperrouza@epfl.ch)

## **1 BACKGROUND, RATIONALE AND RELEVANCE**

According to the principles of constructive alignment first described in the literature by Tyler (1949) and, later on, by Biggs (1999), an outcome-based curriculum should be designed as a coherent system containing three central elements: learning outcomes, teaching strategies and assessment strategies. At the same time, one sometimes needs to be reminded that teachers are first and foremost experts of content so when they go about designing a course, that's often where they tend to start. Moreover, a course does not take place in a vacuum. Contextual elements, such as the number and diversity of students, the format of the course (in presence or hybrid), the available infrastructure and the teaching staff's experience place real boundaries around course design. Contextual factors can also heavily impact course design. One can think of how the pandemic has abruptly changed teaching formats or how Large Language Models can require some teachers to revisit elements of their course (e.g., in terms of assessment, activities or learning outcomes).

## **2 MOTIVATIONS AND LEARNING OUTCOMES**

Through our experience of Teacher support, we have noticed that integrating content and contextual elements allows them to focus on their immediate concern (i.e., designing a course on a subject) without disconnecting them from the setting in which the course takes place (Hussey and Smith 2002).

Whereas many teachers and pedagogical advisors are familiar with the principles of constructive alignment, some seemed to lack a visual and actionable tool (Avdiji et al. 2020) to ensure constructive alignment throughout the design of a course (e.g., for teachers working alone) or to structure a conversation around course design (e.g., for pedagogical advisors or for teachers in a co-teaching format).

We have developed a canvas to support both teachers and pedagogical advisors throughout the course design process. It builds on the constructive alignment principles and extends them by adding both content and contextual elements to the initial framework. By design, it retains intended learning outcomes at the core of the process while giving explicit space to context and content. The canvas can be used both for creating a course but also for revisiting one, reflecting on its overall alignment or integrating new contextual elements.

At the end of the workshop, participants will be able to:

- Describe the elements and mechanics of the pedagogical coherence canvas
- Apply the canvas to the design of a course
- Reflect on the design process through a structured conversation
- Assess how the canvas can be used to design a course or structure a discussion around course design

## **3 WORKSHOP DESIGN**

The workshop proposes to introduce participants to the mechanics of the canvas and to structuring conversations around course design with the help of a visual tool.

The workshop will proceed as follows:

- Description of the workshop's aim and brief recap on constructive alignment
- Short introduction to the pedagogical coherence canvas with an example from engineering
- Working alone and in pairs, participants will familiarize themselves with the tool and process by applying it to the design of a course
- The workshop will end with a debrief on what worked well and less well in the design process, first in pairs, then in plenary

Participants will be provided with canvases and post-it notes.

Post workshop: The organizers will gather all canvases, provide comments pertaining to the alignment of the canvas produced and share a set of best practices.

#### **4 TARGET AUDIENCE**

The workshop is primarily intended for teachers and pedagogical advisors.

Previous experience with designing a course or accompanying teachers in course design is necessary but one does not need be an expert in either one. The same can be said about familiarity with the principles of constructive alignment.

The number of participants targeted is between 12 and 40 – there are in principle no issues of scalability (provided the room is large enough).

Pairs will be constituted on the basis of the audience. Guidelines can be adapted on the basis of the audience's composition.

#### **5 SIGNIFICANCE FOR ENGINEERING EDUCATION**

Given its generic nature the canvas can be used in designing courses both in humanities and engineering. That said, in light of the integration of contextual factors (e.g., inclusivity, openAI, ec.) or importance given to transversal skills, the inclusion of a broader set of variables in course design should not take place at the expense of pedagogical coherence. Mapping a course can help finding an optimal equilibrium between equipping students with the required engineering competences and transversal skills while building on evolving contextual variables.

#### **6 ENHANCEMENT OF KNOWLEDGE AND DIALOGUE**

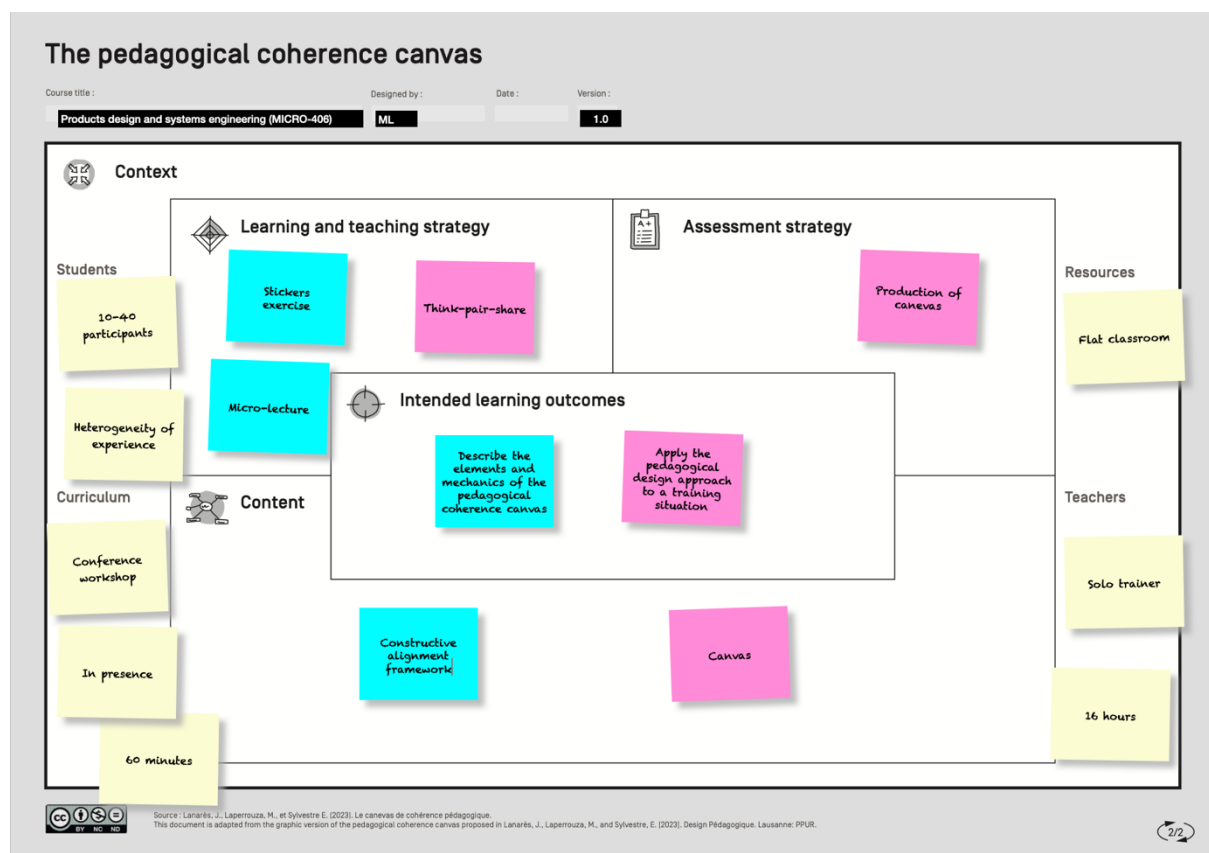
The workshop is designed to provide a short but intensive experience of course design following constructive alignment principles both for new and seasoned teachers and pedagogical advisors. The mix of peer work and exchange followed by a plenary discussion should allow participants both to revisit their practice of constructive alignment and benefit from other participants' experience.

## 7 REPORT<sup>2</sup>

The 60-minutes workshop was held on September 11 and attended by 37 participants.<sup>3</sup>

After a recap of the aims, a short introduction covered the principles of constructive alignment. This was followed by the presentation of the elements and mechanics of the pedagogical coherence canvas. An example drawn from an engineering class was used to illustrate the use of the canvas.

Participants were then first asked to apply this to the workshop itself. To this end, they were provided with 16 pre-filled stickers and tasked with placing them on a blank canvas individually. The exercise was rapidly debriefed (see below).



Each participant was then given a set of blank stickers and tasked with designing a course on the basis of one intended learning outcome. After 20 minutes they were handed a conversation guide and asked to discuss in pairs one canvas.

The final 15 minutes were devoted to debriefing the use of the canvas and of the conversation guide. A number of comments were made by the participants:

- the canvas provides a useful framework to structure a course, in particular for new instructors

<sup>2</sup> Prepared by Marc Laperrouza ([marc.laperrouza@epfl.ch](mailto:marc.laperrouza@epfl.ch))

<sup>3</sup> For users interested, the slides are available here: [SEFI2023 Presentation.pdf](#).

- the visual dimension adds value
- the first stickers exercise is great; it may be interesting to have less "sticky stickers" to move them around

Participants also raised a number of questions or made suggestions as to:

Question/suggestion	Comment from workshop organizer
the order in which one proceeds (e.g., shouldn't one start with the core elements rather than the context)	as long as coherence is maintained throughout, there is no imperative to start with the context; experience has shown that instructors are content experts and often want to start there; depending on the type of interaction/level of seniority, it may well be the starting point to engage a conversation
is the size of the blocks proportional to the importance of the elements; how can one fit all the intended learning outcomes for a semester in such a small space	there is to a certain extent an intention to keep the different blocks relatively small; for a whole semester, this leads to high-level ILOs and bird's eye view of the course (something that is easy to communicate at the beginning of a course to students but also useful for instructors for quickly assessing the feasibility of a course)
whether the canvas could be used in a program/full curriculum development process	nothing prevents bringing several canvases to the table to gain an overview of the different courses and potentially identify overlaps, repetitive learning and teaching activities or assessment modalities; at the same time, there is at this stage no dedicated tool for a meta curriculum development canvas; other tools have been developed to ensure/increase constructive alignment
whether content should be included in the canvas since it is not in the original Biggs' paper	in our experience instructors are content experts and not all of them are able to 'naturally' take a step back and transform content into ILOs or for that matter start with ILOs; as a result, the content block can be useful to initiate a conversation but also to ensure that, for

	a given ILO, there is an appropriate content
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In summary, most of the debrief covered aspects related to the canvas and not to the conversation guide. Follow-up discussions during the conference led to a number of additional comments, including:

- the use of a ‘paper’ guide with an instructor could potentially undermine the credibility of a pedagogical advisor but it would be OK to have the guide on a computer and glance from time to time; this raises the question of the lisibility/UX of the guide
- the type of conversation is influenced by the “forces in presence” - pedagogical advisors will take a different approach depending on whom they have the conversation with; in other words, there is no “one-size-fits-all”
- the small questions (third column) are useful to go more in depth

In conclusion, the workshop seems to have been useful to a number of participants but its ambition (canvas + conversation guide) may have been slightly too high for the available amount of time.

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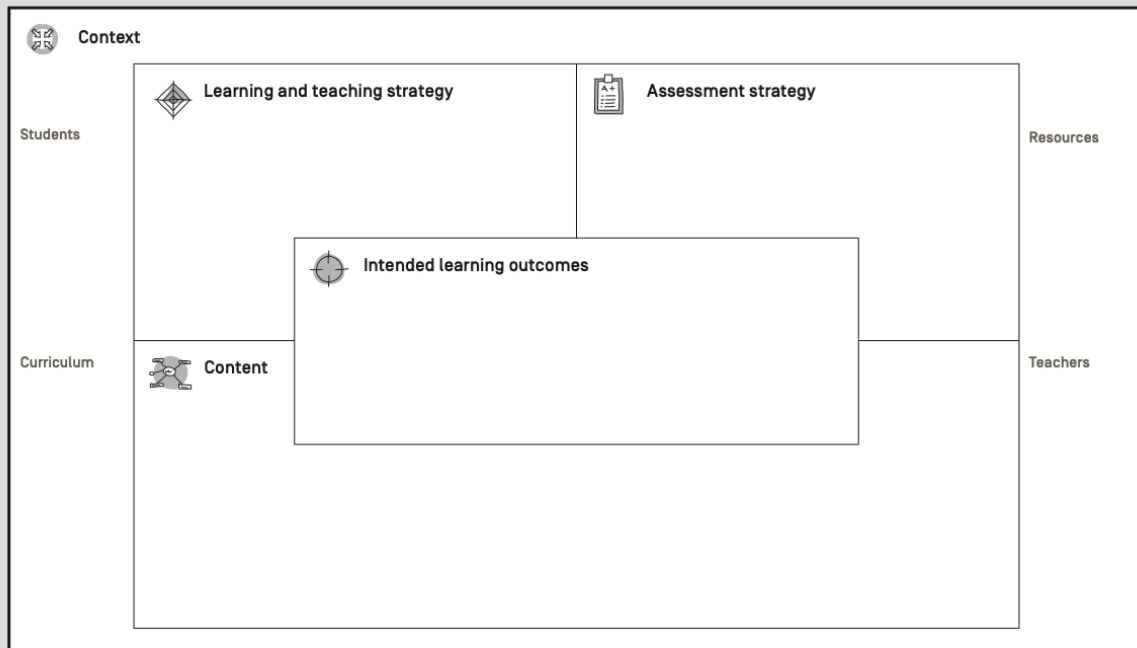
## WORKSHOP TIMING

00:00 – 00:05	Introduction and workshop aims
00:05 – 00:15	Elements and mechanis of canvas with example in engineering
00:15 – 00:35	Design a course (think)
00:35 – 00:45	Conversation (pair)
00:45 – 00:55	Debrief in plenary (share)
00:55 – 01:00	Conclusion

# CANVAS (BLANK)

## The pedagogical coherence canvas

Course title: \_\_\_\_\_ Designed by: \_\_\_\_\_ Date: \_\_\_\_\_ Version: \_\_\_\_\_



Source : Lanarès, J., Laperrouza, M., et Sylvestre E. (2023). Le canevas de cohérence pédagogique.  
This document is adapted from the graphic version of the pedagogical coherence canvas proposed in Lanarès, J., Laperrouza, M., and Sylvestre, E. (2023). Design Pédagogique, Lausanne: PPU.