

# Materials for participants of the Online Workshop for Modular Training Toolkit for Students Engaged in ENHANCE Activities

## 1. Introduction

The workshop's goal is to discuss the concept of co-creation at universities, which, in general, involves students, teachers, researchers, and administration. The goal is to empower students as co-creators of the teaching and learning process.

The **co-creation** is the process of creating something together (Björklund et al., 2017). Together, that is, with the participation of interested stakeholders. This approach is convenient when designing products that address (often partial) ill-defined problems, represent an innovative approach to the problem or are an idea driving future transformations. The co-creation approach in design allows the product to be tailored to the needs of stakeholders.

Following (Bovill & Bulley 2011), the "ladder of student participation in curriculum design" shows how student engagement in the curriculum can range

from no engagement within a dictated, staff-controlled curriculum to significant levels of student engagement with student control of the curriculum (see Fig. 1).

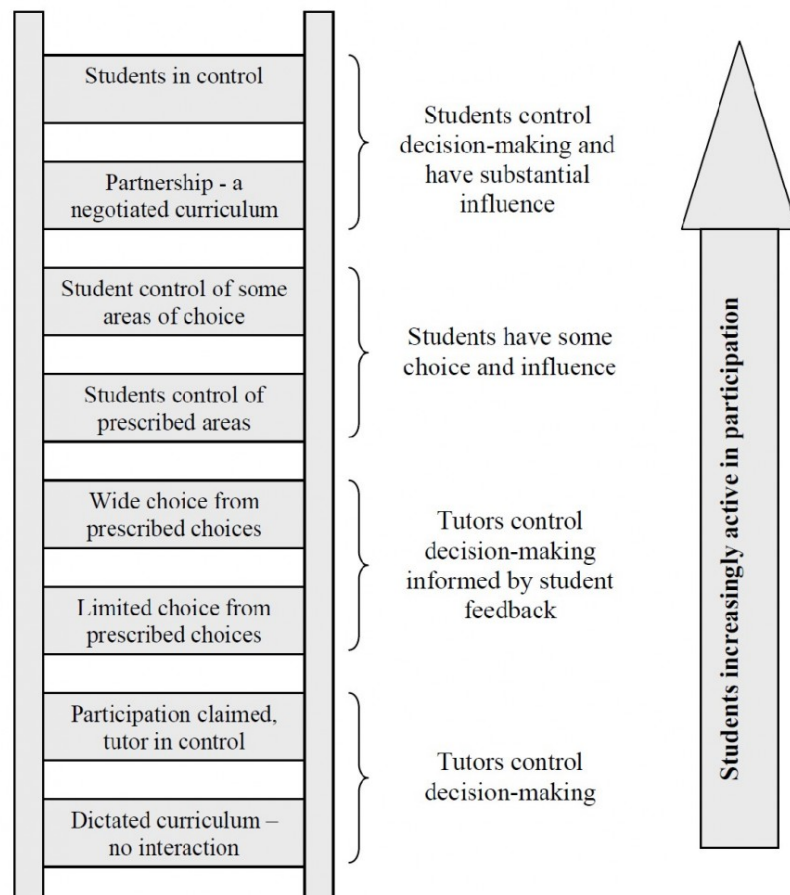


Figure 1 Ladder of participation in curriculum design (Bovill & Bulley, 2011 p.180)

## 2. Issues to address

The issues discussed during the workshop are:

- Co-creating of the events and workshops by students.
- Co-researching and undertaking scholarship projects by students supported by staff.
- Students' participation in course and curriculum design review committees.
- Co-assessing by students.
- Co-designing courses and curricula by students
- Co-evaluation of courses by students.

The goal of the workshop is to address the following issues:

- **Organisation:**
  - How to **organise** the co-creation process engaging: a small selection of participants / whole community?
- **Encouraging students:**
  - What are potential **incentives** for a student to participate in co-creation activities?
  - How to **encourage** the students into co-creation on university activities?
  - What can **discourage** students from participating in the co-creation process?
- **Costs and benefits:**
  - **Do we need** the co-creation at university?
  - What are the **costs** (not necessarily monetary) of co-creation?
  - What are the **benefits** (for whom) of co-creation?

## 3. Review of examples

In (Bovill et al. 2016), the authors classified the participation of the students in co-creation at university into four general roles: (i) representatives, (ii) consultant, (iii) co-researcher, and (iv) pedagogical co-designer (see Fig. 2). Following (Bovill, 2020), there are different examples of students participation in co-creation at the university:

- students co-researching university-wide projects and acting as change agents (Dunne et al. 2011),
- students undertaking research and scholarship projects with staff (Werder and Otis 2010),
- student representatives collaborating with university staff on committees for quality assurance and enhancement purposes (Luescher-Mamashela 2013; Buckley 2014),
- students participating in course design review committees (Mihans et al. 2008; Rock et al. 2015),
- students as consultants providing feedback on teaching observations (Cook-Sather et al. 2014; Huxham et al. 2017),
- students and teachers co-assessing work (Deeley 2014),

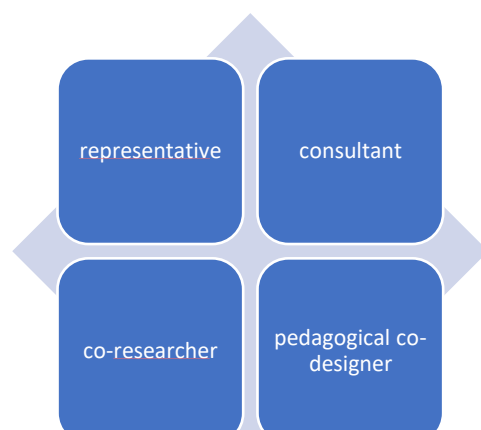


Figure 2 Roles that students adopt in co-creation work (Bovill et al. 2016)

- students co-designing courses and curricula (Bovill 2014; Delpish et al. 2010),
- students co-evaluating courses (Bovill et al. 2010),
- students and staff writing collaboratively (Marquis et al. 2016),
- students involved in teaching and designing academic development work (Kandiko Howson and Weller 2016).

### 3.1. Examples and problems from EHNANCE universities

#### Students co-researching:

- **Example:**
  - „Research project” course for a masters degree, Informatics, Warsaw University of Technology. Students work on article drafts in teams of 2-4 together with a scientific tutor. A group of lecturers takes care of properly conducted research (methodology), while the scientific tutor takes care of the substantive value.
- **Problems:**
  - How can a masters thesis fit into a co-research process?
  - How can a research-related project course be closely connected to current research findings?
  - How can students be supported to publish the results from participating in the different activities mentioned?

#### Students undertaking scholarship projects with university staff:

- **Problems :**
  - How can summer internships be connected to research?

#### Students’ participation in course design review committees:

- **Example:**
  - Committees from Student’s Council provides an opinion on a new programme.
- **Problems:**
  - What type of support do students need to contribute in a constructive way to such processes?

#### Students co-assesing:

- **Example:**
  - Peer-review is an element of the assessment for selected courses, e.g.
    - (a) „Agent and actor decision systems”, masters degree programme in Computer Science, Warsaw University of Technology
    - (b) “Presentation techniques”, elective course for bachelor degree programme in Telecommunications, Warsaw University of Technology
    - The content of the review is graded, but it does not affect the grade received by the student being reviewed by peers
  - Mutual evaluation of team cooperation - included in the formative / summative assessment
- **Problems:**
  - What kind of rubics will be needed to make the process fair and related to the learning outcomes?

- What general guidelines can be formulated for students acting as reviewers of theses and other major deliverables such as project reports?

**Co-designing courses and curricula:**

- **Example:**
  - Students’ participation in designing the degree programmes/curricula (e.g. bachelor degree programmes in “Cybersecurity” and “Internet of Things Engineering”, Warsaw University of Technology)
- **Problems:**
  - What type of support do students need to contribute in a constructive way to such processes?

**Students co-evaluating courses:**

- **Example:**
  - A common system of electronic, anonymous questionnaires.
  - Selected lecturers additionally create their own supplementary questionnaires.
- **Problems:**
  - How do we make sure the students evaluating are representative for all students?
  - How can constructive criticism and appreciation be formulated in a general and neutral way both in an evaluation form and in meetings?

## 4. Models and effects of co-creation

### 4.1. Number of students participating in co-creation

Bryson et al. (2015) distinguish two models of students’ participation in co-creation processes:

- Model A: a small selection of students participate in the co-creation process.
- Model B: all the students participate in the co-creation process.

One should consider: **which** model will be appropriate for the different roles students are taking on; the **efficiency** of a process with many students; **incentives** for participating students.

### 4.2. Curriculum co-creation

Specifically, the co-creation of the curriculum (Bovill and Woolmer 2018) can be organised following two approaches:

- Co-creation **OF** the curriculum: **before** the programme or course takes place.
- Co-creation **IN** the curriculum: co-design of learning and teaching **within** a course or programme, usually during the course or programme.

### 4.3. Outcomes of the co-creation

Outcomes of whole-class approaches to co-creation (Bovill, 2020):

*Table 1 Outcomes of whole-class approaches to co-creation (Bovill, 2020):*

Outcome	Who?	Source
Improved academic performance or higher quality of work from students	Students	Bovill (2014); Deeley and Bovill (2017)

Enhanced skills for future professional development, including teamwork, critical reflection, and communication skills	Deeley (2014)
Learning beyond the course and transferring learning into new contexts/greater academic aspirations	Bovill et al. (2010)
Opened up the learning process to be more transparent	Deeley (2014); Bovill et al. (2010)
Process was fun	Bovill et al. (2010)
A shift from a focus on grades to learning	Delpish et al. (2010)
Increased confidence, enthusiasm, engagement, and motivation	Bergmark and Westman (2016); Bovill (2014); Bovill et al. (2010); Deeley (2014); Deeley and Bovill (2017)
Increased autonomy, self-regulation, and responsibility	Deeley and Bovill (2017)
Appreciated learning by doing and learning collaboratively with other students	Bergmark and Westman (2016); Bovill et al. (2010)
Practice at working democratically	Bergmark and Westman (2016)
Appreciated being asked to voice opinions	Bergmark and Westman (2016); Deeley (2014); Deeley and Bovill (2017)
Felt valued	Deeley and Bovill (2017)
Developed and experienced an equal relationship with the teacher	Bovill et al. (2010)
Lack of familiarity, shock at being invited to co-create a course	Bergmark and Westman (2016); Bovill (2014)
Enhanced identity, metacognitive awareness of learning and teaching, inspired, and/or transformed	Bergmark and Westman (2016); Bovill (2014); Huxham et al. (2015)
Creation of a learning community	Deeley and Bovill (2017)
Enhanced negotiation experience and skills	Bovill (2014); Deeley (2014)
Curriculum becomes more (socially) relevant	Bovill (2014); Bovill et al. (2010)

Student and teacher roles change		Bergmark and Westman (2016)
Felt risky and unpredictable		Bergmark and Westman (2016); Bovill (2014); Delpish et al. (2010)
Challenge in getting the pace of teaching right		Huxham et al. (2015)

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