



### **A3.3, O3: Conducted Teamcher Training (Month 36)**



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## Beneficiaries

- Aalborg University, Denmark
- Dublin City University, Ireland
- Kaunas University of Technology, Lithuania
- Linköping University, Sweden
- Tampereen Korkeakoulusäätiö sr, Finland
- Hamburg University of Technology, Germany
- Universidade de Aveiro, Portugal
- Universitat Autònoma de Barcelona, Spain
- University of Stavanger, Norway
- Universita degli Studi di Trento, Italy
- University of Twente, The Netherlands
- Institut National des Sciences Appliquées, France

## Abstract

Within ECIU university and the framework of work package “Challenge-Based Education” (WP3) activity 3.3 focuses on how the educational innovation of CBL@ECIU university can develop successfully from a theoretical to a practical, didactical approach. In order to motivate teachers and to foster didactical efforts, one activity is to set up a training for teachers which has the objective of providing knowledge about basic pedagogical principles, and to give guidelines for motivating and inspiring practitioners and students as well as addressing skills and competences needed to guide the teams working on challenges.

This report summarizes the workshops and activities offered to teachers and teamchers to support the implementation of Challenge-Based Learning approach (CBL@ECIU) from October 2021 to September 2022. This includes WP3-conducted offers as monthly CBL Round table meetings with teamcher Kick-Off, two workshops about basic principles of CBL as well as all activities from the local Innovation of Education Labs from each of the eleven ECIU partners.

In summary, all partners followed a similar strategy: first academic staff engaged in train-the-trainer workshops offered centrally by WP3, within the first 12 months Innovation of Education Labs established informational resources about CBL and in the third step (with experiences from the first challenge cycle in back) educational advisers and an increasing number of CBL experienced teamchers started own teamcher trainings and offered more frequently and more structured support for new teamcher. It has to be mentioned that the first teamchers that were engaged in CBL courses in all three challenge cycles started their personal Scholarship of Teaching or Classroom Action Project, in which they evaluated and reflected teaching and learning. With their personal Scholarship of Teaching projects they are improving own practice and, on the other hand, they contribute to the advancement of knowledge on teaching within the framework of CBL at ECIU university.

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## Symbols, abbreviations and acronyms

AAU	Aalborg University, Denmark
CBL	Challenge-Based Learning
DCU	Dublin City University, Ireland
EC	European Commission
ECIU	European Consortium of Innovative Universities
INSA	Institut National des Sciences Appliquées, France
KTU	Kaunas University of Technology, Lithuania
LiU	Linköping University, Sweden
TAU	Tampereen Korkeakoulusäätiö sr, Finland
TUHH	Hamburg University of Technology, Germany
UA	Universidade de Aveiro, Portugal
UAB	Universitat Autònoma de Barcelona, Spain
UiS	University of Stavanger, Norway
UL	Lodz University of Technology, Poland
UNITN	Universita degli Studi di Trento, Italy
UT	University of Twente, Netherlands

## 1 Introduction

Within ECIU university and the framework of the work package “Challenge-Based Education” (WP3) activity 3.3 focuses on how the educational innovation of CBL@ECIU university can develop successfully from a theoretical to a practical, didactical approach. In order to motivate teachers and to foster didactical efforts, one activity is to set up a training for teachers which has the objective of providing knowledge about basic pedagogical principles, and to give guidelines for motivating and inspiring practitioners and students as well as addressing skills and competences needed to guide the teams working on challenges.

In March 2020 all members of the WP 3.3 expert group agreed on criteria that must be implemented by 2030 in the ECIU's innovative Challenge-Based Learning approach (CBL@ECIU). This agreement was the starting point and basis for all ideas leading to the workshop concept introduced in Deliverable Report 3.3O2 concept teamcher training in November 2020.

In the proposal it was scheduled to have a workshop at each partner campus by activity leads in addition to the activities of Innovation of Education Labs to take a personal impression of the framework conditions for didactic support on site into account. Because of the COVID-19 pandemic, that restricted mobility, workshops and training activities had to be offered as online meetings instead. We are taking an advantage out of the situation and created a Community of Practice across institutional boards within the ECIU network and continued to have higher number of online activities open for all ECIU partner in combination of events on campus.

## 2 Objectives

This report summarizes the workshops and activities offered to teacher and teamcher to support the implementation of the Challenge-Based Learning approach (CBL@ECIU) from October 2021 to September 2022. This period includes parts of the third and fifth as well as the whole fourth round of challenges at ECIU.

The first part of chapter 3 summarizes all tea(m)cher trainings and activities centrally organized and conducted by WP3 activity leads for all teachers and teamchers in ECIU university, namely the CBL Round table with two teamcher Kick-Offs and two workshops. The second part of chapter 3 summarizes activities from the local Innovation of Education Labs from each of the ECIU partners.

## 3 Conducted Tea(m)cher training 10/21-09/22

In ECIU university in February 2021 the term of “teamcher” was introduced. The teamcher is supporting the challenge teams:

- in creating tentative plans for the teams' work processes and activities in the whole CBL learning cycle (Engage-Investigate-Act)
- in the working process with pedagogical expertise concerning interdisciplinary, intercultural and international team work
- in potential conflicts and pitfalls to keep the CBL process go on
- with innovation and creative-thinking, building student's self-confidence to be the drivers of the learning process.

Teamchers are trained in CBL and often are experienced teachers. They belong to the academic staff and might be applied as professors, post-doc, PhD students and in some rare cases student-tutors. Foremost it is their task to facilitate and support the challenge team. In this focus on coaching teamchers differ from teachers. teachers foremost might act as experts in the field and/or act as networkers by providing additional contacts or resources. Teamchers will foster innovation and creative-thinking and building student's self-confidence to be the drivers of the learning process.

While all trainings, workshops and offers of WP3 are open to all academic staff in general those with focus in operative aspects, e.g. CBL Round Table meetings, are dedicated more to teamchers active in the current challenge round than to teachers. Workshops about basic principles of CBL are designed to be attractive and helpful for teachers and teamchers.

### 3.1 Central offers for Tea(m)cher Training

Based on our experiences with tea(m)cher training reported after 12 and 24 month (see Deliverable Report 3.3 0.3.: Conduct teacher training month 12, month 24) **online workshops** were still conducted by using Zoom as a video conference tool and an online whiteboard from Padlet as a collaboration tool. In addition, the online whiteboard Miro was used more frequently within the last 12 months. To do so action leads from WP3.2 und WP3.3, both from TUHH, requested a free education licence.

The three topics chosen as “most important topics that should be covered in the workshop” in an initial teacher survey are still important parts in all central offers. The three topics are:

- Discussion and exercise how a teacher could adapt existing teaching units to Challenge-Based Learning
- Introduction about basic principles of Challenge-Based Learning (definition, theory behind, phases Engage-Investigate-Act)
- Examples of Challenge-Based Learning

In the reporting period WP3 organized and conducted eight monthly short meetings named **CBL Round Table** including two teamcher Kick-Offs at the beginning of challenge round four and five and two workshops. One workshop was on basic principles in CBL and the other about Classroom Action Research for CBL.

#### 3.1.1 CBL Round Table

The CBL Round Table is a monthly meeting to bring teamchers together to talk about their CBL implementations and experiences. It is scheduled for first Friday in month 2-3 pm (CET) and has a permanent Zoom link. At least one CBL expert from WP3 hosts the session and takes care for the moderation. It aims to enable the exchange of experiences between practitioners and to help to answer general questions about CBL while challenges are running. They are open to all partners in the ECIU alliance and the content is provided by participants mainly, similar to a bar camp. After the launch of COLlab platform in February 2022 monthly CBL round table meetings were announced worldwide and opened for everyone interested in sharing experiences and discussing challenging situations. However, none of the subsequent meetings were attended by anyone from outside the ECIU network.

Round Table meetings have a self-organizing character, relying on the passion and the responsibility of the participants. All attendees are encouraged to present a question or idea and facilitate a break-out session or otherwise contribute (e.g. as a moderator or document ideas). Everyone is also asked

to share information and experiences in the chat or later on in the teamcher channel on Microsoft Teams or on the COLlab platform.

In table 1 numbers of participants in Round Table meetings from October 2021 to September 2022 were summarized.

Table 1: Participants of CBL Round Table 10/21-09/22

Participants (excluding moderator or experts for input)															
Date	Total	AAU	DCU	INSA	KTU	LiU	TAU	TUHH	UA	UAB	UiS	UNITN	UL <sup>1</sup>	UT	
02.10.2021	3	1	0	0	0	0	0	0	1	1	0	0	Not part of ECIU alliance	0	
05.11.2021	0	0	0	0	0	0	0	0	0	0	0	0		0	
03.12.2021	16	0	0	0	3	4	1	1	1	2	3	1		0	
07.01.2022	0	0	0	0	0	0	0	0	0	0	0	0		0	
11.02.2022	No Round Table Meeting offered due to COLlab launch														
04.03.2022	No Round Table Meeting due to Teamcher Kick-Off (see chapter 3.1.2)														
01.04.2022	3	0	0	0	0	0	0	0	0	0	2	0	1	0	
06.05.2022	4	0	0	0	0	0	0	3	0	0	0	0	0	1	
02.06.2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01.07.2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05.08.2022	No Round Table Meeting offered due to summer break														
02.09.2022	No Round Table Meeting due to Teamcher Kick-Off (see chapter 3.1.2)														
Total	26	1	0	0	3	4	1	4	2	3	5	1	1	1	

In regard to the reporting period October 2020 to September 2021 with in total 55 participations, the participation rate dropped down significantly. No teamchers attended four of the eight meetings offered. The need for an exchange outside of one's own organization seems to be decreasing further in continuation of the trend already observed between month 12-24. This comes along with a decreasing number of teamchers that were active in round four and five in comparison to round two and three as indicated in table 2. Additionally, we hypothesized that participation depends on decreasing needs due to:

- sufficient excellent regular local offers, as UT or UNIT has local CBL teamcher groups and regular meeting (see chapter 3.2, table 7)
- the number of offered challenges per challenge round decreased, as reported in deliverable report of WP3.1
- the increasing number of experienced teamchers, being engaged in three and more challenges (see table 2)
- the increasing number of team-teaching and overall number of teamchers at each partner university which makes it easier to find exchange and feedback partners in one's own organization.

<sup>1</sup> UL joint ECIU alliance in March 2022.

Table 2: Numbers of Teamchers active in challenge rounds 1-5

ECIU partner	university	Active in autumn 2020 (round 1)	Active in spring 2021 (round 2)	Active in autumn 2021 <sup>2</sup> (round 3)	Active in spring 2022 (round 4)	Active in autumn 2022 <sup>3</sup> (round 5)	Teamcher in sum
Aalborg University		1	1	0	0	0	1
INSA		0	0	3	1	3	7
Kaunas University of Technology		3	10	3	4	4	18
Linköping University		2	3	3	3	3	5
Tampere University		2	2	4	1	3	4
University of Barcelona		4	7	7	5	4	16
TUHH		2	1	7	1	3	7
Twente University		0	7	5	2	3	17
University of Aveiro		3	2	2	0	0	6
University of Stavanger		1	1	1	1	1	1
University of Trento		2	3	2	2	5	6
Dublin City University		1	1	1	1	6	6
sum of teamchers active in challenges		21	38	38	21	35	94

It was decided after month 24 to continue with CBL Round Table meetings until the end of September 2022, because we as CBL experts in WP3 profit from expertise and experiences of teamchers, too. Links, tools and best practice examples as well as current questions shared in Round Table meetings as summarized in table 3 were included in centrally organized workshops about basic principles in CBL.

Table 3: Topics discussed in CBL Round Table

Date	Discussed Topic
02.10.2020	How to support team building, especially in mixed teams of traditional students and live-long learners? How to give student teams a good start with digital tools?
03.12.2021	How to combine challenges in one Big idea? Presentation and discussion model for stakeholder management.
01.04.2022	How to formulate an actionable challenge from a Big Idea? Digital tools for collaborative work.
06.05.2022	Emotional load of teamchers in CBL

### 3.1.2 Teamcher Kick-Off

To give teamchers a good start in their challenge and CBL courses at the beginning of the fourth and fifth challenge round, a welcome event for teamchers was created as it was done in round two and three. It is named teamcher Kick-Off and uses same time slot and Zoom link as the CBL Round Table to give a smooth move towards the Round Table events afterwards. It is also a one-hour online event.

<sup>2</sup> Last count Oct 18<sup>th</sup> 2021 for report on moth 24, updated for this report.

<sup>3</sup> Last count Aug 30<sup>th</sup> 2022. More Teamcher might join during the round 5.

Both times, on March 4<sup>th</sup> 2022 and September 2<sup>nd</sup> 2022, the event had the following three parts with about 20 minutes each:

- Welcome and background information about ECIU university and Challenges
- Getting to know each other, exchange and networking between the teamchers
- Introduction to teamcher support in ECIU university with discussion about additional needs for their support

In table 4 numbers of teamchers that participated in Kick-Off events and their affiliation are summarized. It indicates a good acceptance and reach of information within those events.

Table 4: Participants at Teamcher Kick-Off

Data		Number of Participants (only teamcher) and their affiliation												
	Total	AAU	DCU	INSA	KTU	LiU	TAU	TUHH	UA	UAB	UiS	UNITN	UL	UT
04.03. 2022	11	0	0	1	0	0	0	2	0	3	3	0	2	0
02.09. 2022	29	1	2	3	6	1	3	4	0	5	1	2	1	0

The **Kick-Off event on March 4<sup>th</sup> 2022** started with a warm welcome from the president of the ECIU university, Marius Martinez. He explained to the teamchers, why it is worthy to deal with challenge-based learning and how we can actually make a change towards a modern education. He pointed out that flexibility and personal learning goals are the major factors that drive ECIU university apart from having a great opportunity to find friends and connections for a life time.

After this refreshing greeting the participants just started to discuss Challenge-Based Learning based on an ice-breaker question: "If Challenge-Based Learning would be an animal, which one would it be and why?". As expected very interesting choices and reasons came up, e.g.

- CBL can be an elephant because it is so big and powerful, and also has this strong bonding between the participants and in the whole ECIU university.
- CBL can be an eagle because you can see the world from a distance but you focus on a small problem and get it.
- CBL was pictured as an "egg laying woolly pig" because so many different expectations are meant to be pleased by this format and it certainly offers huge opportunities.

After that, discussion continued on a very interesting inside perspective from colleagues of University of Stavanger who presented findings from their research about CBL. They combined data from 5 group interviews with survey results to investigate the learning opportunities and engagement perceived by the CBL students and teacher assistants during and after the challenge. Based on this Pattamawan Jimarkon Zilli, Kenan Dikilitas and Masoumeh Shahverdi recommended to the teamchers:

- Maximise interaction between and among students themselves and with teamchers.
- Provide opportunities for learners to take charge in connecting with stakeholders.
- Provide space for learners to reflect critically on the challenge and their own learning.

So overall it has been a very informative session.

In the **Kick-Off event on September 2<sup>nd</sup> 2022** Prof. Kerstin Kuchta, vice president of education at TUHH, welcomed all participants right from the vice president of education meeting with the latest news from their meeting in Brussels. She introduced the idea of a flexible learning pathway, how the digital platform will support teamchers and learners in the future and the attempts to integrate CBL into curricula. Afterwards the 29 participants split off in three break-out sessions with different best practice presentations.

The Kick-Off was hosted together with a team of teamchers from UAB and KTU. From KTU Inga Staliulaitiene, Benas Urbonavicius, Asta Daunoriene and Jurgita Bariniene put together four best practice elevator pitches in the 20 min session plus discussion. In parallel José Luis Molina from UAB gave advice to CBL course planning and explained the three most crucial points for CBL based on his experiences: (1) create a truly actionable challenge, (2) engage the team building right from the start, (3) it is worth to spend time on expectation management because it reduces dropout rates. Daniel Franco, also a teamcher from UAB, introduced design thinking and design thinking steps as ideation-creation methodology within the CBL cycle as well as the CBL toolbox that were a joint action by CBL experts and teamchers from UAB.

Those best practice session were followed by a plenum discussion and introduction of upcoming central organized workshops as well as teamcher support offers by Siska Simon and Dorothea Ellinger, action leads WP3.2 and WP3.3 and moderators of the teamcher Kick-Off. After farewell, Siska and Dorothea continued to answer questions and discussed with a small group for about 30 minutes, which shows that the best practice presentations had triggered many important thoughts and questions.

### 3.1.3 Central organized workshops and conducted by WP3 members on CBL

In the reporting period two workshops on CBL open for all members of the ECIU alliance were organized and conducted by CBL experts of WP3:

- (1) one-day online workshop about basic principles of CBL on March 22<sup>nd</sup> 2022 9.30 am – 4.30 pm
- (2) three-day blended workshop on Classroom Action Research in CBL on March 23<sup>rd</sup> 9.30 am – 4.30 pm online, May 16th 2022 01.30 pm – 5 pm and May 17th 2022 09.30 am – 12.30 pm hybrid at TUHH

The online workshop **“Basic Principles of CBL on March 22<sup>nd</sup> 2022 9.30 am – 4.30 pm** was conducted by Dorothea Ellinger and Siska Simon as CBL experts and activity leads of Work Package “Challenge-Based Education” and based on the experiences at ECIU university and from TUHH. The three phases and nine steps of CBL were introduced and the differences to other active learning methods as Problem- or Research-Based Learning were discussed. We had a lively exchange about the various roles and activities of teachers and learners that differ from traditional classes and its consequences for group dynamics. Last but not least, different roles of external stakeholders and expectation management were addressed. The workshop aimed to enable teachers to become active as teamcher and conduct a challenge within ECIU with the principles of CBL.

As in the workshops about basic principles in CBL before, Zoom was used as a video conference tool and the Padlet to share presentations and results. All materials are still stored and accessible via <https://tuhh.padlet.org/c00zli01/6couy2jqvl9fkirz>. In addition, for collaborative work and to support discussion an online whiteboard from Miro was used. Padlet and Miro can be entered anonymously without registration from workshop participants. Nonetheless, the use of third-party apps in

compliance with data protection regulations was a hot topic of discussion throughout the workshop. Due to lacking transparency about server locations, the use of Padlet and Miro is not permitted for some universities and there was a great need for exchange on open access and privacy-compliant digital offerings, accessible for students from all ECIU partner.

In sum, 14 participants attended the workshop of which nine were from ECIU partners (TUHH, UAB, UL, UNITN). In order to promote the exchange of innovative teaching/learning formats beyond the borders of their own alliance, the workshop was also open to five teachers from the EU Flensburg (EMERGE) and Hafencity University Hamburg.

As mentioned in the report summarizing teamcher training between month 12-24, first teamchers (from UiS, UA and UAB) engaged in CBL courses in three challenge cycles started their personal Scholarship of Teaching projects in which they evaluate and reflect teaching and learning. To support them and inspire further teamchers to do so a **three-day blended workshop “Action Research on CBL to Promote Sustainable Learning Spaces in Higher Education in Europe”** were conducted by Dorothea Ellinger together with Kenan Dikilitas from UiS. The workshop took place on March 23<sup>rd</sup> 9.30 am – 4.30 pm online, May 16th 2022 01.30 pm – 5 pm and May 17th 2022 09.30 am – 12.30 pm on TUHH campus and online. It aimed to support teamchers in their transformation from being a reflexive practitioner who is capable of describing for others the teaching and learning situations he/she has experienced and the conditions of these situations to a reflective practitioner whose objective is to describe teaching and learning situations for the purpose of analysing, explaining and communicating them to others. This involves a greater conceptualisation of the practice which therefore becomes more shareable. The workshop based on the works of Schön (1983) and Donnay and Charlier (2006) mainly.

On the first day, on March 23<sup>rd</sup>, the participants learned more about the principles and phases of Action research. The morning session focused on what action research is and how to identify purpose, problem, and research questions. This was followed in the afternoon by the introduction of various data collection tools. Together we identified CBL activities that can function also as research activities in which students reflect on their engagement, collaboration, and assessment. At the end of the workshop all participants had their personal idea and road map of an action research project as well as peer feedback on it. Therefore, for the second and third workshop day on May 16<sup>th</sup> and 17<sup>th</sup> participants were expected to bring their sets of data from their implementation. The workshop days focused on exploratory analysis, critical interpretation and peer feedback of the current state of the projects. Those discussion were complemented by a lecture from Gesa Mayer, sociologist and member of WP3-team from TUHH, about qualitative and quantitative data processing.

We had 13 registrations of which finally seven teamcher participated in the first workshop day. On the second and third workshop days, four participants took part on site at the TUHH and two others online. The Action Research project of one participant resulted in a publication, from another one in a conference talk.

### 3.2 Conducted teamcher training at each partner of ECIU university

Next to workshops and trainings organized by WP3 together with some partners in ECIU university, each ECIU university partner offers own trainings, workshops or supervision for teachers and teamchers in their local Innovation of Education lab. Those offers are more specific to local requirements, local frameworks and local needs. Often, they are part of a local teaching innovation strategy and aim to inform teachers about CBL, attract them to ECIU university and train them to become a teamcher in the upcoming challenge round. In sum, the local offers can be categorized as:

- tea(m)cher consultation on CBL
- tea(m)cher workshop on CBL
- coaching CBL (methodology or implementation)
- local CBL teamcher group
- informational event on ECIU University

Table 5 summarizes all local offers in the reporting period Oct 2021 to September 2022.

**Table 5: Tea(m)cher training and information events by each ECIU partner**

Date and length	Title and kind of the event	Target group	Number of Participations
<b>Aalborg University</b>			
	No Teamcher training or information event in reporting period		
Nov 14 <sup>th</sup> + 15 <sup>th</sup> and Dec 16 <sup>th</sup> 2022	Workshop within the ECIU online PhD program: Basic Principles of Challenge Based Learning <a href="https://www.eciu.org/courses/basic-principles-of-challenge-based-learning">https://www.eciu.org/courses/basic-principles-of-challenge-based-learning</a>		
<b>Dublin City University</b>			
March 23 <sup>rd</sup> 2022	B – Challenge Based Learning Workshop facilitated by: Clare Gormley & Fiona O’Riordan, Access slides at <a href="https://bit.ly/CBLWorkshop">https://bit.ly/CBLWorkshop</a>	teachers as future teamchers	25
May 24 <sup>th</sup> 2022	DCU Assessment Hackathon 2022, hackathon details <a href="#">linked here</a> . Frank van den Berg from UT and CBL expert led the hackathon as a ‘ninja’	teachers as future teamchers	50
May 25 <sup>th</sup> 2022	B – CBL Assessment Workshop, <a href="#">Link to slides</a> , Frank van den Berg from UT and CBL expert hosted this session	teamchers	15
ongoing	D – local teamcher coaching and one to one meeting with ECIU co-ordinator (Fiona O’Riordan), Approx. 4 meetings per challenge/teamcher.	teamchers	2
<b>Kaunas University of Technology</b>			
ongoing	Challenge – based learning teachers training courses (16 hours) more information <a href="https://ktu.edu/edu_lab/#1629872569785-01347f7e-e150">https://ktu.edu/edu_lab/#1629872569785-01347f7e-e150</a> (in Lithuania)	teamchers	17
ongoing	Challenge – Based Learning Follow up programme (48 h) Based on this program, EDU_Lab experts, together with teachers will work together to integrate the chosen didactic method into the study module. Together with EDU_Lab experts teachers will review the structure of the module, prepare a course plan, prepare student assignments, discuss assessment and grading system.	teachers as future teamchers and teamchers	17

<b>Linköping University</b>			
Oct 4 <sup>th</sup> 2021	General CBL introduction offered by the pedagogical unit of LiU	teamchers	5
Nov 30 <sup>th</sup> 2021	Meeting of local CBL teacher group	teamchers	5
Feb 9 <sup>th</sup> 2022	Meeting of local CBL teacher group	teamchers	5
May 6 <sup>th</sup> 2022	Meeting of local CBL teacher group	teamchers	5
<b>Tampere University</b>			
March 25 <sup>th</sup> 2022	ECIU Workshop on Challenge Based Learning	teachers as future teamchers	15
May 27 <sup>th</sup> 2022	CBL training for Transport Research Center Verne. Researchers from Verne Center are starting their own CBL-course and this was the first training.	teamchers	5
<b>University of Barcelona</b>			
Oct 20 <sup>th</sup> 2021	informational event on ECIU university AQU (Quality Agency of Universities in Catalonia)	teachers and external institutions	14
Feb to June 2022	Pilot CBL with the Faculties of Science and Humanities. A pilot with 2 faculties were carried out. CBL experts helped them in coaching sessions to engage and to develop CBL in different degrees and subjects.	teamchers teachers as future teamchers	30
October- January	Local CBL round table meeting with Teamcher. 1 meeting per month.	teamchers	2/meeting
Feb 22 <sup>nd</sup> +23 <sup>rd</sup> 2022	CBL Workshop (methodology or implementation) open to teachers and personal of administration and services at the UAB	teachers as future teamchers academic staff	13
Feb-June	Local CBL round table meeting with Teamcher. 1 meeting per month.	teamchers	5/meeting
June 1 <sup>st</sup> +2 <sup>nd</sup> 2022	CBL Workshop (methodology or implementation) open to teachers and personal of administration and services at the UAB	teachers as future teamchers academic staff	15
<b>Technical University Hamburg</b>			
Oct 21 <sup>st</sup> 2021	Professors Lounge: ECIU and Challenge Based Learning	teacher as future teamcher	6
March 22 <sup>nd</sup> 2022	ECIU Workshop on Challenge Based Learning	teachers as future teamchers	5
June 17 <sup>th</sup> 2022	Challenges and Micro-Credentials Supply & Demand Workshop 2022	teamchers	7
<b>Twente University</b>			
Jan 25 <sup>th</sup> 2022	CBL fundamentals (1-hour session) more information: <a href="https://www.utwente.nl/en/ctd/courses/769305/challenge-based-learning-fundamentals/">https://www.utwente.nl/en/ctd/courses/769305/challenge-based-learning-fundamentals/</a>	teachers as future teamchers	7
Feb 9 <sup>th</sup> 2022	CBL learning experience (1 day session) more information <a href="https://www.utwente.nl/en/ctd/courses/785139/the-challenge-based-learning-learning-experience/">https://www.utwente.nl/en/ctd/courses/785139/the-challenge-based-learning-learning-experience/</a>	teacher and academic staff	8
Feb 23 <sup>rd</sup> 2022	CBL fundamentals (1-hour session)	teachers as future teamchers	6
March 21 <sup>st</sup> 2022	CBL fundamentals (1-hour session)	teachers as future teamchers	5
April 20 <sup>th</sup> 2022	CBL fundamentals (1-hour session)	teachers as future teamchers	4

## ECIU university

April 24 <sup>th</sup> 2022	CBL learning experience (1-day session)	teachers and academic staff	6
May 13 <sup>th</sup> 2022	CBL fundamentals (1-hour session)	teachers as future teamchers	2
June 9 <sup>th</sup> 2022	CBL learning experience (1-day session)	teachers and academic staff	8
June 14 <sup>th</sup> 2022	CBL fundamentals (1-hour session)	teachers as future teamchers	6
June 16 <sup>th</sup> 2022	CBL workshop (2-hour session)	teachers as future teamchers	4
June 29 <sup>th</sup> 2022	CBL learning experience (1-day session)	teachers and academic staff	15
Nov – June	Bi-weekly consultation hours for teamchers	teamchers	2-4/ meeting
<b>University of Aveiro</b>			
Nov 12 <sup>th</sup> 2021	Community of Practice of Inquiry Based Learning   Topic: How to research/publish about IBL pedagogical practices.	teamchers teachers as future teamchers	Not registered
Dec 17 <sup>th</sup> 2022	Community of Practice of Inquiry Based Learning   Topic: Conception, adaptation and utilization of teaching and learning spaces for the implementation of active learning strategies	teamchers teachers as future teamchers	Not registered
Jan 28 <sup>th</sup> 2022	Community of Practice of Inquiry Based Learning   Topic: The challenges of interdisciplinarity in IBL methodologies	teamchers teachers as future teamchers	Not registered
<b>University of Stavanger</b>			
Nov 13 <sup>th</sup> 2021	CBL introduction part 1 and sharing CBL experiences at UiS	academic staff	20
Dec 3 <sup>rd</sup> 2021	CBL introduction part 1and sharing CBL experiences at UiS	academic staff	30
Jan 11 <sup>th</sup> 2022	CBL introduction and sharing CBL experiences at UiS	academic staff	13
Feb 1 <sup>st</sup> 2022	CBL introduction and sharing CBL experiences at UiS	academic staff	37
Feb 15 <sup>th</sup> 2022	CBL introduction part 2 and sharing CBL experiences at UiS	academic staff	30
Feb 17 <sup>th</sup> 2022	CBL introduction and sharing CBL experiences at UiS at faculty of Social Sciences	academic staff	50
Feb 18 <sup>th</sup> 2022	CBL introduction part 2 and sharing CBL experiences at UiS	academic staff	20
March 10 <sup>th</sup> 2022	teacher workshop on CBL, more information on <a href="https://www.uis.no/en/university/challenge-based-learning-workshop">https://www.uis.no/en/university/challenge-based-learning-workshop</a>	student tutors teamcher	9
<b>University of Trento</b>			
Oct 15 <sup>th</sup> 2021	Challenge-based learning (CBL), un nuovo modo di fare didattica. Verso una comunità della pratica all'Università di Trento. More information: <a href="https://webmagazine.unitn.it/evento/ateneo/98685/challenge-based-learning-cbl-un-nuovo-modo-di-fare-didattica">https://webmagazine.unitn.it/evento/ateneo/98685/challenge-based-learning-cbl-un-nuovo-modo-di-fare-didattica</a>	teamcher teacher as future teamchers	Not registered
May 31 <sup>st</sup> 2022	First meeting Community of Practice on CBL	teamchers academic staff	Not registered
June 23 <sup>rd</sup> 2022	ECIU e micro credentials: l'esperienza di UniTrento <a href="https://webmagazine.unitn.it/en/evento/formid/110441/eciu-and-micro-credentials-the-experience-of-unitrento">https://webmagazine.unitn.it/en/evento/formid/110441/eciu-and-micro-credentials-the-experience-of-unitrento</a>	teamchers academic staff	Not registered

Jun 28 <sup>th</sup> 2022	Second meeting Community of Practice on CBL	teamchers academic staff	Not registered
July 27 <sup>th</sup> 2022	Third meeting Community of Practice on CBL	teamchers academic staff	Not registered

In summary, all ECIU partners established an Innovation of Education Lab (as reported in Deliverable Report 3.301) set up online resources to inform teachers and academic staff about Challenge-Based Learning (as reported in Deliverable Report 3.305) and conducted teamcher training depending on the local needs and frameworks. In most Innovation of Education Labs regular meetings between CBL experts and teamchers took place during the challenge cycle; in some on a weekly in other on a monthly basis.

## 4 Discussion of Teamcher Training and recommendations for the upcoming funding phase

After five pilot rounds the ECIU university has 94 trained teamchers who have carried out an average of 1.6 challenges and have gained experience with the CBL format. Compared to the last reporting period, there was an increase of 20 teamchers.

In retrospect, the development and implementation of the teamcher training was divided into three phases. During the first 12 months a concept was designed, tested and, above all, adapted to the unforeseen conditions of the Corona pandemic. The participants were mainly teachers with a lot of teaching experience, great teaching commitment and a lot of curiosity about new teaching formats. Above all, higher educational developers often took part in the first 12 months and the training followed the concept of train-the-trainer. Between months 12 and 24 the offers within each of the ECIU partner gained momentum. Fewer centrally organised offers were needed and participants were mainly teachers, some with little teaching experience. Teachers who have facilitated three or more challenges in the meantime have become designated CBL experts by month 36.

In conclusion from the CBL Round table meetings and the Teamcher Kick-Off events it is recommended for the next funding phase to have between two and four centrally organized online CBL round table meetings per year in the format of an 4 h/half-day workshop with invited speakers from ECIU alliance to present their findings or best practice on CBL, presentations of current changes from a member of the ECIU Board or project management team and enough time for discussions and exchange. Two of this 4 h/half-day workshop should be around start date of the challenge round, as in the beginning of September and late February or March with personalized invitation of new and future teamchers by the PoC of education work packages.

For the centrally offered workshops as well as for support offers organized in each Innovation of Education lab is has to concluded that a greater variety of offers had been established and are still needed in the next four years. Within the next funding phase, a significant increase in learning offerings and students taking part are expected. Therefore, there is an increasing need for trained teamchers. Although the workshops about basic principles in CBL were not the favorite course within the last 12 month it should be offered continuously to train new teamchers join the ECIU university offers. Within the next two years trainings and exchange formats with focus on continuous learners, teaching and learning in interdisciplinary spaces and with (very) heterogenous groups will be necessary.

Between month 24 and 36, we observed that teamchers conducted trainings on CBL themselves, accompanied teamchers in their first challenge as experienced experts in team-teaching or shared their findings in handouts, conference participation and publications (see Deliverable Report 3.3O6 scientific publications). The following list of shared trainings and activities might be incomplete:

- Alessandra Scroccaro CBL expert and teamchers from UNIT act as trainers on an UIS workshop in March 10<sup>th</sup> and teamchers from UiS visited final event from UNIT in May 2022. Teamchers of UiS und UNIT support each other in a Classroom Action Research Project.
- On June 29<sup>th</sup> in a workshop CBL learning experience conducted by UT 3 teamchers from DCU and one from UiS participated
- On May 24<sup>th</sup> 2022 Frank van den Berg CBL expert and teamcher from UT acted as day chair and CBL instructor in a hackathon conducted by DCU. Additionally, he gave 2-hour workshop for approx. 12 DCU teachers on assessment in CBL courses next day.
- UT and UAB developed handouts suitable as training materials for future teamchers.

Based on these examples, the authors recommend to strengthen the community of practice of the experienced teamchers. This could be done by incentives (e.g. funding of mobility) for team teaching, peer visits or Scholarship of Teaching projects of teamchers from two or more ECIU partner. A publication project, as a Handbook of CBL@ECIU, a jointly organized conference or participation on high level events of EU commission as speakers could keep the motion and motivation of experienced teamchers high.

Last but not least, the great variety and the excellent quality of the shared educational resources need a space that is accessible without barriers to share with teachers, researchers in higher education and experts of CBL in the world. The Collab platform is limited due to its registration, the Teams Channel is restricted to ECIU members only and the homepage has a different target group. Further development will give insights if the to be created Digital Exchange Platform DXP will tackle this need.

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