

UAB

Universitat Autònoma
de Barcelona

THE UAB'S SHARED AGENDA

THE ITACA PROJECT AND THE
INSTITUTIONAL IMPLEMENTATION OF
CHALLENGE-BASED LEARNING



Xavier Ariño

Myra Ronzoni

Margarita Freixas

Jorge Grau

Susagna Tubau

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1. The UAB and the challenge-based learning methodology

Universities have been and continue to be trend-setting institutions in the generation and promotion of knowledge, and key agents in the process of identifying and addressing society's main challenges. In recent years, the relationship between university and its immediate social environment has experienced profound changes, and it is progressing towards increased interaction and collaboration between the stakeholders involved, decisively contributing towards the economic, social and environmental development of society¹. This view of a university that is much more open to society, and with a real impact on its natural territories (what can be defined as its **ecosystem**), is promoted by the European Commission in the framework of the smart specialisation strategy policies, which seek integrated approaches for the socioeconomic development of the territories, creating regions of knowledge in which universities will have a leading role as a driving force². This approach seeks the active participation of the different social agents (quadruple helix: governments, academia, companies and civil society) in the development and application of social and economic innovation and activation strategies, always in accordance with the needs and potential of this territory.

The **Universitat Autònoma de Barcelona (UAB)** has strong links with its territory, its local and regional environment, and has established many ties with the social fabric, in order to actively contribute towards its development. Consequently, the UAB's institutional strategy is defined in this firm commitment to promote a context of collaboration to address society's main challenges, and to foster initiatives to share and co-create knowledge with citizens, the administration, companies and organisations from the third sector. Actually, in recent years, the UAB has been exploring and developing methodologies to link teaching and research to local and regional challenges and thereby contribute to the transition towards more sustainable and inclusive development. These challenge-based methodologies must be designed and implemented, so that they are part of the institution's normal work dynamic.

It is a long road, and not without obstacles, as it ultimately promotes a transformative change. The perspective of a university that analyses society and proposes useful suggestions, and thus valuing the knowledge it produces, is evolving towards another model in which universities work alongside society to define real challenges and to find solutions. The models are not exclusive, but complementary. But, while the traditional model is organisationally integrated into the university structure, the challenge-based model needs to be implemented.

¹ *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a European strategy for universities, 2022.* <https://education.ec.europa.eu/document/commission-communication-on-a-european-strategy-for-universities>

² Higher Education for Smart Specialisation <https://s3platform.jrc.ec.europa.eu/higher-education>

How can transformative measures be implemented on an organisational level? What are the main points of influence to promote transformative innovation? What process needs to be followed, and how can the results be measured?

This article will explain a specific experience of transformative innovation in the UAB: **the pilot experience of implementing the Challenge-Based Learning (CBL) methodology³ in two of the university's faculties.**

Through the description of the conceptual framework in which this process of change was developed, the general work agenda and the case study of a faculty, the main lines of this innovative experience are identified, many of which can be replicated to other initiatives of change in universities, and even in other public organisations.

2. The theory of change and the UAB's shared agenda – The ITACA project

ITACA⁴ (Transformative Innovation in Shared Agendas) is a research and action plan run by the Secretary for Economic Affairs and European Funds of the Autonomous Government of Catalonia, in collaboration with the research institute INGENIO (CSIC-UPV)⁵.

The project seeks to explore how the conceptual and training assessment framework developed by the Transformative Innovation Policy Consortium can be adapted and applied to the transformative innovation initiatives promoted in Catalonia. In this regard, it is developed in collaboration with the main stakeholders of the transformative initiatives, such as the UAB.

The conceptual framework of the transformative innovation process supporting ITACA is based on the **Theory of Change**, a methodological tool aimed at designing a public intervention that seeks to reduce a social problem. To achieve this result, the main elements of the intervention are identified and related to each other: the problem to be solved, the resources available, the activities planned, the products resulting from these and, finally, the anticipated changes or impacts. The identification of these elements helps to unveil the main hypotheses and assumptions about how public policy is expected to work⁶.

³ Known in Catalan as *Aprenentatge Basat en Reptes (ABR)*.

⁴ <https://fonseuropeus.gencat.cat/web/.content/ris3cat/documents/2030/ris3cat-2030-itaca.pdf>

⁵ INGENIO is a research centre of the Spanish National Research Council (CSIC) and the Technical University of Valencia (UPV). <https://www.ingenio.upv.es/va>.

⁶ Ivàlua, "Toolkit: Com puc elaborar una teoria del canvi?" Available at https://ivalua.cat/sites/default/files/2020-10/Toolkit_Eina%201.1.%20Teoria%20del%20Canvi_Def.pdf

In the context of the theory of change, **shared agendas** are a tool to address complex challenges in the territory, aimed at bringing about a transformation of the system.

Each agenda has its own particular characteristics, although they also have some points in common⁷:

- They are generated based on problems detected by agents in the territory. From the outset, they involve the groups affected by the problems being tackled, but they go beyond this, with the aim of reproducing or scaling the successful solutions and connecting them with more global strategies and agendas, such as the EU research and innovation missions.
- They are based on cross-sectoral collaboration and on the generation of knowledge shared between public administrations, academia, businesses and civil society, to understand and manage complex problems from a holistic and dynamic perspective, bearing in mind the long-term effects and the direct and indirect impacts. Therefore, the organisation of these agendas requires blurring the lines between disciplines of knowledge, and between science and society.
- They are adaptive strategies, which actively respond to unexpected effects, developments, successes and fails. Experimentation, monitoring and strategic learning are key elements.
- They seek to foresee the systemic effects the actions may cause in the long term, assess the results of the actions to be learned and incorporate learning into the interventions.
- They have their own governance model, which includes the stakeholders in the territory who are relevant in the field of the challenge and the related problems.

In order to achieve the change, a fundamental point in the shared agenda is the creation of a “niche” where new strategies, processes and organisational models can be experienced, which drive the transition to new socio-technical systems.

The **niches** are small networks of stakeholders that react to the changes in a constructive and open manner. These networks act like “incubators” to experience, on the one hand, and protect, on the other, new technologies and practices that may have a potentially high impact of change.

When the niches gain sufficient momentum for their configurations to become institutionalised, they make room for emerging technologies and practices that challenge and replace the regime and trigger transitions.

This multilevel perspective between niche and regime of the theory of change is shown in the following diagram:

⁷ The organisation of shared agendas for sustainability and social change (2020), available at <https://fonseuropeus.gencat.cat/web/.content/ris3cat/documents/monitoratge/08-monitoratge-ris3cat-agendes-compartides.pdf>

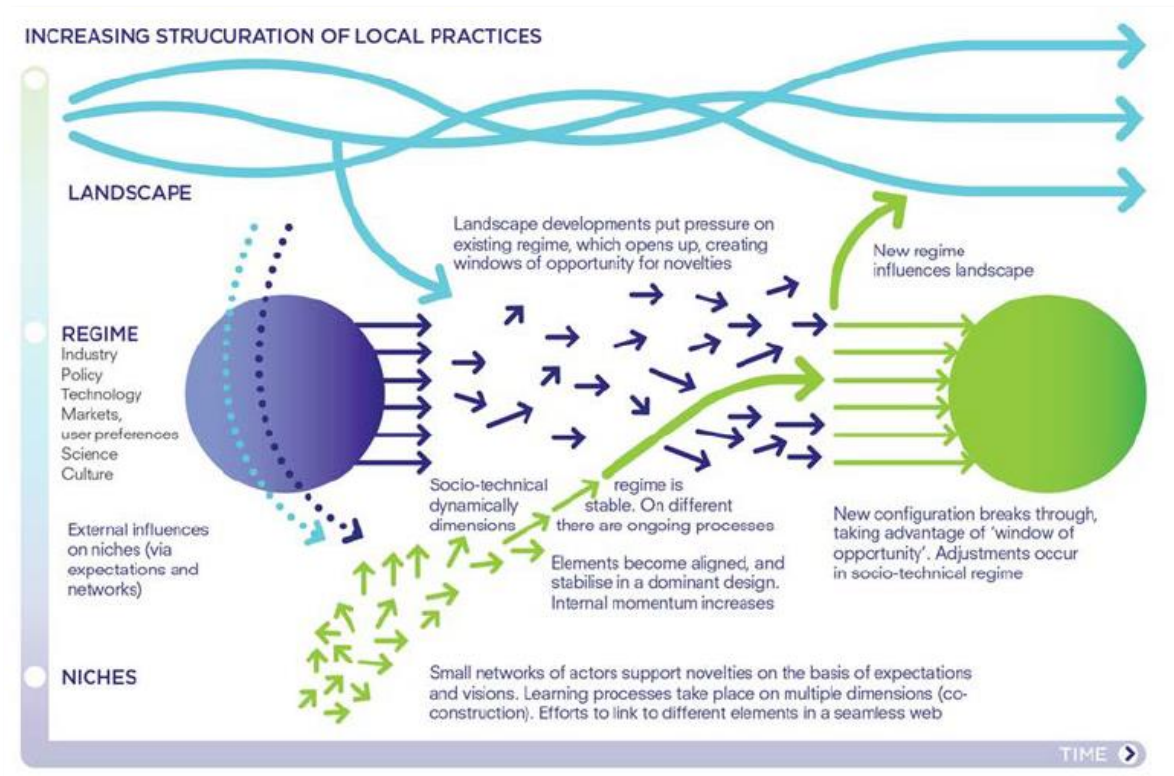


Fig. 1 Multi level perspective of the socio-technical transition framework. Source: Geels, 2002; Geels and Schot, 2007.

How are these theoretical concepts applied to the practical case of the UAB?

In the global context (landscape) of the UAB, different elements coexist, such as the European framework programme (Horizon Europe) and the European university alliances (ECIU University), with proposals for new methodologies aimed at the greater social impact of universities, including challenge-based learning (CBL) and the development of local knowledge ecosystems (Hub B30). These elements are putting pressure on universities' current operational regime. In this context, the UAB has started a transformative process in a protected niche, in which systematic changes are being experienced, which interact with the existing regime. The long-term result of this process will be the establishment of a new regime, that is, a new learning, research and innovation ecosystem.



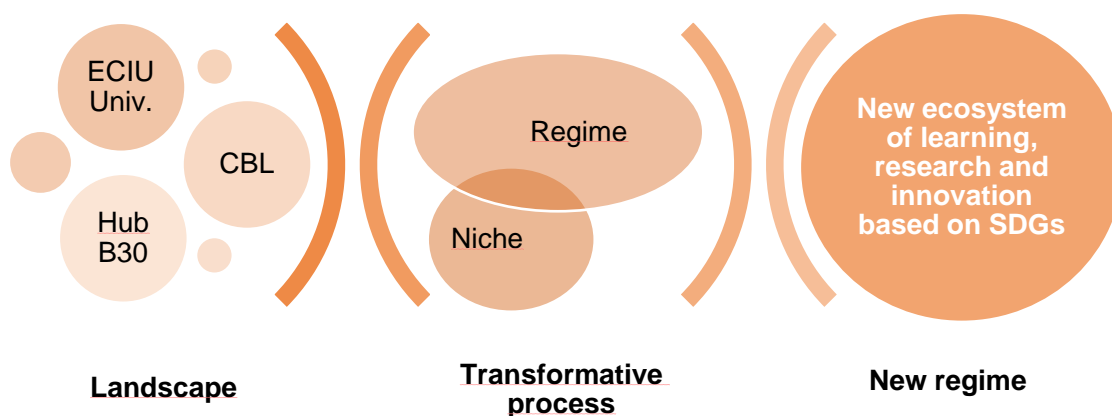


Fig. 2 Interactions between landscape, transformative process and new regime.

The next chapter describes the process via which the UAB's shared agenda was carried out within the framework of the ITACA project.

3. The creation and implementation of the UAB's shared agenda

As mentioned in the previous chapter, the key point of a shared agenda is to identify the intended impact, the main strategic goal that guides the actions around which the agenda is designed.

The UAB seeks to contribute towards the **transformation of the ecosystem itself**, towards a more responsible and sustainable model, identifying the challenge alongside the stakeholders in the territory, and providing collective responses (whether from a local, regional or global perspective).

To achieve this goal, **the teaching and research methodology must be transformed**, to have the necessary mechanisms and resources to be able to address these challenges. In this context, ECIU University⁸ provides the opportunity to innovate the teaching methodology at the UAB, by implementing Challenge-Based Learning (CBL) in Bachelor's and Master's degrees.

⁸ ECIU University is an initiative of the European Consortium of Innovative Universities (ECIU), of which the UAB is a member. The aim of this project is to establish a European University where students, teaching and research staff collaborate with a wide range of social and economic stakeholders, to provide solutions to real life challenges. <https://www.eciu.eu/about-eciu#about-eciu-university>

Following this line, the following **strategic goal** is at the base of the UAB's shared agenda:

The strategic goal of the UAB's shared agenda

To have a university that is strongly connected to the environment, to be able to identify and address challenges and create quality learning conditions for all (university students and people in continuous professional development, agents in the territory, etc.), via multiple experiences (formal and informal) and processes in which knowledge is shared and co-created. The connection with the environment creates an internal and external ecosystem (a set of relations and interactions between agents), which generates a significant impact on the improvement and development of society and people.



The key elements of this strategic goal are 4 great **transformative results**:

1. The challenges (that connect society, teaching and research) are present in subjects, degrees and teaching guides in the form of work proposals.
2. The agents involved (students, teaching and research staff, administrative and service staff, organisations...) acquire new skills, becoming a learning community.
3. Students, teaching and research staff and administrative and service staff collaborate closely in the degrees with challenges.
4. Networks are created with actors from the quadruple helix who work on challenge-based learning.

Achieving the strategic goal of the shared agenda depends on these results being attained.

Each transformative result is made up of a series of **intermediate results**, and the intermediate results are made up of **activities**: practical, measurable, specific actions. Performing a set of actions will lead to an intermediate result, and a set of intermediate results will lead to a transformative result, according to the following sequence⁹:

⁹ It is important to specify that the same activity can contribute to one or more intermediate results, which in turn can contribute to one or more transformative results.



Fig. 3 Sequence of the elements of the shared agenda

By way of example, let us consider the following elements related to the first transformative result of the UAB's shared agenda:

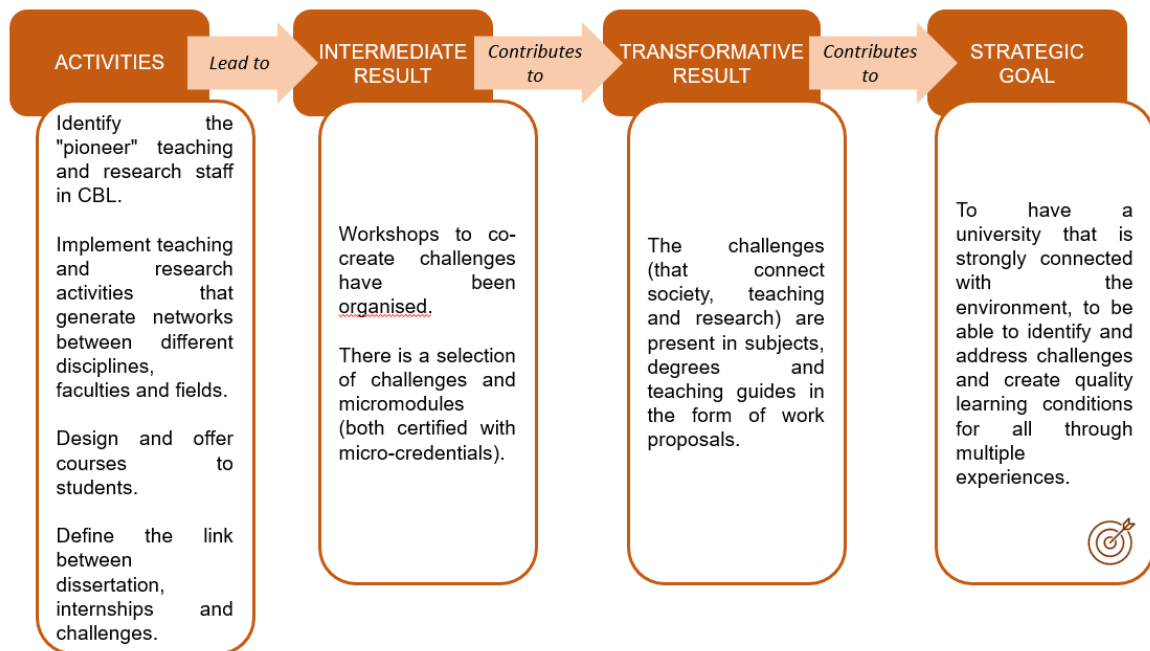


Fig. 4 Example of the interaction between activities, intermediate results, transformative results and strategic goal in the UAB's shared agenda.

These are the fundamental theoretical elements of any shared agenda.

How were the specific elements of the UAB's shared agenda identified?

The first step was to look for who has to identify these elements: the stakeholders involved.

The key stakeholders

The decision about which stakeholders should be included in defining and developing the shared agenda is of crucial importance for the final result: it entails identifying roles, both in the institution and outside, that have first-hand knowledge of the starting point from where the change is being considered, and they must be aware of the limitations and obstacles that may arise during the process. These stakeholders must also have a positive and enthusiastic attitude around identifying possible changes and improvements to the status quo.



The involved institutions and stakeholders from the UAB are:

- **Faculties of Biosciences and Philosophy and Arts:** two departments open to innovation in teaching. There were three types of profile involved in the project :
 - o **Academic:** Bachelor's and Master's degree teaching and research staff
 - o **Specialist:** administrative and service staff
 - o **Institutional:** dean and sub-dean

In this way, all the elements of the faculty are represented, and they contribute, each with their knowledge and experience, to laying out problems and suggesting solutions.
- **ECIU University Office at the UAB:** The ultimate mission of the ECIU University project is to establish a European University where students, researchers, businesses, citizens, public organisations and associations can create innovative solutions to solve real life challenges, and have a real social impact. In this regard, the academic and specialist staff at the UAB who work in ECIU University contribute both their theoretical knowledge of CBL, and their experience in the creation and implementation of challenge-based training.
- **CORE:** The communities oriented at strategic challenges (CORE in Catalan) are research networks involved in resolving the territory's challenges. The CORE contribute experience about the implementation of challenge-based training and a strong connection with the UAB's territory of reference.
- **Stakeholders in the territory:** If the goal is to transform the university's ecosystem of reference, external agents must be an integral part of this change (see

transformative result 4: *Networks are created with actors from the quadruple helix who work on challenge-based learning.* To do so, a representation of these institutions (specifically, an organisation from the third sector) became involved in the definition of the shared agenda: to contribute an external perspective that was not influenced by being a part of the university.

- **Institutional and political roles:** a change of this magnitude requires the supervision, support and participation of more political and strategic institutional roles, which help to maintain the focus on a global vision that drives the creation of the shared agenda at the university. In addition to the deans and sub-deans of the faculties, the Vice-Rector for International Relations and the Head of the Institutional Projects Office have participated in all the phases of the shared agenda, supervising its definition and final result, so that it is in line with the university's institutional strategy.

The range of stakeholders involved is vast, in two ways:

- In terms of the type of knowledge: there are roles that provide pedagogic knowledge about the CBL methodology, while others provide a more specialist and operational perspective.
- In terms of perspective regarding the relationship between the university and its environment: it moves from a more internal perspective, to an intermediate one, until reaching an external perspective.

Each level provides a different point of view and knowledge, and the result is the holistic contribution of all the parties involved.

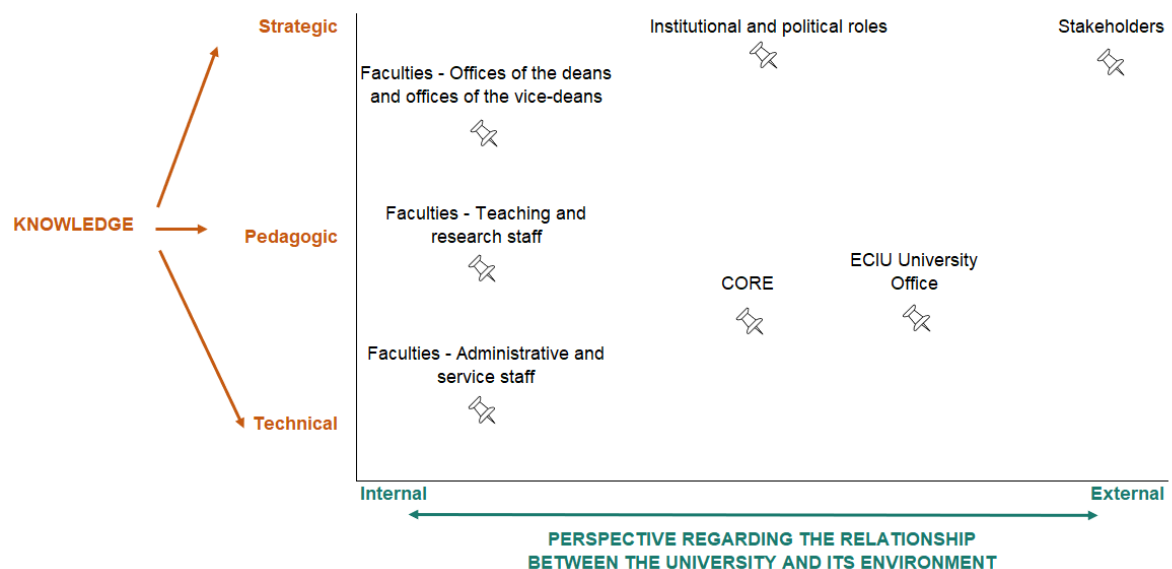


Fig. 5 The different types of stakeholders involved in the UAB's shared agenda.

Organisation of work meetings

In order to define the fundamental elements of the shared agenda, which were explained in the first section of this chapter, in-person work meetings were organised in which all stakeholders took part. These meetings were structured in three parts:

- Theoretical training provided by the INGENIO advisory team, in which they provided theoretical knowledge about the theory of change, which was briefly summarised in the previous chapter of this article.
- From theory to practice: how can the strategic vision of university and the theory of shared agendas be linked to the specific case of the UAB?
- Beginning of the project: the actors “get down to work” and start to detect the elements of the shared agenda.

This final point was worked on through open discussions and brainstorming sessions, during which each stakeholder expressed the important points to start to define the impact/strategic goal, the transformative results, the intermediate results and the activities.

From these first meetings onwards, work continued with two different groups, in order to try to ensure that the stakeholders involved continued to participate. A smaller group met every month to refine the elements detected by all the people involved. Less frequently, the plenary group also met to make its contribution and to maintain the holistic component of the contributions.

The meetings were held in different modalities (in-person, online or hybrid). The main working tools were an online table that was updated during each meeting with the participants' contributions, and a shared working document.

In total, the process lasted a full six months, from the end of December 2021 to June 2022.

Results at the end of the project

At the end of the work semester, the UAB's shared agenda was defined in detail, and compiled in two main documents:

- **Infographic:** this document includes the goal, results and activities of the shared agenda. It is a graphic and illustrative document of everything that was worked on during the process, which provides a general view of what we want to achieve and the means to get there.
- **Monitoring, Assessment and Learning Plan:** the shared agenda and its elements are alive, and require regular updating as they develop. This document compiles all the elements to be used when updating the theory of change: the indicators to be measured, the monitoring and review process, the people responsible for each phase of the process, etc. It also includes a description of the shared agenda in a more exhaustive way than that which appears in the infographic.

Evaluation

Once the first version of the shared agenda had been defined, an ex-post evaluation of the strong points and the challenges detected during the process was carried out.

As regards the strong points, three main aspects can be highlighted:

- **Support from INGENIO:** being able to avail of the supervision, advice and support of a specialised research group has added quality to the project's content: beyond its practical effectiveness, the project has always pursued accuracy in the content, in line with the theoretical foundations of the theory of change. At the same time, INGENIO's experience in working on real cases with public institutions has guaranteed the flexibility required to be able to look at the concrete and practical case of the university.
- **Attitude of the stakeholders involved:** as mentioned above, all the time and care needed was devoted to the initial phase of recruiting the stakeholders. This has been fundamental to the success of the project, throughout all its phases. It is crucially important to make sure that all the parties involved are inclined towards the proposed change, that they do not lose their critical side, but are always participatory. This can make a radical difference when the project is launched, and will have a decisive influence on the outcome.
- **Long-term view, gradual implementation:** the change proposed by the shared agenda is very broad, both because of the number of institutions involved (at the UAB there are 14 faculties and 2 schools, and all of them are subject to incorporating CBL into their training) and because of the depth of the change that is to be carried out (which revolutionises the current teaching model).
For this reason, a gradual implementation will best ensure a good result in the medium-long term, with the view that the proposed changes will emerge from the framework of the project to become an institutional programme.
- **Contribution from ECIU University:** CBL is the driving force behind this transformation. Thus, the participation of the UAB in the ECIU University is a very important contribution to the institutional implementation of this methodology. Despite the uniqueness of its case, the UAB benefits from the knowledge and experience of the ECIU University, both in terms of content and implementation strategy. The opportunity to benchmark with other European universities that are undergoing a similar transformation process at an institutional level is also very important.

As regards the challenges in the process of creating the agenda, two fundamental aspects have been detected:

- **Regular participation of the stakeholders:** the plenary group comprised 25 people, while the smaller group comprised 8 people. In general, it was difficult to always have all roles participating in the project, and this influenced the fact that certain actions had more weight than others in the final result. It is recommended that, especially for stakeholders who are less represented in the university, there should always be a back-up person who can participate should the main stakeholder be unable to attend a work session. This means that all parties participate regularly in the different development phases of the project.
- **Linking the theoretical concepts to the specific and practical case:** the theory of change is a vast and dense field of knowledge. Transferring the theoretical concepts to the specific case of the university has been a challenge in terms of finding a

common language between all the parties involved: the external research group, the external actors and the internal actors in the university. Often, potential discrepancies are not so much related to content, as to the way different parties express the same concept. In this regard, the previous training of the research group was essential so that the stakeholders could become familiar with the theoretical concepts of the theory of change. A flip session, during which the university could have explained in detail its starting point and the elements that had to be taken into account when implementing the change, would have been beneficial to increase the understanding of all the parties involved.

What stage are we at?

Once the support phase had concluded, the CBL implementation pilot was launched in the two faculties that participated in the project, Biosciences and Arts. This pilot was extended throughout the entire 2022/23 academic year.

At the end of the academic year, an evaluation and reflection session was carried out about this first implementation phase, with all the teams that worked on it. In general, there was the feeling that the change process that has commenced is of considerable size and impact, and that it has only just begun.

The teaching staff were able to propose different challenge-based projects, some of which have been carried out successfully and have been positively assessed by all parties involved. Other proposals have not been able to be developed, and will be proposed again in the following years.

As regards the specialist and administrative part, the fact that until now there has been a very limited implementation of CBL has meant that, from the point of view of academic management, it was not possible to fully assess all the implications of this new methodology for students' curricula and the university's IT systems. It will therefore be necessary to continue this evaluation during the next academic year, during which it is expected that CBL will be gradually increased, both in these two faculties and in three new faculties (Veterinary Science, Psychology and Educational Sciences), which will join the pilot implementation of CBL at the UAB. The aim is to continue with this gradual implementation, and that during each academic year an increasing number of faculties will join, until CBL becomes an integrated teaching methodology in all the faculties and schools of the UAB. In this regard, at the end of each year, the evaluation of the pilot will lead to an update of the working documents, the infographic and the Monitoring, Assessment and Learning Plan, which will serve as a guiding document for the next pilot. This is a circular dynamic between pilots and working documents, in which each component improves on the other.

Lastly, a significant reflection shared by all the parties involved in the pilot: although it is true that the work with the CBL methodology is designed to be implemented after the third year of the degree, due to the level of work autonomy required of the student, it is also true that students do not automatically assume this level of autonomy simply by being at a more advanced stage in their studies, but they must work on it and develop it gradually. Therefore, a new perspective in CBL opens up in the university: the need for students to receive training during their entire academic career, not necessarily focused on the CBL methodology, but on all the crosscutting skills and abilities required to apply

the methodology efficiently and completely, once this is proposed in the context of a subject or a dissertation.

The experience of one of the two faculties involved in defining and implementing the shared agenda, the Faculty of Philosophy and Arts, is explained in detail in the following chapter. This chapter covers the complete scope of the faculty's participation, from the beginning of the ITACA project, to the pilot CBL implementation programme.

4. Case study: CBL in the Faculty of Philosophy and Arts.

Since January 2022, the Faculty of Philosophy and Arts has been taking part in the pilot CBL implementation programme in the UAB, alongside the Faculty of Biosciences. One of the main aims of this initial phase was to promote and implement CBL in some subjects in the centre's degree programmes. Adopting the CBL methodology entails introducing a pedagogic approach that is aimed at active learning, by working on real problems that are a challenge for society. These problems require a contextualised, measured and critical solution, which is reached after a process of prospection, documentation, direct knowledge of the environment, analysis and evaluation of the different possible improvement options, in the context of coordinated work with teaching staff and different social agents present in this environment.

To roll out this strategy, the Faculty worked on four simultaneous lines during the second semester of the 2021/2022 academic year and the first four months of the 2022/2023 academic year:

1. Participation in a teaching work group, composed of the dean, sub-dean and teaching staff from the two faculties involved.
2. Participation in a specialist work group, focused on administrative matters in which administrative and service staff from the Faculties of Arts and Biosciences participated, as well as different members of the dean's office.
3. Procedure for the dissemination of the CBL methodology and selection of possible subjects likely to incorporate it in the Faculty of Philosophy and Arts.
4. Application for the Teaching Improvement Project called "*L'aprenentatge basat en reptes com a estratègia de millora de la formació i l'ocupabilitat a les titulacions de la Facultat de Filosofia i Lletres en el marc de l'ECIU University*" [Challenge-based learning as a strategy to improve training and employability in the degrees of the Faculty of Philosophy and Arts in the framework of the ECIU University].

The teaching group helped to pool the fundamental aspects of the challenge-based learning methodology; at the same time, the specialist committee was highlighting the requirements to be considered in each phase of the implementation process. With this double support, the implementation in the Faculty became established thanks to the determination of the teaching staff who assumed the challenge of opening the path during the 2022/2023 academic year.

To reach this point, the Faculty's office of the dean decided to lead the different phases of the sequence of selecting subjects. The first step was to promote a first information session with teaching staff interested in the CBL methodology (or who wanted to become familiar with its principles), which took place in January 2022 and during which the teachers-guides ("teamchers") presented their experiences of a challenge developed in Prat de Llobregat around dignifying the distribution of food to local families in vulnerable situations (an approach that was carried out with the participation of the city council, as well as various local organisations and associations)¹⁰. This session also served as an open call for the presentation of subjects that could potentially be adapted to the CBL methodology.

The next step was to select courses and teachers who could easily adapt the teaching methodology and assessment procedures to challenge-based learning. In many cases, the contacts with the organisations interested in solving the problems (stakeholders) already existed, and all that was needed was to adjust the design of the subject and the framework of the collaboration to make them revolve around the challenge.

During the month of March 2022, individual interviews were held with each of the selected teachers to jointly assess the feasibility of starting the transition to CBL immediately or whether it was preferable to wait until a later date for implementation. The result was the final selection of four subjects (two from Bachelor's degrees and two from Master's degrees) to begin the implementation of the pilot programme during the second semester of the 2022/2023 academic year:

Subject	Degree	Teacher responsible
104247 - Regional and Environmental Laboratory: Report	Bachelor's Degree in Geography, Environmental Management and Spatial Planning	Antoni Durà Guimerà
100259 – Teaching methodology	Bachelor's Degree in English Studies	Elisabet Pladevall Ballester
44257 – Master's degree dissertation	University Master's Degree in Digital Humanities and Heritage	César Carreras Monfort
44471 - Advanced Topics in Regional Studies and Planning	University Master's Degree in Territorial Studies and Planning	Àngel Cebollada Frontera

Fig. 6 Selection of subjects from the Faculty of Philosophy and Arts with CBL content in 2022/2023.

¹⁰ The results of the challenge (*Transformar el programa gratuït de distribució d'aliments garantint la seguretat alimentària per a grups vulnerables* [Transforming the free food distribution programme guaranteeing food security for vulnerable groups]) was presented publicly on 23rd November 2021 <https://www.uab.cat/web/actualitat/detall-noticia/l-eciu-university-presenta-els-resultats-del-repte-sobre-seguretat-alimentaria-al-prat-de-llobregat-1345821317235.html?detid=1345852264523>.

The CBL adaptations in each subject were as follows:

- **Regional and Environmental Laboratory: Report.** During the year, this subject has worked on community facilities in the city of Terrassa in such a way that, as stated in the Teaching Guide: “The challenge will be, by identifying specific problems expressed by local stakeholders (primary schools, markets, community centres, sports facilities, libraries, etc.), to select, define, and work collaboratively in order to identify possible solutions. Work will be carried out in small groups, each of which will work on a small set of facilities. The results will be presented to municipal authorities and other stakeholders in society.”¹¹

To this end, the subject content explains to students what the challenge-based learning methodology consists of and what are the elements associated with the facilities in the city of Terrassa. The course consists of four phases (discovery, research, identification of needs and proposals for improvement and presentation of results) based on a coordinated set of practical work that concludes with the presentation of a territorial and environmental diagnosis report.

- **Teaching Methodology.** In this case, the teacher chose to limit the application of the CBL methodology to one of the assessment items, which the pupils could choose. Thus: “If it is decided to carry out the class observation following the challenge-based learning methodology, this item and the planning of a class and presentation will be carried out in groups of 3 people and assessed together. These groups will have to develop a series of phases leading to the final presentation: discovery, research, suggestions for improvement. The groups will have to identify a problem in an English classroom and suggest improvements to solve it.”¹²

This choice involves, for the students who select this option, the joint assessment of two of the four assessment items (class observation and planning).

- **Master’s degree dissertation.** As this is a Master’s degree dissertation, there is no single proposal for the development of challenges or a specific area of evaluation and proposed solution, but rather both variables will depend on each case. Overall, the University Master’s Degree in Digital Humanities and Heritage has a high practical and technical content and real problems can be presented that need to be solved with a computer application, making prototypes of innovative digital projects, designing educational proposals in heritage contexts, etc.¹³
- **Advanced Topics in Regional Studies and Planning.** This master’s degree module is oriented towards: “[...] the performance of a practical exercise, consisting of the recognition and identification of the urban, social and environmental characteristics of a territory in order to implement projects and proposals that resolve the challenges identified”¹⁴, in such a way that, basing the 2022-2023 academic year on active mobility in metropolitan areas: “The challenge will be, by identifying specific problems expressed by local actors, to select, define and work collaboratively in order to be able to identify possible concrete solutions in proposals and projects”. Work will be carried out in small groups, each of which will explore one thematic aspect. The results will be presented to local authorities and other stakeholders in society.”¹⁵

¹¹ <https://ddd.uab.cat/pub/procur/2022-23/g104247a2022-23iCAT.pdf>

¹² <https://ddd.uab.cat/pub/procur/2022-23/g100259a2022-23iCAT.pdf>

¹³ <https://ddd.uab.cat/pub/procur/2022-23/g44257a2022-23iCAT.pdf>

¹⁴ <https://ddd.uab.cat/pub/procur/2022-23/g44471a2022-23iCAT.pdf>

¹⁵ See the previous note.

As a result of the pilot programme, the office of the dean has detected the need to reinforce the acquisition of competences and skills related to the challenge-based work methodology with the aim of boosting the future employability of the graduate students. Thus, once the priority objectives of the pilot experience have been met, a more comprehensive academic action is proposed to extend the CBL methodology (and its implementation within the ECIU University project) to potentially all of the Faculty's degree programmes. Thus, at the end of the 2021/2022 academic year, a teaching improvement project was requested¹⁶ which started in September 2022 and will run throughout the academic years 2022/2023 and 2023/2024, with the aim of detecting specific needs, developing the necessary skills to meet them and reinforcing skills in tackling and resolving challenges of social interest.

This strengthening of professional skills through the application of CBL is also beginning to bear fruit in transdisciplinary collaboration in the tackling and resolving of challenges. At present, the Faculty is consolidating an initiative that involves students and teaching staff from the Department of Social and Cultural Anthropology and the Department of Geography. It consists of defining and tackling a challenge in a neighbourhood of Santa Coloma de Gramenet, in collaboration with the City Council of this town. The ultimate objective is for the inhabitants of the neighbourhood of El Fondo to have a positive image of their neighbourhood.

Overall, we have opted for a gradual implementation of CBL, based on consolidated links between institutions and departments, which will be evaluated at the end of this first academic year of implementation and which forms part of a more general framework of organisation between the teaching, research and training dimensions of the teaching staff. At this last, fundamental level, in the first four months of the 2022/2023 academic year, emphasis has been placed on becoming familiar with new methodologies and acquiring new tools that enable the application of active learning strategies (such as the Lombard method, which involves the adaptation of Design Thinking through four phases aimed at solving a problem)¹⁷.

5. Conclusions

Transformative innovation in universities involves the implementation of disruptive and significant changes in the system and in existing practices to promote growth, improvement and adaptation to a constantly evolving world. This form of innovation seeks to overcome traditional models and explore new ideas, methods and technologies to achieve a positive impact on higher education. The UAB has initiated a transformative process through the ITACA project, creating a shared agenda for the internal stakeholders of the university community to advance towards a model in which it works with society to define challenges and find solutions, thus adding a new perspective to the traditional model of university. As mentioned at the beginning, the two models are not mutually exclusive, but complementary. However, while the traditional model is

¹⁶ <https://webs.uab.cat/cblletres>

¹⁷ <https://webs.uab.cat/cblletres/recursos>

organisationally integrated into the structure of the university, the challenge-based model needs to be implemented.

In this regard, the pilot experience in the faculties of Biosciences and Arts has been very satisfactory, and allows us to look forward to the next phases of the gradual development of the UAB's shared agenda.

The dynamics that have been implemented, based on the Theory of Change, allow us to continue exploring and experimenting, in protected environments (niches), the great changes that will later be systematically implemented throughout the institution.

The UAB's Shared Agenda is therefore confirmed as an excellent instrument to transform our institution gradually, safely and profoundly.

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