Experience Reports

WP 6.4

Table of Content

1. Summary

The experience (pilot) reports were set up by each project partner responsible for the monitoring of the learning projects and internships, considering the aspects of:

- Context, target groups, activities of the practical activities
- Planning and delivery of the learning activities
- Competence validation (including (LEVEL5 and ECTS validation) and
- experiences regarding feasibility, usability, acceptance and cost/benefit

The reports were clustered along the following topics:

1. Development process of the learning projects
2. Contents delivered
3. Methodology
4. Outcomes
5. Impact
6. Perspective
7. Professional Development

The reports were compiled, checked and analysed by the evaluator, who wrapped up the results and experiences her external evaluation.

2. UDE

2.1. Development process

At UDE we worked with 3 professionals who used the CIM approach in their courses in the framework of the Master of Adult Education.

The CIM methodology was applied in

- a course module on "International and European Context", Module 8 (https://www.uni-due.de/studienangebote/studiengang.php?id=41) with 12 CPs and also
- a project workshop related to international collaboration within a study module: "Empirical Research in AE" (12 CP) and
- a PhD study in which creativity and innovation techniques were applied and researched within a module "Embedded, profound studies".

The full programme was contextualised mainly in the first Module 8 over 2 semesters interwoven in 2 courses on "Organisations and Institutions in AE in the EU" and in "Validation of Informal and Non-Formal Learning in the EU.

The CIM approach was introduced in the learning projects of the students who went through the design thinking process on fictitious or real existing organisations and projects as a stage for their product and prototype developments. The prototoypes, again, were connected to the study courses and referred in the first course on "organisational development and innovation" and in the second case on "innovative validation design".

We could fully apply the technical tools provided by CIM and also the didactic approach of DBCL (Design Based Collaborative Learning) which we blended with the original study modules.

With this we could substantially enrich the quality of our teaching in M8 since the students (despite the Corona situation) enjoyed very much the collaboration.

15 students accomplished the course within 2 semesters.

2.2. Contents

The design thinking process was carried out starting from event 2 onwards with

- entry competence scan on Spotting Ideas and Opportunities (according to the EntreComp Framework)
- team finding and visioning
- scanning the background and context (market research 1)
- definition of challenge
- ideating on innovative ideas in the study context

- refining the ideas with selected tools
- client profile (persona canvas, market research 2)
- prototyping
- pitch
- and a closing essay covering:
    - description of the development processes
    - analysis of the cooperation
    - reflection and validation of the own competence development

These CIM contents were blended with the themes of the modules as described above.

2.3. Methodology

The CIM design Thinking approach is both Content and Methodology and it was the objective to familiarise students with creativity and innovation (also in theory introductions and reflections).

The courses were planned, using the COL&V instruments. We delivered the originally design theory parts as planned.

We fully applied the CIM learning platform consisting of a mahara e-portfolio (for the group documentation, the moodle LMS (to deliver theory and information units) and the LEVEL5 software connection (we provided the data via csv) plus zoom meeting spaces in connection with MIRO boards for synchronous communication and Design Based Learning.

2.4. Outcomes

Prototypes:

The students worked in teams of 2-5 persons and developed prototypes of different kinds. On the one hand they developed organisational innovations like new offers, new events and partly even new institutions like two European Academies and networks -for instance one network for offers specially for older employees, a specific “European” online academy or one training network for childcare and education.

They also developed specific events and study weeks (for instance the beer brewery CPD for incoming ERASMUS students) and other innovative ideas and activities

These prototypes were thoroughly developed, described in detail, presented in 10 min pitches and discussed. Each student had to write an essay about the project

Competences:

The competence development of the students was assessed in the way which was proposed by the CIM consortium – as a mix of formative and summative elements and different assessment formats (self-, peer assessment, rounded up by the trainers as “experts”) based on the LEVEL5 assessment

pack relating to SIO competences. This way also the quality criteria (reliability, objectivity and validity) could be kept.

We could establish certificates for 15 students.

2.5. Impact

A parallel study carried out with 130 international students revealed a serious gap in regard to innovative and participatory online learning formats in times of Corona.

In contrast, real collaborative formats could be invented in the combination of Design Thining and "normal" study courses. Of course, it affords a change of programme, but even more of teaching methodology. Trainers have to move some of their theory contents (inputs) to the students and one need trust in them during these new learning formats. Trust that they really work together, that they research and that the become committed to develop their projects. On the other hand this is also the essential way of "New" learning – it has to be demand driven, should establish a relation to the individual learner and offer opportunities to grow and develop. And this is what came out of the 2 main courses and also in the projects and courses that have been initiated after the CIM project phase.

Students' satisfaction was extremely high. The above-mentioned study revealed that very clearly. They feel more respected and treated rather as "colleagues" as "students". They develop their team competences and (which was innovative) also had to reflect and report on these developments.

They had fun during their projects and really became creative. However, as they learnt, they turned creative ideas into innovative prototypes and showed a profound development of their ideas into something which can be transferred in practice. The addition to the European funding schemes put the prototypes partly in very realistic scenarios, for instance by the KA1 funding for mobility learning or joint collaboration projects on innovative learning projects in AE.

All in all, the experience at UDE was 100% successful – no losses in the team process, highly reflective in their essays and also those students with lower motivation and problems to express themselves could be supported within the teams.

A most important competence was developed in the student projects (and this statement appeared nearly in every essay): The development of Ambiguity Tolerance. This is a central skill in the VUCA world in which we need to deal with complex, uncertain, volatile and ambiguous contexts and sytems.

One special highlight was the collaboration of IPL, UDE and VU students in a specific transnational DBCL course which was delivered in spring 2021 for interested volunteering students in which a phantastic interdisciplinary video was produced.

All the students had any problems with the digital tools and development spaces offered by the project.

2.6. Perspective

As described above, at UDE we have already started to further develop the CIM programme. On the one hand we transfer the COL&V approach to other courses in the MA AE courses (e.g. Module 4.1).

Furthermore, we laterally transferred the approach to:

- Design based collaborative Research -which includes:
  - International partner universities and joint research projects, e.g. on interdisciplinary projects
  - Internships which a R&D question related to the job

We will further mainstream the planning methodology (COL&V) but also the delivery (blended learning and all the involved tools). Especially the connectivity of the LEVEL5 tools (mahara, LEVEL5) and the University systems (moodle) males the integration very easy.

We have already started with an internal CPD programme for our staff (3) and the other 4 persons will be offered training offers as well. Especially the young PhD candidates the CIM approach is a very appropriate means to gather didactic and methodological competences.

2.7. Professional Development

Talking about competence developments:

We learnt a lot. And the best of it is: we became aware of it while filling the self-assessment and discussing it with our peers. The LEVEL5 certificate is a valuable acknowledgement and proof of what we have learnt backed up by the comments and feed-back of the organisers:

We improved our facilitation skills and competences, by:

- Planning our training according to competences and competence levels of our students
  - Looking at the learners' needs and what they are interested in
  - Giving them a first competence scan on Spotting Ideas and Opportunities and letting them reflect on their profiles
  - Planning the theory modules (theory parts of VINFL and Orga/Inst courses and the overarching European aspects of educational policies) according to levels of complexity and difficulty
  - Planning the practical modules (Design thinking steps) according to the procedure
- Delivery:
  - Delivering contents and assignments on 3 learning modalities (F2F, consecutive on LMS and group assignments) according to a well developed and consistent plan

    - By appropriate and substantiated use of digital tools (keynotes, discussions, synchronous, asynchronous, collaborative…)
    - By regarding motivational aspects (raising interest
- Validation
    - Starting with a formative (curiosity creating) competence profile that, after a first reflection round, motivated the students to go for more
    - Introducing reflection rounds according to the competence levels during the process
    - Designing the final essays accordingly looking at 2 competences (SIO) and (partly) teamwork
- On Top: we and our students had the opportunity to present our student projects in front of more than 100 experts from Europe. This was a super-motivating event both for students and us as facilitators!

Conclusion:

It was really a long, interesting, challenging and extremely successful experience!

3. DIE

3.1. Development process

The main challenge was to find a suitable setting where the CIM approach could be implemented. Due to the Covid pandemic we did not have interns at the time concerned who could have been involved. Even when we have interns there are not normally there for undergoing a training course but to help the DIE staff who hire them in their daily work, have some practical first hand experience in a professional work environment and practice learning by doing.

We found a solution to that challenge as we could identify another context where the CIM approach could be meaningfully introduced. This was the informal working group on art works on the DIE premises that has been described above. The factors that made this group interesting for CIM (and vice versa) were that the group was dealing with a task that could be defined as a creative/innovation challenge, and, secondly, that a group setting of colleagues joined by a shared interest was already given and had not to be created or "enforced" in an artificial way.

The setting had consequences for the implementation of the CIM approach. The focus was less on implementing the CIM approach as a learning project in the strict sense as one would do with students or maybe with interns. The CIM approach should rather help the group to release their creative potentials in a targeted way, with the help of a structured approach and different techniques/instruments, and to reflect on it. Learning was thus to some extent consciously integrated into the process, but the focus was on the group's own work on their own chosen topic.

3.2. Contents:

The main focus was on the Design Thinking Approach. Participants should become familiar with the approach, with its general principles and with various tools and techniques that could be employed. We used training material that was presented in the Palermo workshop as starting point but then went on to develop our own materials referring to additional resources and materials on design thinking

This does not apply to the DIE setting as we don't have "programmes". The Design Thinking Approach however is suitable for being employed in any setting where new ideas or products are to be developed. Since most of the art working group members are working in a department which is concerned with such tasks, we are convinced that they can easily transfer the approach or parts of it in their daily work on many occasions.

3.3. Methodology

The design thinking approach was at the core of our implementation. This was the element that was most closely related to the reality of working life at the DIE as describes above. The approach was well received by the colleagues, however they also noted that the individual elements of design

thinking were not really completely new to them, but that there was actually a big overlap with methods and principles that are used in the field of adult education anyway. However, it was found that the design thinking as an overall approach could provide a very useful overall frame which can support the work creative tasks rather effectively. We are therefore convinced that this approach will also be able to provide inspiration and practical support for the colleagues' future work in various occasions and settings.

3.4. Outcomes

Certainly, there was some competence development, as the design thinking approach meant new knowledge and skills for the colleagues. Also there may have been some impact on attitudes as the colleagues were made (more) aware of the importance to take into account the potential target groups' need in a targeted way (this awareness however was already well developed from the start, so it is difficult to identify a development that could be clearly described to the CIM input.

We were not able to reach this stage of the implementation. It was originally planned to continue until the production of prototypes, but work constraints of the colleagues and the newly arising pandemic situation in September prevented the continuation of the working group until that point within the project period. Once the situation will allow it is however intended to take up again the process in the art working group and continue – using the design thinking approach – towards this goal.

3.5. Impact

The design thinking approach was new and – partly – innovative to the group members, although as mentioned individual elements and principles of the design thinking approach are rather commonly used and accepted in the field of adult education. Taken together as a whole package the DT approach was however found to be an interesting and innovative concept with many potential links to the actual work practice of the DIE staff.

The feedback from the group members stressed both perspectives. Partly, the Design thinking was felt to be "Old wine in new bottles", but partly it was also seen as an inspiration and interesting approach that is worth engaging with further.

3.6. Perspective

As we don't have a regular "programme" that will be repeated again this question is difficult to answer. No doubt the Design Thinking Approach will remain as a valuable resource in the future, and we will explore in future occasions where and how we can implement it again. The challenge is that the situations will be always very different and we will have to find different solutions in each case then.

3.7. Professional Development

The design thinking approach was new to me as well at the time I attended the Palermo workshop. The information given in this workshop itself was actually limited, but after the workshop when

trying to develop a concept for the implementation at DIE, I had to engage more deeply with the approach, searching and using additional resources that I could find. This was an interesting learning experience and I see actually many occasions where this approach could be used in work settings at DIE also in the future.

4. Blinc

4.1. Development process

At blinc we worked with 4 professionals who used the CIM approach in their projects and internships.

5 interns carried out the CIM project in our premises. They were intensively prepared and mentored during their 3 months stay. Their internship was carried out within the Master of Adult Education, in the "module" 8 - "Adult Education in Europe".

In their internship they intended to acquire practical knowledge and skills related to different European Educational projects carried out within our cooperative and to develop scientific projects ("practice research") within these working contexts of blinc. By the end of the CIM project 2 of them even prepared their Master Theses on EU projects coordinated by blinc and developed research for the sake of the EU, more specifically in the field of learning mobility.

The internships consist of competence-oriented learning and development units which can be clustered to "learning modules". This approach led to a smooth development and a conscious step-by-step development – rather like a trainee programme which focused on Creativity and Innovation Management methodology and approaches.

4.2. Contents

The aim of the internship was to equip the students with practical skills and competences to document, design and develop educational projects relating to validation and professionalisation.

For this purpose, they went through different phases:

- to get familiar with running projects, to research both applications, programme documents and the current project state and their documentation
- To take over certain defined tasks within the projects
- To develop own activities and take over the coordination
- To self-reflect the own projects and to self-assess the own competence development
- In connection to the projects students were asked to develop their own ideas and prototypes that are useful within the running projects or could be subject of new applications.

4.3. Methodology

The internship were planned, using the COL&V instruments. This led to a conscious increase of complexity in the tasks. After each week we had a feed-back round. We also asked the interns to set up competence profiles related to the competences that they ought to develop.

Due to Corona a large part of the 5 internships were delivered online, which was an experiment, but it turned out to be much more successful than expected. Due to the necessity to go online, we fully applied the CIM learning platform consisting of a mahara e-portfolio (for the group documentation, the moodle LMS (to deliver theory and information units) and the LEVEL5 software connection (we provided the data via csv) plus zoom meeting spaces in connection with MIRO boards for synchronous communication and Design Based Learning.

4.4. Outcomes

Prototypes:

The interns worked in teams of 2-3 persons and developed prototypes of different kinds.

- Research projects to explore certain sectors (2 projects on the KA1 CPD offers within the European PROVIDE platform and one project on a survey on validation within the German ERASMUS KA1 community)
- Learning activities and events in the cultural, educational, sustainability sectors (which were connected to 3 different running projects

The prototypes were thoroughly developed, described in detail and presented within the teams and 2 projects even in the framework of the CIM conference in Dec. 2021.

Competences:

The competence development of the interns was assessed in the way which was proposed by the CIM consortium – as a mix of formative and summative elements and different assessment formats (self-, peer assessment, rounded up by the trainers as “experts”) based on the LEVEL5 assessment pack relating to SIO competences.

4.5. Impact

This “qualified” way of internship turned out to be extremely successful, not just for the interns but also for the colleagues. We invested some more time for an intensive mentoring, however, we could even get new collaborators because all of them remained in our entity, which is really exceptional.

This effect could only be achieved due to the well prepared, project like and competence oriented internship. Interns always had the feeling that they were in good hands and the tasks and activities were selected consciously, following the purpose that the interns should grow while performing.

Apart from the high satisfaction of both mentors and interns and the development of personal relations (even without direct encounters!!!) the CIM pilots developed a high impact also in the practical projects since the interns became a real support within the development and management of our projects. This related to the KA1 platform, project monitoring tasks and the development and introduction of a new controlling system, design thinking workshops in sustainability projects and project development workshops in the new ERASMUS application period in early 2021, for instance in the culture sector.

4.6. Perspective

We will mainstream the approach of DBCL and turn it into a KA1 course offer.

We are planning to continue our project work with our new staff members and we will definitely continue to design our internships accordingly. We will also apply the CIM methodology when collaborating with other educational institutions, for instance with those who provide interns from CPDs for unemployed academics in the field of project management from Göttingen or Florence.

We have already started with an internal CPD programme for other staff members (3). Eventually we have also transferred the approach into a completely different field of “circular carbon economy” which is our second field of activity.

4.7. Professional Development

Our colleagues were enthusiastic and developed their competences to spot ideas and opportunities, especially also their skills to work with Design Thinking methodology and creativity tools including the delivery via digital online modality.

Hence the participating colleagues developed their entrepreneurship education competences and their methodological competences relating to the facilitation of DBCL. All of them were so enthusiastic that they inspired other colleagues to join the CPD. A next course will be delivered in September 21.

5. Q21

5.1. Development process

The concept of a pilot project at Q21 within the CIM project was designed as a theory-practice approach, where a loose framework was given to the interns to create and foster an environment of creativity and innovation.

Through small inputs and phases of self-experience and experimentation, the interns had the opportunity to broaden their own experiences (through failures and successes), to exchange ideas with experts in specific fields and to develop their learning project at their own pace.

However, this also meant that at Q21 not only one specific colleague was available to support the trainees, but - depending on the focus - the respective expert could be called in.

The special challenge within the learning project for the interns was to make their development process comprehensible in order to reflect on their idea and adapt it if necessary.

On the Q21 side, this in turn meant that the trainees had to be supported again and again through short and targeted questions and to react flexibly to their needs.

This in turn led to the fact that the learning effect for the interns as well as for Q21 was equally noticeable.

The focus of the learning project that the interns came up with was to develop a digital learning environment that would enable users to understand the steps of the Design Thinking approach as modular systems. The basic concept - as a toolbox system - should make it possible to go through individualised learning steps and to set the focus individually. In order to offer a certain attractiveness, the interns had also considered expanding certain sections with personal comments - in the form of video and comments.

Unfortunately, the learning project could not be completed due to the impact of COVID 19, as the trainees had to go home "from one day to the next" due to travel arrangements.

5.2. Contents:

During the regular team meetings, different design thinking techniques such as storyboarding, brainwriting, role plays or interviews, 6Ws or status quo diagram and others were introduced. The techniques were addressed in different ways: through self-awareness or theory input by providing the respective material. The general intention was to provide more techniques than would actually be used, to give the interns a choice but also to make them aware of more techniques and to build on their own skills and knowledge in this field.

Furthermore, the self-running of creative approaches allowed them to evaluate them for usefulness and necessity.

In addition, the LEVEL5 approach was introduced and in this context a self-assessment questionnaire was used with a focus on "Spotting Ideas and Opportunities".

5.3. Methodology

As planned, we were able to transfer the COL&V approach. Both interns completed a self-assessment on the Spotting ideas and Opportunities competence and received a LEVEL5 certificate.

The Design Thinking approach was an important part of the whole pilot project. The self-learning material presented the concept, some techniques and references to go deeper into the topic, especially in relation to their background in project management. The pilot phase was divided into small parts, regular weekly meetings and additional workshops on specific software (like moodle and Mahara).

As mentioned in the introduction, the learning project could not be fully completed in terms of project outcomes.

5.4. Outcomes

Both interns have acquired knowledge and skills about creativity and innovation and have made their first experiences with Design Thinking in relation to their own learning project. Not only have they gone through most of the phases of Design Thinking theoretically, but they have also put them into practice in the development of various contents.

Furthermore, the accumulated knowledge and visualisation on Mahara and Moodle is an indicator of successful implementation on their behalf. This can also be seen in the plans and structure they had developed before developing content for these online platforms.

5.5. Impact

For both interns, the design thinking approach was a new method, especially for creating innovative results. Being able to go through the process themselves in theory and practice made the experience different from the normal learning experience.

Also, the concepts and the process of self-reflection and self-assessment were mainly new to them and were not easy to comprehend at the beginning, mainly due to the almost non-existent experience.

Furthermore, from Q21's perspective, it was interesting to see how new ideas related to digital learning were tried to be developed and implemented. However, the associated difficulty of having both technical know-how and preparing and presenting the content as creatively as possible could only be implemented to a limited extent during the 2-month internship.

Even though the final prototype of the modular learning concept in the field of design thinking was not completed, the process and the steps of development show a successful implementation for both interns.

5.6. Perspective

You should draw conclusions from your first launch: what would remain in a next round in your programme, what would you want to improve.

The CIM approach was a valuable and innovative process for Q21 and our interns. Besides the exchange through different colleagues within Q21 and the interns, which offered new perspectives on how to visualise certain aspects on an online platform, the design thinking approach ensured a closer work involvement of the team and the interns.

As this was the first experience with the CIM approach, some steps still need to be adjusted a bit and some tasks need to be formulated more clearly and be more effective especially in guiding the interns. Especially with regard to the background of Q21 and the specialisation on digital learning, it is important to note that the process will take more time, as it is not expected that interns already have a certain level of experience with the different learning platforms.

However, we had to make this experience before we can use the design thinking approach more in the future.

5.7. Professional Development

It is also interesting to know what you yourself has learnt (as trainers). What was new for you and what will you use in future, maybe also in other courses?

At the beginning of the CIM project, Design Thinking was only a rather unknown term and we had no experience in its application. During the internship, we were able to successfully integrate the approach into the organisation at a certain level, which led to an impact on the whole team. This in turn means that although we need to adapt some steps better, but we will implement it as a permanent part of problem solving.

6. Joker / Trendhuis

6.1. Development process

We worked together with VDAB, the Flemish service for Employment and Vocational training, to provide this learning course for unemployed jobseekers who wanted to become sustainability advisers. We developed a course with lectures, discussions and workshops and also a 6-weeks internship in a sustainable enterprise where participants could put their knowledge from the course into practice.

During the course we experienced there was some insecurity with participants to apply what they have learned, especially at the 'measuring results' part. To solve this, we added extra time to work around measuring with some practical exercises. For the internships, it was a challenge to find the right matches and to make the internship meaningful for both parties.

6.2. Contents:

The learning project combined theory with practice through an integrated approach where students were stimulated to engage their newly acquired competences on sustainability in organisations. In the project, we used practical oriented exercises based on CIM techniques, like Design Thinking and Appreciative Inquiry.

The creative and innovative techniques like Design Thinking and Appreciative Inquiry were very much appreciated by the participants so we can use them as well in other programmes we might organize in the future.

6.3. Methodology

The development of the participants was scored during their internship based on the competence to spot ideas and opportunities (cfr. Level 5 validation).

Yes, we used Design Thinking in the exercises and workshops. Participants were enthusiastic about this approach and came up with innovative ideas. Furthermore, they were able to consider advantages and disadvantages of their ideas and they could identify the best possible idea.

6.4. Outcomes

Absolutely, the enthusiasm of the students was great. We could see they were really involved and wanted to learn more and more each week. They grew towards being eager learners of sustainability over the weeks. During the internships we saw that students could really apply what they learned in the theoretical course and tried to transfer the design thinking methodology. Some students even stated that they wanted to delve even more into the world of CSR and that the course could have been longer.

In the internships the participants were asked to develop a new product and a business plan, like a circular couch, a sustainable start-up giving trees in the city a second life, creating ways to reuse paper and so on. Some of the students even got a job in the enterprise after finishing their internship!

6.5. Impact

Resulting from the various creative and innovative techniques we used, participants got a better understanding and knowledge of the SDGs and they were able to get started with the SDGs in a practical way. We provided them a clear understanding of development, integration, realization and measurement of sustainability.

The students were very satisfied. The approach and lesson parts were scored an average of 75% by the participants. The evaluation took place immediately after the training and assessed the satisfaction of the participants. The accompanying conversation showed that most participants stated the training content reached above their expectations and learning goals. The students were delighted with the systematic and varied approach:

- there was a clear understanding of the SDG-FIT that prioritises the step-by-step development, integration, realization and measurement of sustainability
- they also liked to work in groups and to use the methodology of design thinking.

6.6. Perspective

Based on this course and the feedback we received from participants, we see some improvements are possible. Regarding the theoretical course, a daily online evaluation (e.g., by mentimeter) might be better than an evaluation on paper after the whole series of course days. It might also be an improvement to focus more on cases where a company is undergoing (has undergone) a transition towards being a sustainable company instead of focusing only on companies that started from a sustainable idea. The participants also mentioned it would be useful if there is a return day midway the internship so we can add it to the programme.

6.7. Professional Development

It was very interesting for us to work with these innovative and creative tools. The positive reactions from participants towards the innovative and creative approach we used in the course was very much appreciated by the trainers. So Trendhuis and Joker will use design thinking, appreciative inquiry, etc… in further trainings.

7. Sant'Anna School

7.1. Development process

The pilot was developed in collaboration with another Italian CIM partner, CNR, in order to bring together the expertise on designing competence-oriented learning programmes on one side and delivering content through online technologies on the other side, and it worked out successfully.

The original pilot concept consisted in a self-learning phase with the support on ad hoc online material, a one-day face-to-face workshop on design thinking, and a practical phase in conjunction with the module on Project Cycle Management, delivered by another trainer. Those students that were already doing an internship did the practical phase as part of their internship experience. Unfortunately, the lock-down imposed by the Covid-19 pandemic did not allow us to do the design thinking workshop face-to-face, so it was turned in an online workshop and shortened to 4 hours.

Also, it was necessary to coordinate with the other actors involved: the Master Tutor, the Master Coordinator, the Master Director and the trainer in charge of the Project Cycle Management module. The trainer received all the material used for the pilot well in advance and was thoroughly informed about the whole concept. The actors connected to the Master management did not go much into deep in the concept and were more interested in the organisational aspects of the new activity.

7.2. Contents

Several design thinking techniques to foster creativity and innovation were presented and used, such as the Desirability, Feasibility, Viability Model and the Brainwriting technique. They were first explained in the self-learning material and then applied during the workshop. The idea was to provide students with useful tools that they could then use during the development of project ideas, as required by the group assignment of the Project Cycle Management module and by the internship tasks. Also, a self-assessment questionnaire on "Spotting ideas and opportunities" was available to students to reflect on their creativity and innovation management competence levels.

7.3. Methodology

We were able to transfer the COL&V approach as planned. Indeed, most of the students undertook a self-assessment on the Project Management competence and received a LEVEL5 certificate.

Design thinking was a key part of the whole pilot. The self-learning material presented the concept, a few techniques and references to go more in deep in the topic, especially in relation to project management techniques, then the workshop was designed for students to put in practice a few design thinking techniques and use an online collaboration tool (Miro boards). The workshop lasted 4 hours in a row, such choice was made not to plan too much time in front of a computer: students were able to reach the final tasks, but the widespread feeling was that we rushed too much through it.

7.4. Outcomes

All students gained knowledge and skills on creativity and innovation management competences. This was more evident in the students undertaking an internship since they had more opportunities to apply

different techniques, on a longer period of time. Both Master students and interns worked in groups to develop a project proposal.

7.5. Impact

The concept was definitely innovative, most students had not heard about design thinking or online collaboration tools before. Also, most of them had not undertaken a self-assessment of competence development before.

The pilot with the interns was very successful, the host enterprise involved was very engaged in the whole approach and regularly used the abovementioned techniques and tools in their daily work. Interns understood the value and the usefulness of the new skills and knowledge gained and started using online collaboration tools also for purposes external to the workplace.

Master students were only partly satisfied. Almost half of them did not fully understand the purpose of such “new unexpected lesson” since it was very different, as a topic and as teaching approach, from all the other lessons. In our opinion, this result is not related to the quality or the concept of the CIM pilot, but to the fact that it was not properly embedded in the Master programme. A timeslot was found for it and material passed on to students, but the lesson learnt is that the proper understanding of the concept and utility of such learning offer by the University/Master coordination team and its engagement in it, it is fundamental for its success.

7.6. Perspective

The CIM approach is definitely valuable, innovative and very promising. Besides a greater involvement of the management team as expressed above, we would make a few changes in the structure of the workshop. 4 hours are not enough for participants to get familiar with the concept and its tools. If it will not be possible to do a whole day face-to-face, then it will be planned online as more numerous shorter sessions, e.g. 3 sessions of 2,5 hours each, once per week or 3 days, once per week, 2 hours in the morning and 2 hours in the afternoon. Also, we would not let students start with the self-learning material, but we would plan an initial presentation session face-to-face or online.

7.7. Professional Development

When the project started, design thinking techniques and online collaboration tools such as Miro or Mural were new to us. Now, we have embedded them in our daily work, and we train other colleagues, interns, and students on how to use them. Also, we have adopted the Student learning pattern and progress report form for the internships.

8. CNR

8.1. Development process

The activities of the pilot have been conducted jointly with another Italian CIM partner, Scuola Sant'Anna. This choice was successful since it has made possible to leverage the experiences of the partners on designing competence-oriented learning programmes and the use of online learning methodologies and platforms.

The pilot was organized in two phases, the first was mainly a learning phase in which participants acquired the main concepts about Design Thinking approaches and Project Management, the second was a practical phase in which participants put into practices what they learn in the first phase. In particular, the first phase consisted of self-learning activities and an online workshop on design thinking. All the materials have been collected and prepared by the tutors in advance. This first phase was organized in strict collaboration with Scuola Sant'Anna. In the second phase, participants had the opportunity to practice and experiment the use of Design Thinking approaches on their everyday working tasks. The background of the participants were different as well as their main working activities. This aspect was interesting since we had the possibility to test the approaches proposed from different perspectives.

Due to the Covid-19 outbreak all the activities of the two phases have been conducted online.

8.2. Contents

The learning materials provided to the participants on the first phase of the pilot were focused on the main Design Thinking approaches. The Desirability, Feasibility, Viability Model and the Brainwriting technique have been made available during the self-learning activities and have been presented during the workshop. Participants had the opportunity to acquire these tools that were then applied during the second phase in which Design Thinking approaches were applied to their working tasks. A self-assessment questionnaire on "Spotting ideas and opportunities" was available to participants to reflect on their creativity and innovation management competence levels.

8.3. Methodology

All the participants received a LEVEL5 certificate on the Project Management competence by using a self-assessment method, in which knowledge, skills and attitudes before and after the whole pilot were assessed. The pilot was based upon Design thinking approaches with particular respect to project management techniques. The first phase was constituted by the self-learning activities and the workshop has given the opportunity to learn the basic concepts behind the Design Thinking approaches, but the tutor also provided participants with specific useful references to improve and delve into the application of Design Thinking approaches in several domains. During the workshop participants used Miro (http://miro.com/), an online visual collaboration whiteboard, that facilitated the collaborative activities. Participants of both institutions (CNR-ITD and Scuola Sant'Anna) had the opportunity to work in group and practice the use of Design Thinking approaches supported by tutors. The advantages of using this approach for the workshop were twofold: from one side the participants had the opportunity to practice Design Thinking approaches collaborating between them, and from

the other side participants also experienced the use of collaborative online tool that were very important during the second phase of the pilot in which all the activities have been conducted online due to the limitations applied for COVID-19 outbreak.

8.4. Outcomes

All participants developed and improved their competences on creativity and innovation management, as well as they were able to acquire a LEVEL5 certificate on the Project Management competence.

8.5. Impact

The effects of this pilot and consequently its impact, are mainly focused on participants and the institution. All the participants were not familiar with the Design Thinking approaches, even though these approaches could be successfully applied in their field of expertise. Moreover, the use of online collaboration tools has given the possibility to learn and practice new tools that are fundamental during the period of COVID-19 outbreak in which all the working activities have been moved online. Finally, the pilot was also an opportunity to make participants familiar with Competence Oriented Learning and Validation methodologies. All participants appreciated the content, the methodology adopted, and the outcomes achieved during the pilot.

From the institutional point of view, the competences acquired by the participants are reflected in new approaches that can be put in place when new project ideas have to be developed and implemented. The expected impact in the long term is the possibility to transfer these competences on these new approaches to a wider team.

8.6. Perspective

The implementation of this pilot has given us the opportunity to experiment in practice the approach developed in the CIM project. The results that have been achieved are successful, thus proving the value of such an approach to develop creativity and innovation management competences. Regarding the possibility to adopt same approach in the near future, some considerations about the organization of the two phases have been raised in collaboration with Scuola Sant'Anna. The main issues were in the time allocated for each activity. New editions of this learning programme should take into account the possibility to have an initial synchronous presentation regarding the activities (in this pilot the presentation has been delegated to a short presentation available during the self-learning phase), and to have more workshop sessions (to be conducted in several days if possible) in which participants could have more opportunity to work collaboratively and practice on the Design Thinking approaches.

Finally, even though the online organization of the pilot has not affected its success, we think that some face to face activities could be undertake to improve collaboration dynamics between participants.

8.7. Professional Development

Running this pilot, constituted a great opportunity for the team involved in the CIM project to get familiar with Design Thinking approaches and online visual collaboration tools such as Miro. The CIM project gave us also the possibility to improve our skills in applying in a real context the concepts at

the basis of Competence Oriented Learning and Validation. Moreover, the approach adopted in the CIM project to document the learning programme through the Student learning pattern and progress report form for the internships will be borrowed to be used in other context since they turned out to be effective to design, first, and describe, during and after the implementation of the pilot, the learning experiences carried out by the participants.

9. CESIE

9.1. Development process

The development phase was based on the real necessity of the staff, based on their needs gained within interviews, we structured the working plan, which helped to develop innovative solutions for the appeared challenged. However, one participant of the activity left the group due to return to home country, this called for a reshaping of the activities and reflection of learning outcomes within a smaller group than it was planned in the initial phase.

9.2. Contents:

The contents related to Creativity and Innovation was based on emergency to find solutions for remote work during the pandemic and not only.

9.3. Methodology

The main methodology applied in the training process was the Design Thinking methodology, as it has been structured by the University of Potsdam. The interns were able to affront in group the different stages of the process which was a catalyst for their understanding of the methodology and their development of competences related to creativity, teamwork and process management. All in all the training method was a success. Meantime, the concept of the COL&V will be disseminated within other projects and institutions aiming to spur innovation potential at EU level.

9.4. Outcomes

Definitely. Other than the development of competences that are strictly related to the application of the Design Thinking method, the interns developed themselves in various other areas, such as solution orientation, critical thinking and problem solving as well as creativity and thinking out of the box competences.

The interns developed four different prototypes (solutions in our case, see images below) for the chosen challenge (how to make your work smarter?) that were later presented to a number of potential users as well as the responsible body of the organization (HR) for the organizational development processes. All three prototypes were analysed as valuable for the different areas of application and are set to be taken into consideration for the organization, as it was communicated.

Idea 1

Idea Dashboard

Name: PM alla pari

Tagline: impariamo gli uni dagli altri

What is your idea all about: attivare un processo snello di peer learning all'interno dell'organizzazione

How does your idea work?

- Analisi dei bisogni dei PM
- Individuare i peer
- Affiancamento 1+1 o formazioni di gruppo
- Applicazione, feedbak, reflection

For Whom is your idea?

PM - colleghi che condividono stesse probematiche/situazione

Why is your idea meaningful for your user(s)?

- sensazione di isolamento
+ collaborazione
+ Migliore comunicazione
+ nuove idee
+ Autonomia

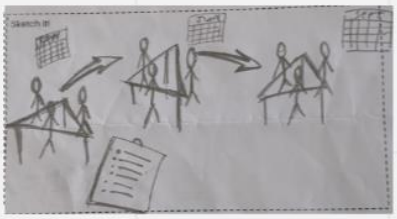
Idea 2

Idea Dashboard

Name: Work (In) Progress

Tagline: Work In Progress and the Progress of Work

What is your idea all about: strutturare il percorso del lavoratore insieme alle risorse umane e al capo unità, sulla base del proprio ruolo e alla durata del periodo



How does your idea work?

- Le **risorse umane** organizzeranno **un primo meeting** insieme al **lavoratore** ed al **capo unità**
- Descrizione del proprio **percorso universitario, professionale, interessi e aspirazioni all'interno del Cesie/CSC**
- Verranno stabiliti degli **obiettivi di crescita professionale da raggiungere ad intervalli** regolari
- **Ad ogni tappa verrà organizzato un meeting** per discutere:
  - **se è stato raggiunto** l'obiettivo e **se si è pronti per continuare con il successivo**, oppure
  - **quanto manca** e quali sono stati gli **impedimenti**

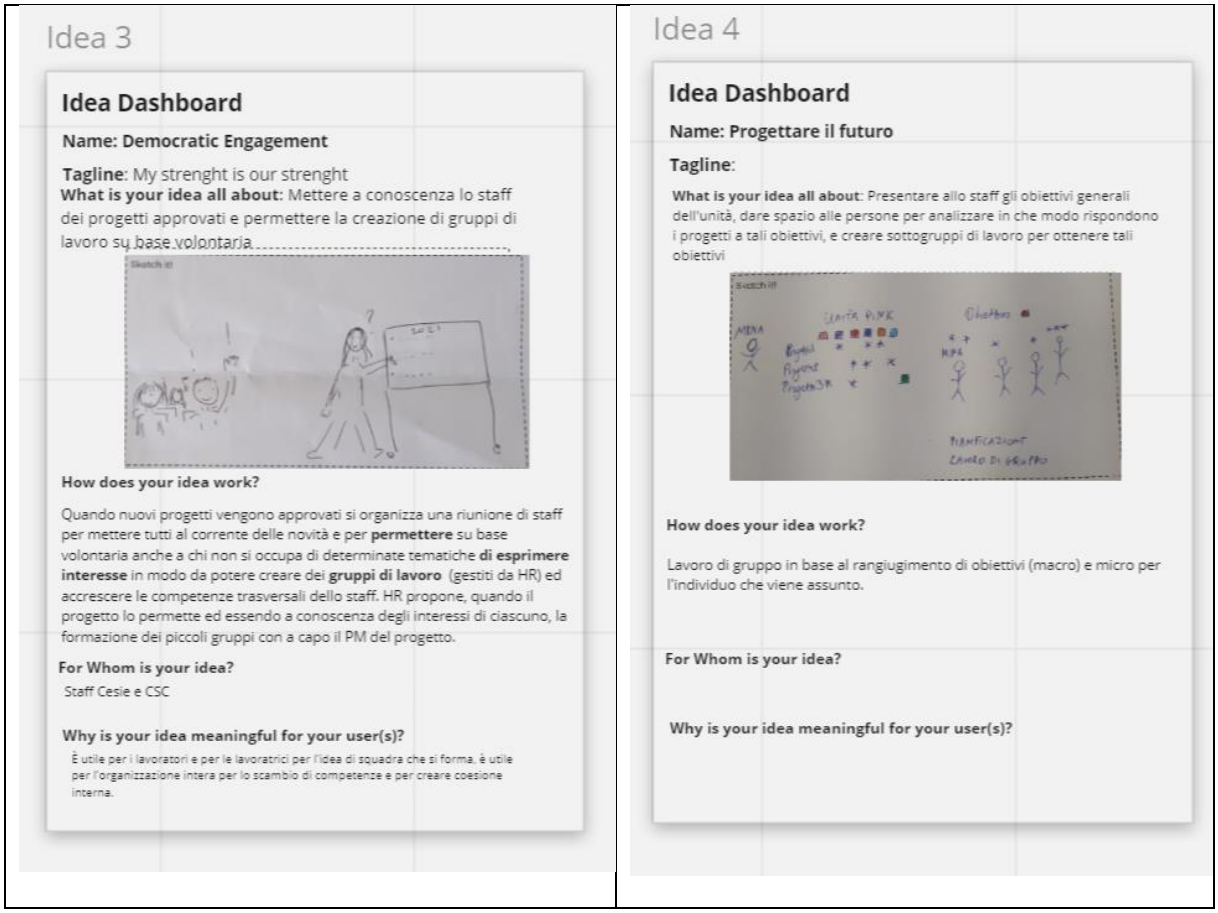
For Whom is your idea?

Staff Cesie e CSC

Why is your idea meaningful for your user(s)?

Permetterà ai lavoratori/alle lavoratrici di

- sentirsi ascoltati dall'organizzazione
- di vedere realizzate le proprie aspirazioni di crescita professionale



9.5. Impact

The innovative aspect of the learning experience was that interns were put in a decision-making position considering that the whole design thinking process was depending on the type of reflections, team work and research that the group did. The fact that they were the protagonists of the process gave them a lot of self-esteem and allowed them to explore all the creative possibilities.

The feedback was positive, the interns appreciated the long educational process and the collaborative/interactive possibilities that design thinking gave them during the first stages of the pandemic, considering that most activities with a minimum of interaction were suspended in that period of time. Moreover, all of them feel comfortable to work with the method and have reported that different tools and work will be useful in their future endeavours.

9.6. Perspective

Certainly, the frequency and organization of the collaborative work should remain in the next round of the programme considering that it gives consistency and possibilities of growth in a short period of time.

9.7. Professional Development

Putting everything into perspective, this experience allowed us to reflect and establish a working method that is not limited by the possibility of being in presence. Most of the learning process was conducted online and that was not achieved before. We would say that the adaptability that was required helped us to understand even more the importance of approaching each training situation for what it is, without stereotypes from the past experiences.

10.Vilnius University

14 students chose to take part in CIM project internships. Initially, they participated in two design thinking training sessions, where they were involved in active working. Students had to participate in all stages of design thinking process: emphasizing, problem identification, ideation, prototyping and testing activities. The sessions were organized by the University staff, all members of CIM project team who had received a design thinking training in Learning mobility course in Palermo, Italy.

During the training session, students firstly got acquainted to the theory behind design thinking methodology and received a basic understanding of its steps. Also, the students were informed of why, when and how to use design thinking strategy. Later on, they had an opportunity to work in groups and imitate design thinking path, receiving a chance to apply theory to practice straight after the receiving it. It is important that students got familiar to the whole process of design thinking so that they could transfer it to a new business context. The business environment is significantly different from academic workshops, so it is important that the students received a full understanding of the subject and had a coach with whom she/he can discuss the issue. This also helped them to internalise prototyping into their mindset.

After the training was provided, the students use the opportunity to tackle real life business problems using design thinking methodology at their traineeship enterprises. They were encouraged to explain design thinking method to their business colleagues and support stronger design thinking involvement into their workplace, by organizing design thinking activities of their choice. Also, the students had to identify different problems of businesses and solve them using design thinking methodology in their teams at work. They had to evaluate their performance on the way and report on their successes and things to improve to their traineeship leaders (lecturers), who helped to solve occurring problems and suggest things to improve. On the business side, they had mentors who helped students to perform better while performing internships in the enterprise setting.

Vilnius University team chose to perform this project as a way to increase the knowledge of the students and spread the design thinking methodology among private enterprises.

The Creativity and Innovation Management (CIM) project aimed at developing innovative teaching and learning approaches and including them in high education institutions (HE) and entrepreneurial practice.

We expected CIM project to equip the attending students with competence to bring about creativity and innovation in several different domains: (1) To foster the perception of (entrepreneurial) opportunities; (2) To teach methods for generating innovative ideas of solving encountered problems; (3) To stimulate skills to evaluate the creative ideas regarding the usefulness, desirability, feasibility, legality, ethical-moral aspects etc.; (4) To support the implementation of new ideas. To achieve these goals, an innovative, self-directed learning approach at the interface of higher education and business was employed.

To facilitate such outcomes, we concentrated to set up a holistic, needs-driven and competence oriented open learning environment and to promote and validate critical competencies at the interface of academic education and learning in practice business contexts. It included creating an open learning

environment and a validation system for the development of CIM-competences of students in mobility/traineeships and Continuing Professional Development (CPD) of employees in parallel.

In Faculty of Economics and Business Administration (EVAF) at Vilnius University (VU) we started the CIM project with the prepared CIM learning pattern that served as the primary teaching and guiding tool for the students who were involved. It was expected that the students would individualize these learning patterns to their own different contexts and practical situations wherein they would be developed. Therefore, each student was supposed to substantiate this pattern in his/her project description.

The CIM learning pattern included several aspects: projects description summary, target group, themes (content area), learning objectives, methods/activities and expected outputs/results/impact descriptions. Being included with short descriptions, all these parts constituted the whole project planning pattern. Two times during the internship and at the end, the students were expected to fill up the progress report form to track their knowledge and experience progress.

We selected 14 students, who started their internship at the beginning of February 2020 and were keen to implement it in different way according to CIM project. Because the internship is obligatory (has a value of 15 ECTS credits) and all process including the report and defense of the internship is thoroughly described by the EVAF rules, we received the consent from the administration of the faculty for implementation of internship according to CIM project requirements.

The CIM project in EVAF was kicked off with the design thinking seminars for the involved students. The first seminar took place at the EVAF at the beginning of March. Being concentrated on the design thinking pattern, it covered the topics as follows: creating a joint vision, empathizing, ideating, refining ideas, prototyping and testing. After the students were introduced to theoretical concepts, they were split in the small groups and provided with a possibility to take a workshop to help them to implement design thinking methodology by fulfilling practical tasks. The presentation of this seminar is attached hereto as an annex.

The information about these seminars was published on the website of EVAF VU (it is available at this internet link: https://www.evaf.vu.lt/apie-fakulteta/naujienos/2407-kurybiska-ir-inovatyvi-praktika-pagal-cim-projekta-naudojant-dizaino-mastysenos-metoda). In these seminars, a lecturer Ona Marija Vysniauskaite, assoc. prof. Laimute Urbsiene and dr. Arunas Burinskas served as the mentors for the students involved. After the seminar, the students were asked to create small teams in their internship organizations, to share the knowledge about the design thinking method with their colleges and collaborate while implementing internship project.

Two times, in April and May, students drafted short reports about their progress, presented it during the seminar and discussed problems with their colleagues and mentors. Having approvals of internship organizations involved, all these projects were being started at these organizations and our students led the teams of their teammates. Though all these projects were very different, at the core, they all followed the design thinking pattern and involved creativity and innovation concepts according to the CIM project framework.

At the middle of May of 2020, after the students had concluded their projects and finished their reports, they presented them via the MS Teams publicly. Also, they filled up online questionnaire and the form for knowledge and experience progress evaluation. It revealed that all students experienced an increase in the knowledge, attitudes and skills of the application of the design thinking methodology and significantly improved creativity.

The CIM project in EVAF followed the valorization strategy - the comprehensive validation system to assess and evidence learning outcomes in combination with the continuing professional development approach (the core product of the CIM-project).

It consisted of three elements:

1. A standardized validation procedure with description and pre-formatted instruments, based on the LEVEL5 approach,

2. A holistic learning system, the CIM learning system for students and persons in motilities and internships,

3. An open learning space provided on my-VITA e-Portfolio system.

All the students concluded their projects successfully and received the certificates that confirmed their attendance the CIM project together with their undergraduate studies diplomas. The feedback from the students about such internship was very positive. They stressed that it was not only interesting and challenging, but also very useful for future career. Several students got employment proposal form their internship institution.

11.AUTh

11.1. Development process

Occasionally some students find it difficult to communicate with their mentors but this is easily resolved. A supporting element is our administration in the department and our permanent liaison with the heads of the structure to which our students were allocated. TRACEYOURECHO is an exemplary collaborator in this respect. I provided the interns with specific information about security or confidentiality issues, acceptable with regard to dress and appearance, their role in the placements and at the same time I had the opportunity to coach, counsel and reinforce positive attitudes and performance. I encouraged them to keep a portfolio of work accomplished during their work placement. This provided them with a sense of accomplishment and a context to discuss their professional growth and identity. Weekly supervision meetings helped interns to remain aware of their work. Also every intern continuously informed an Online Calendar and an Online evaluation at the end of the internship.

11.2. Contents

I organised ad hoc learning material for our student trainees. The material was readily available during their traineeship and is updated based on their feedback. Contents varied based on the actual tasks the interns were involved. They included performing general administrative duties, assisting other administrative staff with overflow work including word processing, data entry and internet research tasks. More specific: managing the company's lobby area, greeting and directing visitors, cooperating with external services, interacting with courier companies, ensuring completion of paperwork, making meeting, lesson and event arrangements, helping with trade shows and events planning, networking, creating or updating presentations using Microsoft PowerPoint and other software, controlling the incoming and outgoing documentation process and maintaining files and project reports, arranging letters, memoranda, invoices, students/beneficiaries portfolios and other indexed documents according to an established system, typing, development, preparing scanning, verifying documents and educational-counseling tools and materials, creating electronic copies of documents, creating spreadsheets, preparing reports, editing copy to ensure proper grammar, spelling, syntax and style, inputting information from a variety of sources into a computer database, updating existing accounts, managing database records, operating standard office equipment, receiving, and routing calls to appropriate departments, answering calls and processing transcript requests or responding to student/beneficiaries inquiries, contacting businesses or individuals describing services/events, assisting admissions, obtaining students/beneficiaries/customers information, filing student/beneficiaries information and creating portfolios, scheduling appointments, drafting and distributing students/beneficiaries mailings, resolving complaints As part of the educational process, internship's work activities focused on responsibilities specifically related to creative thinking, innovative action, problem solving and planning resources and management.

11.3. Methodology

The concept of COL&V was transferred exactly as it was planned in the project with the application of Design Thinking that worked out as expected. The students became highly motivated pre-professionals. In the beginning of their internship they assisted professional staff with overflow work performing general administrative duties including word processing, data entry and internet research tasks in order to pursue more creative projects. Host institutes benefited as Learning activities included: managing the company's lobby area, greeting and directing visitors, cooperating with external services, interacting with courier companies, ensuring completion of paperwork, making meeting, lesson and event arrangements, helping with trade shows and events planning, networking, creating or updating presentations using Microsoft power point and other software, controlling the incoming and outgoing documentation process and maintaining files and project reports, arranging letters, memoranda, invoices, students/beneficiaries portfolios and other indexed documents according to an established system, typing, development, preparing scanning, verifying documents and educational-counselling tools and materials, creating electronic copies of documents, creating spreadsheets, preparing reports, editing copy to ensure proper grammar, spelling, syntax and style, inputting information from a variety of sources into a computer database, updating existing accounts, managing database records, operating standard office equipment, receiving, and routing calls to appropriate departments, answering calls and processing transcript requests or responding to student/beneficiaries inquiries, contacting businesses or individuals describing services/events, assisting admissions, obtaining students/beneficiaries/customers information, filing student/beneficiaries information and creating portfolios, scheduling appointments, drafting and distributing students/beneficiaries mailings, resolving complaints.

11.4. Outcomes

This is part of the students' competence development goal in the university. In terms of KNOWING the majority of our students start from level 2 (Identifying the field and the challenges) and they gradually move to level 3 (Understanding causes and consequences). Having a good grasp of causes and consequences, they move on to ACTING level 3 (analysing and schematising planning & structurising) and after this during their traineeship they dafely move on to level 4 (Solving, developing and/or (re-)designing). In some cases, we have students who move on to the VALUEING phase at level 4 (Relating to (other's) multiperspectives), and most rarely we also have a vry small number of students who achieve level 5 wither in the ACTING or the VALUEING phase.

11.5. Impact

Creativity was obvious in terms of how the students worked during their internship. Supervision provided firstly by mentors in the placement which had the primary responsibility for the interns, helped them develop individualized learning plans, determined the range of activities and specific outcomes for their internship and gave them ongoing verbal feedback and evaluation of their skills. Intern's mentors in every host institution developed a thorough orientation and training plan to be

implemented when the interns began work. Almost in all cases they involved interns in team working in order to quickly understand what the structure does and how it operates.

11.6. Perspective

I would like to improve my approach to innovative thinking and relate it more to the needs of the students. An effort was made to establish a reasonable balance between the interns' learning goals and the specific work a structure needed done. Students who participated in the Programme benefited in the following ways: First work experience in the career field they are considering/ extroversion: They familiarized themselves with the work environment, and they had the opportunity to fulfil tasks that are directly related to their field of study, they got acquainted with market trends and the skills required, they begun to acclimate to the work environment, familiarize themselves with various specializations in their profession and receive information necessary for them to choose wisely what is best for themselves both at a personal and professional level.

11.7. Professional Development

This was essentially a learning situation because I measured the students' learning outcomes, but beyond the mundane aspect of learning assessment, what is also important to stress here is that the notion of competence that has emerged because of an interest in bringing education and work more closely together. As such it was associated with a trend in modern societies where the focus is on learning and where education is seen as playing a different part in providing the workforce with the qualifications, skills and competences to cope with the challenges of business and organizational life. The role of educational institutions has changed from being seen as the end producers of knowledge to enablers of learning capability. Rather than viewing education as the site where knowledge is transmitted to younger generations, so that knowledge can later on be transferred and applied into work processes, the role now is to prepare students to develop the capacity of generating knowledge-that-works in particular situations that will be met in a constantly changing labour market, and to support the continuing development of workers' competences. Lifelong learning is another key related notion here, which also highlights a new role for education in supporting the continuing development of more differentiated groups of people, who vary not only according to their age but also in terms of their culture and to their different needs. As such, education has been given a different and important role in supporting adult education, continuing education, professional development and e-learning but which requires a close collaboration with business life. Related concepts are the learning organization or organizational learning, where workplaces and organizations are seen as sites of engagement that bring with it both learning opportunities and boundaries for learning for organizational participants.Rather than focusing on the individual's learning as a matter of cognitive capacity, the attention is being placed now in how people, together with other people, in regular forms of doing work and with material resources, can sort out the challenges of their work.

12.CATRO

As CATRO is a small company and could not take more than a single intern, we decided to partner with an external organisation. We found a suitable partner in the Career Centre of the Faculty of Economics and Business Administration (FEBA) of Sofia University. Together with the Vice-dean of the Faculty, we sought to identify the best environment for developing the creativity and innovation competences of students. We came to an agreement that graduate students are not the most suitable group, as the internships they are undergoing usually involve learning a lot about the basics of the functioning of the company they are working in – hardly the most conducive environment for innovating. Instead, we identified several other groups that could have more room for competence development. Therefore, it was decided that students tasked with organising a Career fair at the faculty are the most relevant group.

The group of students involved in the project consisted of 2nd year undergraduate students in the following a 60 ECTS course (two semesters) in Business projects in an international environment. As part of the course, those students were undergoing an internship at the Career Centre of FEBA, where they fulfilled various tasks. A year-long objective of all students is the organisation of a career fair involving dozens of companies and most of the students in the Faculty. The group of 16 students was divided into 4 teams with different focus of activities. Each team followed a yearly plan and regularly updated their supervisor on their progress, while working mostly independently.

Team 1 - Career fair – were in charge of the overall organisation of the career fair, logistics, placement of company stands, pricing etc. Team 2 – Communication – were responsible for the communication between the Career centre and the students, as well as mobilising the student community. Team 3 – Content – were preparing content for the Career fair - plans for the location, photos, statistics; invitations; countdowns (Facebook posts). Team 4 – Event masters – were taking care of the fan page of the Career centre in Instagram. Instagram was selected as most students consider Facebook an outdated channel.

The initial plan of CATRO was to hold an introduction session in the beginning of the second semester, get to know the teams and their progress so far, and hold several face-to-face design thinking sessions with them, after which the teams would return to working independently. With the establishment of a COVID-19 quarantine, both the University and the CATRO team had to adapt their activities to a distance form on work and study, making use of recorded videos, lecture upload on Moodle, and holding team sessions through video conferencing.

A presentation on Creativity and Innovation Management was sent to all students, setting the stage for the approach. This was followed up by a video lecture on design thinking. Students had to write down their expectations of the process and the goals they are trying to achieve, before the workshops started. Because of the necessity to work online, some complications arose. Although attendance was very high, most students did not use a camera even when asked to, affecting group dynamics accordingly. While they were present, it took some time and effort on the side of the moderators to get them to participate actively. Still, the work in teams proceeded as planned, and they managed to go through most stages of the design thinking process over the course of two two-hour workshops. Additional research was carried out by the students between the sessions.

As ideas developed by the teams revealed overlapping responsibilities, a separate meeting was organised with team leaders to clarify priorities and communication channels. After all teams developed their ideas and plans, they set to carrying them out. It was planned to have a joint sessions for presenting prototypes, but academic pressures did not allow it to be realised. Still, nearly all students carried out an evaluation of their competence development on spotting ideas and opportunities, project management and teamwork using the LEVEL5 system. Because an initial assessment could not be carried out at the beginning of the internship, it was decided to take a retrospective look to that beginning and allow the students to compare their progress, justified by concrete examples.

In addition to the competence development assessment, students did an overall self-reflection on the whole process and internship. When discussing the course of the internships and the CIM project, students demonstrated a significant change in their attitudes, which are affected by the following key aspects:

Top-down tasks or personal initiative. Many students are accustomed to being given clear and specific tasks, as was the case at school. The need to orient themselves and set goals on their own often leads to confusion. At the end of the year, most of them were more comfortable with setting goals on their own according to the needs of what they are trying to achieve - as in a real work situation.

Motivation - external or internal. Like task setting, many students initially viewed projects as tasks that someone expects them to accomplish. Towards the end of the year, they began to realize the importance of setting goals for themselves, which changes their motivation.

Organisation of the work process. Most of the students found deficits in the planning of the work process - insufficient attention and motivation in the initial planning, as well as inconsistent application of the planned actions. By the end of the year, there was a clear understanding of the need for detailed planning, based on a good understanding of the problems, as well as a willingness to take a flexible approach to dealing with the challenges that have arisen in the work process. In particular, the clear distribution of responsibilities between team members, as well as timely planning of the tasks stand out. Some students point out the benefits of clear documentation at every step of the work process.

Communication - in the team and between teams. Most students had no experience working in a team and had great difficulty communicating at first. Coordination between different teams was a particularly big problem - sometimes they took on the same tasks without realising it. Matching communication styles, listening to each other and opening up a space for different points of view are areas where students have made significant progress. Most of them learned to actively seek and give feedback and develop their conflict resolution skills.

The students have come to the conclusion that the training in Design thinking was extremely useful both for the development of their own competencies and for the development of ideas related to their tasks around the career forum. They recommended that in the following school years such training take place at the beginning of the school year so that future participants can plan their activities in a timely manner. It is also noteworthy that many of the ideas generated in the process

were not realised - partly due to the impossibility of a live career forum, but also because the creation of new ideas occurs at a relatively late stage of the work process.

Based on the overall positive feedback, a second run of the course and internships was repeated in the next year, this time involving 35 students. Teams shifted their focus to include the faculty's webpage, as well as social media accounts, in addition to organising a career fair. The training and sensing thinking workshops were moved to the first semester, so they adequate goals could be set in advance. All workshops were still carried out online, and met similar initial challenges with student participation. Nevertheless, the needs of the target users were clearly identified, and many ideas were generated in order to address them. All teams created a plan of future activities.

In order to test their assumptions, the teams decided to jointly design a survey directed at all students of the faculty, so the needs identified so far can be tested. The organisation of the career fair, as well as all other activities, will need to be online because of ongoing restrictions. A competence development assessment is planned towards the end of the year.

13.die Berater

13.1. Development process

Since our learning projects were embedded in business internships we did not really develop a learning course concept, but we developed a process of how to train our interns in using the design thinking approach and the CIM methodology, including the validation.

The challenging aspect was how to integrate this training process in our daily business with considering the fact that our interns are mainly hired for supporting the team and for doing specific tasks. They are not interns to be trained. It is more a setting of “learning by doing”

13.2. Contents:

We worked with the training material referring to the development of design thinking processes our trainer team got to know in Palermo.

We did not embed it in other programmes so far, but we are convinced that this methodology and content can be easily used for different settings and topics.

13.3. Methodology

No, we have to adapt it, since we had to use it in daily working life inside a business company and not in a HE setting. Also the structure of the material and the sources were it was provides, was sometimes not easy to follow, since it was confusing and very complex.

Yes – as describes above. We used the design thinking approach with the help of the material of the CIM training in Palermo. It was a very positive and inspiring experienced – not only for the interns, but for the whole team.

13.4. Outcomes

Both interns were able to develop in all competences selected. Both students reported that the tasks that were given to them were challenging and in the beginning of both learning projects they felt the need for more instructions and communication. With a longer duration of the project, they felt more and more confident in doing their tasks and they were motivated to try out news things and to bring in their own ideas into the projects. The positive feedback increased their commitment and willingness to work independently and on their own responsibility.

They did not really developed prototypes, since both students had to work on specific tasks. But inside these given tasks, they were able to create new solutions, they developed self- responsible and on their own.

13.5. Impact

Testing the CIM approach in the context of the work in the media department had a positive effect on both – the students working as interns but also on the whole media team. Using creative thinking methods and applying the design thinking approach had a motivational impact on the whole team.

For the two students it was encouraging to see their own competence developments over the duration of their projects. They could not only develop their creativity potential but also their competences in project management and problem solving.

13.6. Perspective

Calculate some extra time for training sessions, and reflection rounds for the interns/trainers in advance.

13.7. Professional Development

Using creative thinking methods and applying the design thinking approach was new for us as trainers, and it was interesting to see how it can change your way of thinking and see issues from a different perspective. We will use this approach in other settings and projects in the future.

14.DCU

14.1. Development process

We trained our placement students in the use of the Design Thinking principle and approaches that they in turn could use to infuse creative and innovative approaches in their teaching practice.

There were a number of successful parts of the process. These included the student's enthusiastic engagement with the Design Thinking process itself and the recognition of the possibilities that it opened up regarding the enhancement of their practice in the future. This was a new way to do things for the students and has potential for further development in the programme. The collaborative, team-based online environment and approach was also successful and the whole process ran much more smoothly and effectively than the programme team had initially anticipated.

14.2. Contents

We used the training material referring to the development of design thinking processes that our team learned about in the training workshops in Palermo.

The Design Thinking process will be used again on the placement year of the degree. There are other modules on the degree programme where DT can also be introduced and these will also be considered by the programme team in its planning for the next academic year.

14.3. Methodology

We had to adapt it to our situation but we are familiar with the language and concepts so it was possible to do this.

We designed and delivered a collaborative, online workshop which took place over 3 half-days and which covered a considerable amount of material. The students and project team found this to be an enjoyable and rewarding exercise which opened up possibilities for the students' and lecturers' further practice. The format of the workshops and the spirit they were conducted in contributed to a very rich learning experience. It was very enjoyable and challenging in the best sense of the word.

14.4. Outcomes

It is difficult to say how well the students developed their competences based on the experience of the workshop alone. However, it could be said that from our impressions of the workshop that the students were stretched and were challenged. They had begun the conversation about the scenarios and situations that the design thinking approach could be used in during their placement and were keen to try to implement these.

Because of the Covid situation it was not possible for our placement students to implement a DT approach in their settings. However, in the workshops we had begun the discussion about the possible ways that DT could be applied in a range of scenarios in their placement settings so it was likely that a prototype or product would have been developed.

14.5. Impact

The students on the placement year of programme are very committed and interested in their learning and are very sure of their educational path. As a result, they are very open to new approaches and are keen to learn about and implement these. The concept was one that they had no real prior knowledge of and after some initial resistance they embraced the principles of DT and spoke about how innovative, interesting and potentially useful they found the approach.

14.6. Perspective

To begin with, I think I would run a blend of face to face and online workshops for the DT training element. I would also like to have seen how the DT principles could have been implemented and I would probably build in an observational element to this so that we could see how it worked in practice as well as from the perspective of the students' self-reflections on the process.

14.7. Professional Development

I had very little prior knowledge of DT and it was a bit of a learning curve, particularly in the training stages in Palermo where there was a lot of material and concepts to take on board (though this aspect of the programme was really well put together and managed by the team). In short then, I learned a new way to work that has challenged some of my preconceptions about creativity and given me some very interesting tools and techniques that I can bring to my teaching and into the course material for my students. I will be using it in the future in a range of settings not just teaching related. I think it has many applications in team building, team development, project management and in leadership settings.

15.IPdL

15.1. Development process

The development and realisation of our learning course concept was very interesting. The short movie challenge within this curricular unit is not new, it is around for 3 years with minor changes. This time the main change was the design thinking approach, and it was like a inspiring kick for the students to think about their personal or team challenge ahead.

The most successful part of the challenge is the final presentation, it is where students compare their work with the others and reflect on it, on what could be better. The most challenging part for students is to get an idea that is simple to implement and tells the story with a good impact. The recording and editing part is also challenging, but more for the students because they only come to the teacher if they have major problems, generally they manage on their own.

15.2. Contents

The main contents related to Creativity and Innovation that were tackled were the design thinking approach, in particular the ideation phase, and the prototyping phase, with the video as prototype.

Whenever the number of students is not so high and you have some time to spare in your program it is possible to create a challenge that needs ideas, and to use creative development approaches, like design thinking to contribute to solve the problem.

15.3. Methodology

The transference of the Competence Oriented Learning concept to the pilot project was of achieved, maybe not totally as it was planned, but at a good percentage.

Design thinking approach was explained and applied as an exercise activity with all the group as a team, to illustrate the method. It was new to almost all the students and they reacted in a very positive way. They used them similar approaches to develop ideas for their own problem. So it can be concluded that it worked out fine.

15.4. Outcomes

The challenge to decode a scientific paper always develops communication competences outside the academic domain. Students generally speak about it with family and friends to see how they react to the stories, and in the end, they like to show the short film. So generally, some increasing communication competences are seen. This time, a new tool was presented to contribute to the idea generation phase and students felt it as a fun and productive approach to generate ideas. It is not clear if they will transfer this approach to other kind of problems, but it is possible, and it they are exposed to it again they will be much more motivated to apply this approach.

Main outcomes were the short videos developed by the students, with a diversified sort of tools, scenarios, and ideas.

15.5. Impact

The usual challenge (to make the short film) is very innovative and motivates them to make something different. The use of the design thinking methodology was also different, maybe more organized, but students are used to brainstorm with strange ideas and jokes, and they could use a similar approach to develop ideas for the film. Other students did that in the past with very good results. Maybe for the less creative students a greater impact can be expected.

Student's feedback was very good, they were satisfied to learn a new methodology, and said it was fun and productive.

15.6. Perspective

The conclusions from this round were very good, after the pilot I got the possibility to participate e several more design thinking rounds and decided that the approach will remain if it is feasible with time limits and student numbers per curricular unit.

Next round already started, and there was a new improvement in the challenge. The ideation workshop had the participation of foreign students used to design thinking but with outside the scientific domain of the papers. Several students from some European universities were invited to team up with our students and generate ideas together. It was a very interesting workshop and it expected to give very good short films.

15.7. Professional Development

The online classes process is being a challenge, not only from the learning point of view but also from the interaction part. The use of the zoom platform and the MIRO board within the meetings, workshops and conference promoted by the CIM project really helped in our skills development and had an impact in the classes. The use of the MIRO platform templates in the classes, not only form design thinking but also to discuss with students provides a different kind of interaction that helps in this confinement period. These tools are being used in different classes and courses, allowing also international teamwork, a very good experience for teacher and students.