

WP5 (INTENSIVE LEARNING workpackage) Final Evaluation

Prepared June - August 2016

by: **Lesley Drumm, Peter Purg, Dalia Rimkūnienė and Terhi Heino,**
under collaboration of Vesa Hautala and Rosemary Borup.

Contents:

The methodology used to evaluate the Intensive Learning workpackage	1
Results from evaluation sessions at the end of each COHORT's Intensive Learning process	2
Evaluation of Pre and Post Questionnaires	3
Positive effects for students from a European trends and policies perspective.....	6
ADDENDUM: Overall grades statistics of both Cohorts	7

Executive Summary:

The courses took a lot of organisational and coordinating efforts on behalf of all four universities, as well as the participating professional mentors. However, multiple evaluation sources and evidence show that all participants (students, teachers and business mentors) found it worth while to participate in such a trans-disciplinary and trans-cultural course. The external assessment of student-delivered innovative business ideas, projects and their improved entrepreneurial attitudes and capacities prove that additional support to such course and cross-collaborations should be more stably and generously supported by both the university management, and the policy makers.

The methodology used to evaluate the Intensive Learning workpackage

was combined from:

- **Questionnaires to mentors** for COHORT 1 (consisting of Intensive Learning event = IL1 in Manchester and IL2 in Nova Gorica, in 2015) and COHORT 2 (consisting of IL1 in Turku and IL2 in Vilnius, in 2016)¹

¹"Cohort" (C) refers to Intensive Learning process which is used to describe the 2 mobilities ("Intensive Learning" = IL events undertaken by each cohort.

- **Questionnaires to students about the logistics and organization matters** of each IL in COHORT 1 (C1) and COHORT 2 (C2)
- Each COHORT's Final day evaluations with students
- **Pre and post questionnaires** to students for C1 and C2 about their learning, with special respect to **the entrepreneurial attitudes as transformed** during the course of the entire COHORT's learning experience (consisting of online preparation + IL1 + online mid-phase + IL2 + post-phase)
- **Mentor reflections** after experiencing teaching in both COHORTS
- **Student reflections** as part of the assessment process

This provided both qualitative and quantitative data.

The questionnaires to students and mentors provided information to improve the subsequent mobilities. The evaluation round with students at the end of C1 also provided feedback which was considered in planning C2. The several **changes made between the course implementation C1 and C2 have been recorded** in the development documents of the Course Programme as provided in both courses (discussed collectively by project partners in a dedicated googledoc online document.).

Results from evaluation sessions at the end of each COHORT's Intensive Learning process

Qualitative results from the COHORT 1 were mainly reflected in COHORT 2. The main differences between the two cohorts were that listening skills and presentations were not specifically mentioned after the second mobility but they were, however, mentioned in student reflections of C2.

When asked what **was different about IDEATE (if compared to the usual academic learning experience)**, some of the words students used were:

- o Creativeness, learning methods, accepting frustration, unstructured, communication, interactive, exploration, confidence, inspirational, inversion, international, intensive, exciting, multi-cultural, experimental, teamwork, intensive, enjoyable, useful, exciting, engaging, focused, surprising, unpredictable, exhausting

When asked **what knowledge was acquired**, students responded with the words:

- o Management, planning, pitching, personas, screening ideas, project development, unplanning, criteria, reduction, current market trends, foreign culture, problem solving, mind mapping, multi-perspectivity, multicultural differences and expectations

When asked **what skills were developed**, the words used were:

- Project presentation, thinking outside the box, patience, brainstorming, communication, improvisation, teamwork, courage, time management, confidence, ideating, problem solving, interpretation, making friends, controlling chaos, reductionist methods, risk analysis, patience

From the above qualitative results gained from the second cohort, it is clear that the pedagogy of IDEATE is importantly different from what the students have previously experienced and that they have gained useful entrepreneurial skills and knowledge during the process. Also, all these qualifiers denote an **overall positive attitude towards such methodology of teaching and learning**.

Looking at both cohorts, 9 student on the average stated that the module required more effort, 4 stated the same amount as in any other (usual, average..) course. This might be interpreted as proof that **the pedagogy encouraged many students to put more effort into their learning**.

One student said it was “hard work but totally worth it.” . And most importantly:

All students would recommend this or such module or course to a friend.

Evaluation of Pre and Post Questionnaires

The project team recognized problems with the pre- and post- questionnaires used for COHORT 1 due to their insensitivity to some key aspects of the project that were owing mostly to the low number of polled students and therefore a need to very precisely articulate, and cross-map the questions . A statistician was consulted when the results were available and, because the data had not been paired, it was discovered that the results would not be very reliable. With a maximum of 16 possible pairs (16 students), the sample would always be very low which could also be seen as reducing confidence in the results.

Statistical analysis was carried out on the data from the first cohort (see evidence):

- An Independent t-test (assuming normal distribution of data), showed significance in the question ‘an entrepreneur does not have the potential to be successful unless supported by government or individuals’. It can be assumed that the content of the course changed the students’ perception in this area. There was also some significant change when doing non-parametric analysis which showed that a significant number of students felt ‘an entrepreneur needs networking skills and making professional contacts’. These two statements are linked and it was interesting to see that they were both significant.
- Further analysis showed that a significant number of students agreed more after than before the delivery of the course that ‘an entrepreneur needs personal effectiveness

skills’ and ‘skills/capacities of an entrepreneur are to **acquire knowledge of how to develop entrepreneurial narrative**’.

The interpretation of these results was difficult as the mentor group recognized that no clear research questions were formulated before the first questionnaire for C1 was completed. When designing the second pre and post questionnaires (for C2) the group could also lean on the advanced research of the project in WP4 and WP7, so the following research questions were used:

1. How are the personal perceptions of the entrepreneurial skills and knowledge of the student changed by undertaking the module? 5-18
2. How are the personal perceptions of the entrepreneurial attitude of the student changed by undertaking the module? 1-4
3. How beneficial was the transnational element of ideate in improving entrepreneurial knowledge, skills and attitude?
4. How beneficial was the transdisciplinary element of Ideate in improving entrepreneurial knowledge, skills and attitude?

Questions were designed to answer the above research questions, with reference to research by other members of the team, esp. V. Hautala and D. Rimkūnienė in WP7 on exploitation. This was linked to the WP5/WP7 emergent activity of establishing an **online "Toolkit" at <http://howto.ideate.me/>** (between C1 and C2) as the central legacy of the project, which was also included into the teaching and learning process with C2.

Working in consultation with the statistician, the first two questions used a Likert Scale with 10 possible answers in order to potentially give more significance to any change noted, while the second two questions used open questions to gain qualitative data. Students were asked to enter a secret code (known only to them personally) onto the questionnaire to allow us to pair answers.

12 of the possible 15 students answered both the pre and post questionnaires. 10 paired answers were gained, the remaining could not be matched due to being given different codes.

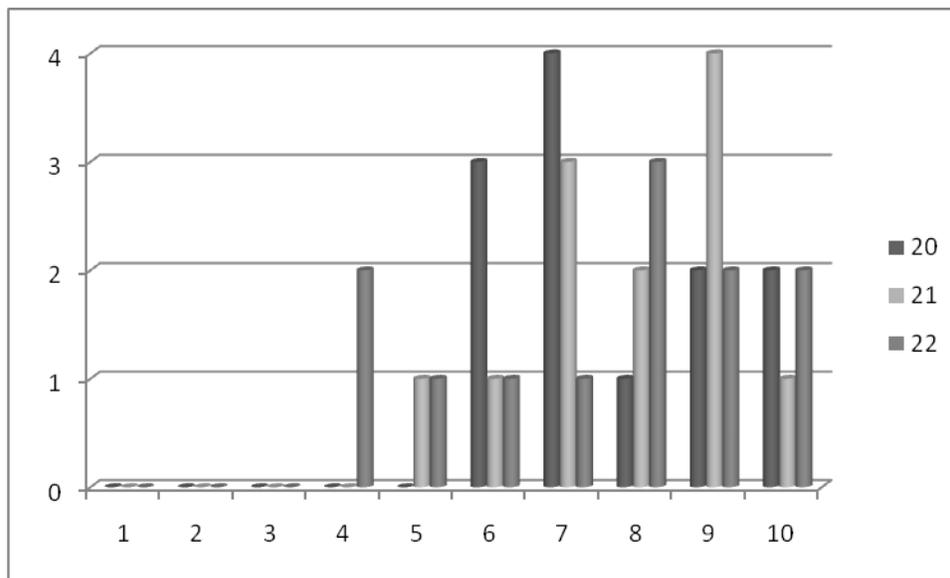
Paired T Tests were used to analyze based upon assumption of normal distribution but Wilcoxon analysis was also carried out to take into consideration an assumption of non-normal distribution. The following statements showed significant change (5%) from pre to post:

Research Question	Questionnaire Question Number		T Test Result	Wilcoxon Result
2	6	I feel confident about evaluating business opportunities through various means	.022	.034
2	7	I feel confident about developing business opportunities through	.022	.037

		various means		
2	9	I do not fear failure	.004	.01
2	10	I feel confident about working with other people	.037	.01
2	14	I feel confident about my decision-making skills	.015	.016
2	16	I feel confident about my innovation skills	.004	.0015
2	19	I feel confident about my ability to deal with stress	.012	.010

On the 10 paired questions, questions 1-19, all post answers received very positive mean scores, with minimum scores of 5.

There were no statistically significant changes noted to answer the first research question. The paired answers, questions 1-4, showed that during the course, students did not significantly change their opinions with regard to whether they wanted to be self employed. However, there were several questions added to the end of the post questionnaire to specifically ask about how their engagement on the course had changed their entrepreneurial attitude (question 20), skills and knowledge (question 21) and their attitude toward becoming an entrepreneur (question 22).



The positive results for Question 6 and 7 was an interesting finding because none of the students who were involved in C2 were Business students. The fact that they felt more confident about evaluating and developing business opportunities shows they gained **useful and concrete entrepreneurial skills and knowledge**.

The experiential method used in the delivery of the module appears to have boosted their confidence in many areas and is strongly related to the fact that they fear failure less through **undertaking the module** (Questions 9, 10, 14, 16, 19).

Evidence:

- Questionnaires to mentors for IL1 and IL2
- Questionnaires to students about the logistics of IL1 and IL2
- Pre and post questionnaires to students for IL1 and IL2 about their learning
- IL Final day evaluations with students
- IL1 notes from final evaluation

Positive effects for students from a European trends and policies perspective

Several **positive effects of the IDEATE course experience for students** could be noted along both cohorts that pertain to the current and emerging trends in the European HEI teaching and learning, encouraged by several policies following the Bologna Declaration and its recent developments, e.g.:

- European Commission/EACEA/Eurydice (2014). Modernisation of Higher Education in Europe: Access Retention and Employability 2014. Eurydice report. Luxembourg: Publications Office of the European Union.
- European Commission (2015). Yerevan Communiqué. EHEA Ministerial Conference. 14-15 May 2015, Yerevan, Armenia.

Here are selected statements from student's individual course evaluations of the C2 run in 2016:

Openness for group work and collaboration	<i>"The workshop experience made me realize that personal attachment should be minimised for efficient collaboration. However, I can still be friends (outside of the project work) with those who are very different from me and thus often get into conflict when we work." (Student A; 1)</i>
Interdisciplinary communication	<i>"The interdisciplinary differences did not negatively influence the quality of group or team work, as it mostly depends on the individual, and the mix of personalities in the group. But they can make ideas more fresh and surprising." (Student B; 1)</i>
Multi-cultural communication	<i>"It depends a lot on how a group reacts to the differences in culture: either they succeed to make the best of them (use them as leverage), ignore or neutralize them, if they do not contribute to idea or project development. If only possible, one should not let the project work suffer from these differences." (Student C; 1)</i>
Open curriculum, flexible teaching and learning styles	<i>"(...) it could be seen how the left-brain oriented students would be more focused on critical background research to support the idea, while the right-brained students would be more focused on the intuition. For me this tension was the best experience, since it has made me more prepared for future work with people of different personalities and different work ethics." (Student D; 2)</i>

Close mentoring of student work	<i>"I particularly liked the self-managed project-based working, where mentors mingle, because I found those most crucial for our learning. Similarly the online workshops/tasks, where a sufficient amount of active mentoring is crucial as well." (Student E; 2)</i>
<p><i>Quotes from:</i></p> <p>(1) <i>Final live evaluation round of the Vilnius mobility, March 2016</i></p> <p>(2) <i>Post-course anonymous evaluation questionnaire online, April 2016</i></p>	

ADDENDUM: Overall grades statistics of both Cohorts

	Cohort 1	Cohort 2
UNG	3+2+2+1	3+3+3+2
SU	3+3+2+2	3+2+2+2
UTU	3+3+2+2	3+3+2+0
VBC	3+3+2+2	2+2+2 *

* One VBC student did not attend the course due to health condition force majeure, emerging briefly before course start, so that noo replacement could be found.

0 = not pass
1 = pass
2 = middle
3 = distinction

	Cohort 2	Cohort 1	TOTAL	TOTAL
	6	8	-	1
	7	8	1	-
TOTAL (both cohorts)	13 = 42 %	16 = 52 %	1 = 3%	1 = 3%