Evaluation Report on the Talinn Experience

Within the Deserve Project we implemented the ideas-into-action approach into a three days workshop and run it with 21 students, selected by the project partners' institutions. Since it was a highly attractive program the recruitment for the participants was very easy and the partner organisations could select from a broad spectrum of applications.
The following report documents the evaluation from the perspective of the students who took part in the pilot implementation. For the evaluation we used different methods to gather information:

- written standardized questions in a survey
- open questions in regard to expectations, learning results and aspects to consider for the further development of the approach according to the different phases of the project.
- interviews with students, documented in the movie

The questionnaire we used is in the appendix of this report.

Overall aspects:
From a students' perspective the overall evaluation of the project is very positive. On a five-point scale (coded 0 – 4) the means in regard to questions on overall satisfaction, perceived challenge and emotional states in the project are all positioned on the positive side of the scale, even if you consider the standard deviation. The overall satisfaction is in average by 3.53 (standard deviation 0.51).

Having a closer look on the detailed aspects to the overall evaluation we asked the students to rate different elements of the ideas-into-action approach. For the more detailed analysis we used a four-point scale to press for positioning on the positive or negative spectrum. The scale was visualized by symbols of the weather report (ranging from rain – clouds – half sunny –bright sunny).

The following diagram shows the means and standard deviation for the different aspects.

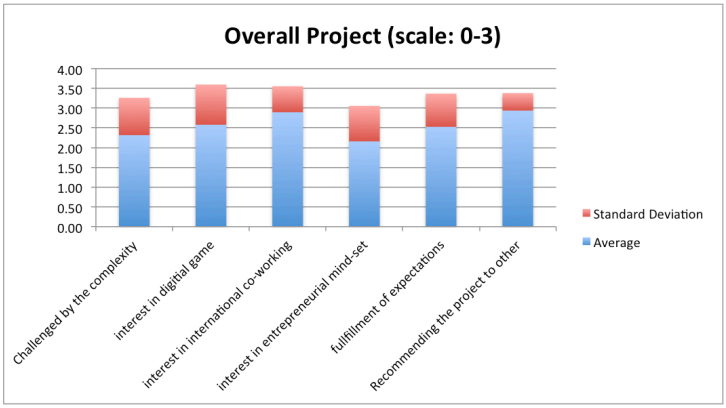

diagram 1: Overall project aspects (means and standard deviation, 4-point-scale 0-3).

The highest average is in the dimension of recommending the project to other students. This very general indication gives a fundamental hint, in regard to the students' perception

and satisfaction. The students ranked the aspect of their interest in international co-working very high, so the social and cultural dimension of the project got a lot of the students' attentions. Since the DESERVE-approach uses the digital game development as one of the fields, where the students can use and apply their different mind-sets, skills and knowledge, it was expected that the interest in digital game development polarized the students. The high standard deviation (1.02) in that criterion indicates that polarization. Also the sparking of interest in the entrepreneurial mind-set got rated with a high standard deviation, which indicates that for some students the project did spark or foster quite high and for others not so much.

We linked the evaluation criteria in regard to the learning process to the dimensions of the entrepreneurial mind-set. Therefore the students' answers helped us to get more differentiated perspectives on the different aspects of the learning process within the ideas-into-action approach. The following table shows the results from the part of the evaluation form. The underlying questions could be rated on a four-point-scale to achieve polarized answers.

Learning Process	**Average**	**Standard Deviation**
Engaging myself	2.63	0.50
Identitifying the problems	2.33	0.77
Understanding tasks	2.42	0.77
Feeling passionate	2.32	0.82
Identifying with user perspective	2.16	0.96
Contributing ideas	2.53	0.51
Develop skills in sub-teams	2.53	0.70
Applying new skills	2.42	0.69
Improving communication and co-operation	2.61	0.49
Getting to know different perspective of sub-teams	2.63	0.50
Enjoying team work	2.89	0.32
Liking interaction with other teams	2.74	0.45
Taking responsibility for team output	2.24	0.67
Feeling responsible for overall output	2.05	0.85
Working under time pressure	2.63	0.50
Finalizing elements	2.05	0.85
Feeling confident in own work	2.26	0.73
Different experience from other learning	2.63	0.60
Bringing game to market	1.87	0.88
Seeing a business opportunity	2.21	0.92

Table 1: results of the standardized questions

The two highest rated aspects emphasise the intra- and inter-team work. The challenge of the ideas-into-action process has a high social complexity, since the students act in different roles and they have to work under strict time constraints in interdependent sub-groups. The high results in the positive side of the scale indicate that the students felt very positive about that social complexity, being exposed to it and coping with the requirements but also experiencing the social interaction within and between groups as very fundamental to the overall experience. Supporting information to that findings can be found in the videos of the interviews and in the documentation of the social interactions within the movie.

The aspects on the fourth and six rang of most positive ratings relate to the alternative approach in learning the ideas-into-action approach provides. From the students' perspective the learning approach used in the DESERVE project gave an opportunity to experience themselves differently than in traditional learning contexts and with a high degree of engagement. This positive expression highlights the importance of the different learning context designs within the ideas-into-action approach and the relevance of creating learning context, which enables students to immerse themselves into the situation. Linking it to aspects of the entrepreneurial mind-set the high positive results in aspects of teamwork and self-engagement can address two important mind-set aspects. With a look on the standard deviations it is interesting that the more product-oriented aspects of an entrepreneurial mind-set seem to polarize the students. The aspects of customer insight ("I could identify with the perspective of a future user of the game") and market opportunities ("I could see opportunities to bring the serious game to the market") have the highest standard deviations (0.96 and 0.92).

We asked the students to mention their three most important individual learning outcomes. The defined learning outcomes were on a very different level of abstraction. Some mentioned very detailed aspects like "I got an idea of programming (how it works)" (Q14) or "cooperation in / between departments" (Q15) to broader aspects like "to work in international groups" (Q19). A few students highlighted the overall process (e.g. "product development from Idea to a demonstration" (Q5), others mentioned more general dimensions (e.g. "social skills (Q13), or gaining insights how games are made (Q12).
It is evident, that quite some of the students got a new insight in their own person. This was expressed in ways that they changed their self concept through that experience (e.g. "I am very free and out of the box thinking" (Q1) or "it seems that I have more leadership skills then I thought (Q4). We structured the mentioned learning outcomes from the student perspective and matched them to the set of dimensions in the entrepreneurial mind-set questionnaire. One dimension which was very often addressed in the learning outcomes and has no equivalent part in the entrepreneurial mind-set questionnaire is the aspect of inter and intra team work processes and dynamics. Since the task we provided was based on the division of labour and the interdependency of the group performance, this experience was highly rated as important and the central dimension in the students' learning outcome. The next dimension in which the students described their learning outcomes was in regard to their experience of being or gaining competence and the feeling of having self efficacy. Learning outcomes which express planning and management aspects and goal orientation were formulated in descend sequence.
We asked the students to define what they can take with them from the project. Overall the "great experience" was highlighted. The students take away different experiences in working in teams and contributing to teamwork but as well in experiencing themselves in a different manner (e.g. "staying calm in situation of stress" (Q 11).
In the next part of the questionnaire we asked the students which aspects they want to develop further for themselves. The students' answers show an increasing demand in very specific areas (programming, gaming industry, business model) or in very personal aspects (e.g. "I want to try to be a bit more active" (Q3), "I want to be more open and try to built up even more confidence to take with me through life and the workplace" (Q8).
It is very stunning that the students claim their experience in the overall more general processes and dimensions and can now describe more clearly in which area they want to develop further.

Although the open questions show that the students define certain aspects of the entrepreneurial mind-set as achieved learning outcomes they can take away from the experience of the idea-into-action-camp, not all of the aspects of the entrepreneurial mind-set were covered resp. mentioned in the students comments. On the other side the answers show the broad spectrum of experiences the students had in the field of entrepreneurial mind-set activities. So the approach has the potential to address very different aspects and students can have very individual important experiences within the same learning context.

We asked the students in more detail to give their comments to each phase of the ideas-into-action camp. We asked for comments coded like traffic lights (green for more on that and for confirmation, yellow stands for aspects to consider more closely and red for aspects to stop doing). We differentiated the overall process in the phases:

- Introduction
- Reflection of the entrepreneurial mind-set
- Inspiration – task understanding
- Inspiration – creating ideas
- Production
- Implementation

We asked for additional comments in the end.
We got only two aspects in the 'red'-section: Those were that the completion of a real game is unrealistic in the time given (3 days) and that within the phase of creating ideas, the way how the idea to follow was decided was not clear and influenced by the moderator.
Aspects the students marked as relevant for further considerations (yellow) were first of all the restriction in time and that more time should be given or that time should be spread differently between the stages of the three-days. The other primarily mentioned aspects can be grouped around the aspect of monitoring and steering group processes. Some students saw that other students were not included or that there was more guidance needed for the group in the phase of the business modelling. A third cluster collected aspects that addresses the question if each individual process can be fostered even better. A fourth package consists of aspects that mentioned single aspects of the work process (e.g. used software tool for programming). The mentioned aspects do not address fundamental principles of the designed learning approach, but give indications for further development in specific areas. As very good and with a "green" label the students not only mentioned the overall project (e.g. "I loved the company and the project. Hope I can be a part of many similar projects." Q19), they also highlighted different aspects like the 'authentic' client, the inter- and intra-group work, the individual reflection phase and the film content (in the business model phase).
As an outlook the students added the following aspects:

- That it is not clear what happens after the project ./ What is the follow up?
- That this kind of experience could be even broader in scope (in regard to countries).

In summary, the students highlight in their evaluation that the ideas-into-action camp serves as a good learning platform. The concept offers a very good framework for individual experiences and for learning upon those experiences. Through the complexity of the task, the processes and the intended learning outcomes, a lot of differentiation is possible between the students' experiences but all within the conceptual context of the entrepreneurial mind-set.
The overall expression of the students' remarks is very positive. The mentioned improvement suggestions help to develop the approach further but they do not tackle the fundamental elements or principles of the approach.

Appendix – Students questionnaire for the evaluation

Dear Students,

We hope that you still can remember somehow our common workshop in TALINN on fostering entrepreneurial mind-set through an experience and reflection based approach. After a couple of month, we would like to come back to you once again to ask you a few questions about your experience and your thoughts about the process. Your evaluation helps us to dig into the potentials and the pitfalls of our approach even deeper and to develop the approach further. Please support us in taking 15 minutes of your time to answer the following questions.

When I think back to the Workshop in Talin, I am

O	O	O	O	O
Not satisfied				Fully satisfied

How challenging was the project for you

O	O	O	O	O
Simple				Complex

How did you feel during the overall process

O	O	O	O	O
Bad				Good

Please describe the process in the project shortly in your own words:

_____

What were your main expectations towards the project?
-   -   -

How do you feel about the following aspects in the project?				
I felt challenged by the complexity of the project.				
The digital game development got my interest				
The international co-working process got my interest				
The development of an entrepreneurial mind-set got my				

interest				
My expectations towards the project were fulfilled.				
I would recommend the project to other students.				

How do you feel about the following aspects of the learning process?				
I could engage myself in the project				
I could identify the problems behind the overall task				
I could understand the task we had to fulfil				
I felt passionate about the result of the project				
I could identify with the perspective of a future user of the game				
I could contribute ideas and thoughts to the development of the game				
I could develop my individual skills in regard to audio, graphic, programming or game design (depending on your group)				
I could quickly apply new learned skills in the process				
I could improve my communications- and co-operations skills				
I got to know the different perspectives of the different sub groups				
I enjoyed working in my team				
I liked to interact with the other teams				
I took responsibility for my team output				
I felt responsible for the overall outcome of the project				
I felt the time pressure but still could go on working				
I could finalize elements of the production				
I felt confident in the work I was doing				
I experienced myself differently than in regular learning processes				
I could see opportunities to bring the serious game to the market				
I could see a business idea behind the serious game				

Please choose your three most important individual learning outcomes
- - -

What can you take away with you form the project?
- - -

In which areas would you like to develop yourself further?
- - -

In the different stages of the project:

	Please stop doing this….	Consider this ….	Please more of this ….
Introduction of the project			
Reflection of the entrepreneurial mind set			
Inspiration – getting to understand the task			
Inspiration – creating ideas, producing prototypes			
Production – working on graphic, audio, programming, game design			
Implementation – developing a business model			

What else would you like to pass on?

Thank you for your contribution to the project's evaluation!