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**WP2- Analysis of use of game based learning initiatives**

Annex 3. SWISS NATIONAL REPORT

Country: Switzerland

Author: Associazione seed



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**Disclaimer:**

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## 1. Introduction to the Report

This report has been produced by Associazione seed at the end of March 2013 and refers to the Swiss National context. It reports the results of the researches (desk research, interviews, questionnaire and focus group) implemented in Switzerland in the months of February and March 2013 in order to accomplish Work package number 2 of the project: Analysis of use of game based learning initiatives.

## 2. Methodological approach to elaborate the report

The research in Switzerland was conducted according to the indications and guidelines of the WP leader.

The methodological tools used were:

- desk research: we had to analyze the game based learning initiatives applied to professional environments in Switzerland and we used different sources: internet, bibliography, reports, specialized magazines, etc. We also took advantage of the expertise of expert interviewed. In fact each expert gave us interesting references to National initiatives. We produced a list of references and a collection of good practices.
- expert interviews: we contacted some of the major experts in game based learning initiatives in Switzerland and performed face to face (just in one case, through skype because of the location of the expert) interviews to ask input by interviews, according to the guidelines given by the WP Leader.
- human resources professionals and training questionnaire: we contacted all available contacts from our network and according to the human resources and trainers profiles given by the WP leader and asked them to fill in the online questionnaire.
- focus group with international project management professionals: we organized on 18th March a focus group at seed with 8 participants from the international project management field. We asked them to contribute with their ideas and discuss them, according to the guidelines given by the WP leader. Actually, some of the professionals are also involved in HR and training and we also submitted them the questionnaire for WP2 and asked if they were available also to answer some questions for the interview of WP3.

### 3. Desk research

According to guidelines given by the WP leader, associazione seed conducted desk research analyzing Swiss game based learning initiatives applied to professional environments using different sources (internet, bibliography, reports, specialized magazines, etc.) and taking advantage of all the indications provided by the experts and professionals interviewed in the other phases. Moreover we used Google scholar to look for more publications, we looked among the Swiss Federal Institute of Technology Zurich publications, the ECGBL European Conference on Game Based Learning publications and consulted the Swiss Game Design Studie 2009 from the Zürcher Hochschule.

The good practices have been collected according to the guidelines indicated by the WP leader, that is:

*Good Practice “A good practice is simply a process or a methodology that represents the most effective way of achieving a specific objective. (...) (The essence of identifying and sharing good practices is to learn from others and to re-use knowledge. The biggest benefit consists in well-developed processes based on accumulated experience.”*

*In the framework of LPMnoge, a good practice is defined as an inspirational example of a game based learning initiative already tested and applied that is specifically aimed at the development of professional competences in working environments among adult professionals. The good practice shall meet the following criteria:*

- *It has been tested and evaluated.*
- *measurable impact in the target group (quantitative or qualitative)*
- *clear educational and pedagogical approach*
- *applicability in professional environments*
- *measurable exploitation potential (quantitative and qualitative)*
- *transferability approach*

### Results of the desk research:

The Swiss research on games seems to be quite creative and active. As an example the Research Laboratory at ETH in Zurich and EPFL are specialized on Visual Graphics, 3D animation and Physics engines. They also conducted some of the researches in the video game production. And also collaboration with private company were activated in the past (ETH Zurich and Disney Research Lab, or the Geneva-based company Pixelux who developed a game engine, some ETH spin-off...) Also in the training field, lot has been done. Since 2004, the Zurich University of Arts - Zürcher Hochschule der Künste (ZHDK) has a comprehensive study program in game design. And specialized technical products by companies like Nvidia in Zurich and Pixelux in Geneva reached the global market.

Nevertheless, a research presented in the Swiss Game Design Studie 2009 with the results collected from a survey to 150 Swiss experts in game design pointed out the issue that in Switzerland game design is still not generally taken as important and serious as it should be and recognition and respect for this industry is missing. Many game designers who answered the questionnaire said that investors and infrastructure and personnel is missing even if Switzerland could be a great place to settle down and start game companies.

About the use of Game Based Learning (GBL) in Business Environments a thesis from ETH Zurich states that:

*... a survey in industry has been conducted in which learning experts of eight mayor companies and institutions based in Switzerland and Germany were interviewed. We found a wide variety of different GBL solutions offered for business application. However, the technical level is by far lower than the one of state-of-the-art video games. The survey results reveal a limited use of digital GBL solutions in the industry. An analysis of the interviews leads towards the definition of four main barriers to GBL, namely "general low acceptance of GBL", "high development costs", "low cooperation between learning companies and gaming industry" and "technology issues".<sup>1</sup>*

The thesis underlines advantages and disadvantages of GBL as follows (it must be said that those elements have been quoted also in many of the interviews to experts presented in the next sections):

Advantages of GBL Attributed to the Game and Simulation Element:

- Motivation and Engagement

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<sup>1</sup> P. Mathias, *Game-Based Learning and its Application in Business Environments*, Master Thesis at ETH Zurich 2008.

- No Impacts on the Real World
- Simulations can Make Hidden Processes Visible
- Experiences Close to Reality
- Adaptiveness and Interactivity

Disadvantages of GBL Attributed to the Game and Simulation Element:

- Games are Not Appropriate for All Kinds of Content
- Games are Not Appropriate for All Kinds of Learners
- Simulations can Not be Skimmed
- Presence of Coach can Alter Learning Results

Advantages of GBL Attributed to the Digital Element

- Integration of Multimedia Content
- Easy Measurement of Learning Process
- Easy Documentation of Learning Process
- Learning Objects are Reusable
- Integration of Learning Method into the Company Learning Management System (LMS)
- Participants Learn to use a Computer
- No Physical Presence of Coach

Advantages attributed to the Online Element:

- Enabling team work
- Actuality of content
- No installation necessary

Disadvantages of GBL Attributed to the Digital Element:

- Need of a Computer
- Requirement of IT Skills
- Need of Flexibility for New Forms of Learning

The thesis presents the results of a survey about GBL in the Industry. The survey was submitted to learning experts of eight large Swiss companies (Bayer, Bundeswehr, Credit Suisse, Insurance Company, Siemens, Sulzer, Swissmem, SwissRe).

The thesis states:

*"Surprisingly, in most companies only very few GBL solutions have been implemented. In spite of the missing applications, the overall rating for the potential of GBL is high."*

*"The main findings of the survey can be summarized the following way: Learning experts agree that GBL is an interesting learning method and that it is effective for most participants. Surprisingly, very few companies actually use digital GBL solutions. A lot of different reasons were mentioned which prevent learning officers from implementing GBL. It is not possible to illustrate the opinions of the learning experts in a matrix representation. This is due to the fact that the experts have different backgrounds concerning GBL and were referring to totally different implementations of GBL."*

*"Almost unanimously, the experts rate the potential of GBL very high. In their eyes, companies will soon develop a lot of GBL solutions and used them to train employees. Only the experts of Swissmem mention that the potential of GBL may be overrated."<sup>2</sup>*

Here is a list of advantages of GBL quoted by the experts of the 8 companies:

- Engagement of Participants
- Competition
- Safe Environment
- Close to Real Life
- Right Situation and Mood for Learning

Around half of the interviewed company experts in the mentioned thesis identified the GBL method as appropriate for any kind of content and most of the interviewed said that the use of GBL solutions facilitates the teaching of skills and makes it possible to change behaviours.

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<sup>2</sup> P. Mathias, *Game-Based Learning and its Application in Business Environments*, Master Thesis at ETH Zurich 2008.

Identified barriers to the use of GBL are:

Barrier 1: Low acceptance of GBL

Barrier 2: High effort and development costs B.3, B.4, B.6, B.7)

Barrier 3: Low cooperation between learning companies and gaming industry

Barrier 4: Technology Issues

Moreover,

*"Regarding the use of digital GBL, there is aversion of some learning experts against computers. This may originate on the one hand from negative experiences with badly designed e-learning solutions. Then again, computer games have still a bad reputation in the eyes of some learning experts. They are often perceived as silly enjoyment, antisocial activity or glorification of violence. Generally, the interviewed experts agree with research papers upon the possibilities and advantages of GBL and are keen to implement more game-based solutions in the future."*<sup>3</sup>

Here is the list of sources identified. In a following table we will also report the collection of Swiss good practiced identified.

Table with the sources:

Number and Title	Author	Year of publication	Subjects approached	Education	Publisher	Comments or Remarks
1. Swiss Game Desig Studie 2009	Beat Suter, Dr. Phil., Dozent Game Design, ZHDK	2009	All game studies in Switzerland	University, enterprises, vocational	ZHDK Game Lab	available at: <a href="https://doc-0o-3s-docsviewer.googleusercontent.com/viewer/securedownload/dkj89b4u3hkk6khe87av1hluh7g1anaq/8nqdnreoa0p50mm1roik2i167bu00e63/1363687200000/Z21haWw=/AGZ5hq8YP0tFFQaN">https://doc-0o-3s-docsviewer.googleusercontent.com/viewer/securedownload/dkj89b4u3hkk6khe87av1hluh7g1anaq/8nqdnreoa0p50mm1roik2i167bu00e63/1363687200000/Z21haWw=/AGZ5hq8YP0tFFQaN</a>

<sup>3</sup> P. Mathias, *Game-Based Learning and its Application in Business Environments*, Master Thesis at ETH Zurich 2008.

						fcibqrlgxst5/MTNkNTk4 ZTQwMzY5OWU0MHw wLjE=?a=gp&filename=s wiss_game_design_stud ie_2009_web%5B1%5D. pdf&chan=EgAAPwK% 2Br9w7AnSGba1nIHqlyX dwVfph5Tz/ESlYgIEfq0z &docid=e8b12758e9a1f e9ae376e067d9b0d0ec %7C249fa0f3f08fef985a f5b705e6490a1a&sec=A HSqidb9fqYQV0pce5VH H9VGIAbckt- EeGikU4dpj- Df6fNzK7IKauFmnFo5ds ORFaj1LzftzXZiG67v97E mERrBZIEu8IMXMzh1k1 zdwEle8CjhVsGj84NSF2J Bw3ULAE5VBuYyWtJKTt QKQn_3wLMuYzUw0P1 kuk3w2rUjrCHLRebwq_ 0ZgmCBX9PdTzFHjygz_ WKUUEq_xngBbv5gxUE acGzKXKYtJqTCixd13G4 uoRgTyy- gfZBHwVG3Rm7mQdoF Mwqs4LLSfYJcbCwCgBs 0XCxJcTRbQ3ZQAoltn8u 4lGZ3QLLqeaDkH08u9N EaMUmOaFVXvaFNCepv wjH1K8BLeK8CeHOgHg hJRKuGg9RMPwyJE9MR kwmcQGXiAVIS2RV74vi OFITmbeHt8rgCKQ8Kwij hUJwjs_0wqFqTBFJPWc - 2VaRjwLmXqYWHfNfJ8p Jjfv87smG5
2. Unterrichten mit Computerspielen	Dominik Petko	2008	Didactic potential with video games	All level	Medien Paedagogik	link: <a href="http://www.medienpaed.com/15/petko0811.pdf">http://www.medienpaed.com/15/petko0811.pdf</a>

Didaktische Potenziale und Ansätze für den gezielten Einsatz in Schule und Ausbildung						f
3. Game-Based Learning and its Application in Business Environments	Pascal Mathias	2008		Master Thesis about application in business Environments	Master Thesis at ETH Zurich,	<a href="ftp://ftp.tik.ee.ethz.ch/pub/students/2007-HS/MA-2007-34.pdf">ftp://ftp.tik.ee.ethz.ch/pub/students/2007-HS/MA-2007-34.pdf</a>
4. Successful Implementation of User-Centered Game Based Learning in Higher Education: An Example from Civil Engineering	Martin Ebner , Andreas Holzinger	2007	Aim of the study is to gain insight into whether and to what extent, online games have the potential to contribute to student learning in higher education	Higher education	Computer & Education Volume 49, Issue 3	available at: <a href="https://www.google.com/url?sa=t&amp;rct=j&amp;q=&amp;e src=s&amp;source=web&amp;cd=9&amp;ved=0CIEBEBYwCA&amp;url=http%3A%2F%2Fcite seerx.ist.psu.edu%2Fviewdoc%2Fdownload%3Fdoi%3D10.1.1.94.6763%26rep%3Drep1%26type%3Dpdf&amp;ei=1m9IUaGD N5DbsgbUn4DIDg&amp;usg=AFQjCNE_5_L65EY1AcInCAKpxONvorqrhQ&amp;sig2=hkYU68xynQ2QNapCokKTdQ&amp;bvm=bv.43828540,d.Yms">https://www.google.com/url?sa=t&amp;rct=j&amp;q=&amp;e src=s&amp;source=web&amp;cd=9&amp;ved=0CIEBEBYwCA&amp;url=http%3A%2F%2Fcite seerx.ist.psu.edu%2Fviewdoc%2Fdownload%3Fdoi%3D10.1.1.94.6763%26rep%3Drep1%26type%3Dpdf&amp;ei=1m9IUaGD N5DbsgbUn4DIDg&amp;usg=AFQjCNE_5_L65EY1AcInCAKpxONvorqrhQ&amp;sig2=hkYU68xynQ2QNapCokKTdQ&amp;bvm=bv.43828540,d.Yms</a>
5. Playing Games in School	Edited by Hirumi, Atsusi  (Book with various author, among which Luca Botturi, on of the interviewed experts)	2010	Video Games and Simulations for Primary and Secondary Education	Primary and Secondary education, but not only	International Society for Technology in Educa	One of the authors is phd Luca Botturi (chapter 2 and 14), one of the experts who contributed to the research
6. Once Upon a	Botturi, L. &	2009	Games in	-	In C. T. Miller	One of the authors is

Game: Rediscovering the Roots of Games in Education	Loh, C. S.		education		(ed.), Games: purpose and potential in education, New York: Springer, 1-22 [chapter 1]	phd Luca Botturi , one of the experts who contributed to the research
7 . A Systematic Methodology to Use LEGO Bricks in Website Design.	Cantoni, L., Marchiori, E., Faré, M., Botturi, L., & Bolchini, D.	2009	Lego Serious Play Method applied to website design	Entreprises	Proceedings of SIGDOC 2009, 27th ACM International Conference on Design of Communication, Bloomington , IN (October).	
8. City Treasure. Mobile Games for Learning Cultural Heritage.	Botturi, L., Di Maria, A., & Inversini, A.	2009	Mobile Games for Learning Cultural Heritage	-	Proceedings of Museums & the Web, Indianapolis, IN (April).	Available at: <a href="http://www.archimuse.com/mw2009/papers/botturi/botturi.html">http://www.archimuse.com/mw2009/papers/botturi/botturi.html</a>

*During the desk research, we also looked for good practices regarding the use of game based learning initiatives in the development of international project management competences in Switzerland.*

The following table gives an overview of the findings. Only few practices can be strictly considered as addressing international project management issues, but there are some other examples listed in the table that are however interesting from a point of view of GBL.

Title of the good practice	SEEAgame - MENU
Country	Switzerland and European Countries
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the good practice	The Game MENU is one of the 2 games developed inside the EU LLP project SEE a Game (the project aimed to develop game-based learning activities where students/players are pushed to develop an <i>entrepreneurial attitude</i> ), in which association SEED was partner (and main designer of the game). The game was really appreciated by users, so much that 2 in service training courses and a Youth In Action course were organized to train adult to use it.
Promoter of the initiative (person or institution that developed it)	MENU is the product of the EU project <i>SEE A Game</i> funded under the Lifelong Learning Programme – Grundtvig, with grant 142205-LLP-1-2008-1-BE-GRUNDTVIG-GMP.
Target group	students and adults, willing to develop entrepreneurial attitudes
Type of game used to implement the initiative and its use	competitive game - social game - board game
Contents included in the game	Rules, handbook for the game master
Competences developed by playing the game	Assessment/Factor analysis Self-confidence Motivation Focusing/goal-orientation Taking initiative Out-of-the-box thinking Organisational competence (information, searching, planning) Self-reflection Decision making Problem solving

	Social competencies and empathy Creativity
Educational and pedagogical approach	competitive game
Number of users – players	MENU is designed for sessions with 10 to 20 players
Transferability – reusability	It can be used in classrooms, during courses about entrepreneurship. The game can also be personalized.
Sustainability of the game	The game was really appreciated by users, so much that 2 in service training courses and a Youth In Action course were organized to train adult to use it (and to be game master to use the game in educational programs). Trained game masters can reuse the game as many times as they want. To learn how to play the game, game masters can study a guide (available to be printed)
Impact (indicate quantitative and qualitative indicators used to assess it)	More than 200 persons all over Europe were trained to use the game with educational purposes.
Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	The game was tested in different EU countries and evaluated (through observation, questionnaires, interviews..) during the LLP project where it was developed.
Improvement areas	-
Further information/ Additional Comments	<a href="http://www.seeagame.eu">www.seeagame.eu</a>

Title of the good practice	SEEAgame - FAIR
Country	Switzerland and European Countries
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the good practice	The Game FAIR is one of the 2 games developed inside the EU LLP project SEE a Game (the project aimed to develop game-based learning activities where students/players are pushed to develop an <i>entrepreneurial attitude</i> ), in which association SEED was partner (and main designer of the game). The game was really appreciated by users, so much that 2 in service training courses and a Youth In Action course were organized to train adult to use it.
Promoter of the initiative (person or institution that developed it)	FAIR is the product of the EU project <i>SEE A Game</i> funded under the Lifelong Learning Programme – Grundtvig, with grant 142205-LLP-1-2008-1-BE-GRUNDTVIG-GMP. Associazione seed was one of the partner of the project
Target group	Students and adults, willing to develop entrepreneurial attitudes
Type of game used to implement the initiative and its use	Collaborative game - social game - board game
Contents included in the game	Rules, handbook for the game master, cards
Competences developed by playing the game	Ambiguity management Self-confidence Motivation Focusing/goal-orientation Taking initiative Self-reflection Decision making Problem solving Social competencies and empathy Creativity
Educational and pedagogical approach	collaborative game
Number of users – players	FAIR is designed for sessions with 6 to 24

	players
Transferability – reusability	It can be used in classrooms, during courses about entrepreneurship. The game can also be personalized.
Sustainability of the game	The game was really appreciated by users, so much that 2 in service training courses and a Youth In Action course were organized to train adult to use it (and to be game master to use the game in educational programs). Trained game masters can reuse the game as many times as they want. To learn how to play the game, game masters can study a guide (available to be printed)
Impact (indicate quantitative and qualitative indicators used to assess it)	More than 200 persons all over Europe were trained to use the game with educational purposes.
Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	The game was tested in different EU countries and evaluated (through observation, questionnaires, interviews..) during the LLP project where it was developed.
Improvement areas	-
Further information/ Additional Comments	<a href="http://www.seeagame.eu">www.seeagame.eu</a>

Title of the good practice	URL – User Requirements with Lego.
Country	Switzerland
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the good practice	The LEGO Serious Play methodology is a structured approach to consultancy and project planning the uses LEGO bricks and based on Lego Serious Play Methodology. It aims at developing a new application for the collaborative requirement analysis and initial design of web applications. Potentially, the same methodology can be expanded to the design of online learning applications.

Promoter of the initiative (person or institution that developed it)	NewMinElab - Università della Svizzera italiana
Target group	Entreprises, schools
Type of game used to implement the initiative and its use	Lego Bricks are used in a structured meeting, where, along different steps, lead by a facilitator, participants can work on collaborative requirements analysis and initial design of web applications
Contents included in the game	Handbook - Lego Bricks
Competences developed by playing the game	Collaborative requirements analysis and initial design of web applications.  Communication  Negotiation  Leadership
Educational and pedagogical approach	Collaborative
Number of users – players	There is not a limit, but it is good to be among 4 to 12 participants
Transferability – reusability	Potentially, the same methodology can be expanded to the design of online learning applications.
Sustainability of the game	URL's handbook is available online an different companies in Europe downloaded it and asked for more information, moreover a Transfer of Innovation project with the idea of transferring the method has been funded under the LLP 2012 program.
Impact (indicate quantitative and qualitative indicators used to assess it)	The method has been tested in several contexts
Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	The method has been evaluated through observation and questionnaires
Improvement areas	-

Further information/ Additional Comments	<p><a href="http://www.newmine.org/lego-real-time-web?parent=">http://www.newmine.org/lego-real-time-web?parent=</a></p> <p><a href="http://www.seriousplay.com/">http://www.seriousplay.com/</a></p> <p><a href="http://www.webatelier.net/url-presented-at-lego-architecture-exhibition">http://www.webatelier.net/url-presented-at-lego-architecture-exhibition</a></p> <p><a href="http://www.webatelier.net/reports">http://www.webatelier.net/reports</a></p> <p>Publications available (see list):</p> <p><a href="http://www.webatelier.net/publications#Industry_articles_a">http://www.webatelier.net/publications#Industry_articles_a</a></p>
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Title of the good practice	START UP
Country	Switzerland and European Countries
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the good practice	StartUp_EU is a project within the Lifelong Learning Programme of the Education, Audiovisual and Culture Executive Agency of the European Union. StartUp_EU is developing an innovative online game to allow secondary school students explore and develop an entrepreneurial spirit and attitude. The game is unique as it will ask students to not only come up with a great, creative idea, but show how they will turn their idea in to a real business, just like a real world entrepreneur.
Promoter of the initiative (person or institution that developed it)	The game will be the product of the EU project StartUp_EU, funded under the Lifelong Learning Programme – Grundtvig. Associazione seed is one of the partner of the project
Target group	Secondary school students (15-19 years old), teachers
Type of game used to implement the initiative and its use	social game
Contents included in the game	still under development, however the game will be a collaborative virtual game, based on different competition, each one with text to be

	studied, challenges, tasks to be done
Competences developed by playing the game	<p>Learning to learn</p> <p>Creativity through invention</p> <p>Raising interest in technology as a career choice</p> <p>Entrepreneurship</p> <p>Motivation to learn languages</p> <p>Communication in foreign languages</p> <p>Digital competence</p> <p>Sense of initiative and entrepreneurship</p>
Educational and pedagogical approach	collaborative game
Number of users – players	no limit
Transferability – reusability	it can be used in schools and in courses for the development of entrepreneurial attitudes
Sustainability of the game	the game will be available online for free
Impact (indicate quantitative and qualitative indicators used to assess it)	still under evaluation
Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	still under evaluation (the game is going to be tested and evaluated)
Improvement areas	-
Further information/ Additional Comments	<p>The game and the project is still under development</p> <p><a href="http://startup-eu.net/">http://startup-eu.net/</a></p>

Title of the good practice	eTreasure
Country	Switzerland
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the good practice	The game is a SMS based treasure hunt for tourists and kids to have a new way to experience a destination. Participants usually play in teams

Promoter of the initiative (person or institution that developed it)	Webatelier.net - Università della Svizzera italiana
Target group	Tourists and kids
Type of game used to implement the initiative and its use	SMS based treasure hunt
Contents included in the game	SMS with questions - guide for participants - guide for teachers
Competences developed by playing the game	Negotiation  Contents about culture, tradition and geography  Learning to learn  Language
Educational and pedagogical approach	SMS based treasure hunt
Number of users – players	No limit
Transferability – reusability	The game can be reused in different contexts, adapting contents
Sustainability of the game	The game can be played by asking the developer
Impact (indicate quantitative and qualitative indicators used to assess it)	The eTreasure was tested and evaluated with different target groups (University students, Primary and Secondary students, tourists)
Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	The game was evaluated by experts and by teachers involved and by university researchers
Improvement areas	more contents can be produced
Further information/ Additional Comments	<a href="http://www.webatelier.net/projects/archive?type=archive&amp;parent=0">http://www.webatelier.net/projects/archive?type=archive&amp;parent=0</a>  Publications available (see at: <a href="http://www.webatelier.net/publications">http://www.webatelier.net/publications</a> )

Title of the good practice	EGGS
Country	Switzerland
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the good practice	<p>EGGS aims at the development of a game-based online learning environment for English, articulated in independent and reusable units. Each online unit corresponds to the didactic modules of a classroom-based intermediate level English course, and is targeted to students studying for Bachelor degrees in the various cycles of Universities of Applied Sciences and universities. The main goal of the course is to allow students who already possess basic linguistic skills to reach level B2 of the European Languages Portfolio. The specific features of the project are the use of a didactic strategy based on narrative and role-playing and the attention to gender-related issues, which make EGGS online units an original and valuable support. EGGS will in fact develop 6 units, in which students will perform specific tasks within a story-based game (e.g., a thriller) which require the development of specific language skills (grammar, vocabulary, etc.), so to enhance situated and task-oriented learning. The units will be framed within a blended learning structure, in which 75 percent will be distance work monitored by a tutor and 25 percent reserved to the time spent in class.</p>
Promoter of the initiative (person or institution that developed it)	<ul style="list-style-type: none"> <li>- Laboratorio per applicazioni di eLearning - Università della Svizzera italiana - <a href="http://www.elearninglab.usi.ch/">http://www.elearninglab.usi.ch/</a></li> <li>- Lic.phil. hist. Germana D'Alessio, SUPSI (capo-progetto);</li> <li>- Hochschule für Gestaltung und Kunst Luzern;</li> <li>- Fachhochschule Solothurn Nordwestschweiz;</li> <li>- Istituto Svizzero di Pedagogia per la Formazione Professionale</li> </ul>

Target group	Students studying for Bachelor degrees in the various cycles of Universities of Applied Sciences and universities
Type of game used to implement the initiative and its use	Game-based online learning environment
Contents included in the game	game online (videos, texts, quizzes...)
Competences developed by playing the game	English language
Educational and pedagogical approach	Narrative and role-playing
Number of users – players	no limit
Transferability – reusability	The game based course can be used for English courses
Sustainability of the game	The game is available online (universities pay for using it)
Impact (indicate quantitative and qualitative indicators used to assess it)	The course is used by about 700 students a year.
Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	Evaluation by experts. Observation of the use
Improvement areas	-
Further information/ Additional Comments	<a href="http://www.usi.ch/en/container_visiting_scholars/container_research_project/research_dettaglio_progetto.htm?id=240">http://www.usi.ch/en/container_visiting_scholars/container_research_project/research_dettaglio_progetto.htm?id=240</a>

Title of the good practice	FAIRSHIP GAME
Country	EU LLP Project - FAIRSTART - associazione seed was partner of the project and the developer of the game
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the	The Fairship game is a board game developed inside an online training program for institutions taking care of abandoned children.

good practice	It has been developed by associazione seed to help staff of institutions to learn organizational issues and train the content learnt in the training program.
Promoter of the initiative (person or institution that developed it)	Partners: <ul style="list-style-type: none"> <li>- Aarhus Social and Health Care College, Aarhus (Denmark)</li> <li>- Ecological Green Foundation, Iasi (Romania)</li> <li>- ARGO Consultancy, Slagelse (Denmark)</li> <li>- Espiral, Entitat de Serveis, Girona (Spain)</li> <li>- Cyprus Adult Education Association, Latsia (Cyprus)</li> <li>- Università della Libertà del FGV, Udine (Italy)</li> <li>- "Die Berater", Vienna (Austria)</li> <li>- Kocaeli Valigi AB Projeler Koordinasyon Merkezi, Kocaeli (Turkey)</li> </ul>
Target group	Staff of institutions taking care of abandoned children
Type of game used to implement the initiative and its use	Board social game
Contents included in the game	An educational game and an handbook available to be printed in the training section of the web site
Competences developed by playing the game	Organizational competences and competences on taking care of abandoned children
Educational and pedagogical approach	Game based learning and eLearning
Number of users – players	No limit
Transferability – reusability	The game can be played in institutions all over the world taking care of children.
Sustainability of the game	The game and the training program was appreciated by users and raised such a interest that volunteers all over the world translated it into more than 20 languages
Impact (indicate quantitative and qualitative indicators used to assess it)	Questionnaires - observation - evaluation by experts

Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	Questionnaires - observation - evaluation by experts
Improvement areas	-
Further information/ Additional Comments	Link to the downloadable game: <a href="http://institutions.fairstartedu.us/?page_id=163">http://institutions.fairstartedu.us/?page_id=163</a>

Title of the good practice	Game for the LLP EU project ABACO
Country	European LLP project - Associazione seed was partner of the project
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the good practice	A game for teaching financial issues was developed in support to the training material of the project ABACO. The game can be played individually
Promoter of the initiative (person or institution that developed it)	Project supported by the European Commission. Coordinator: ANZIANI E NON SOLO SOCIETÀ COOPERATIVA – Italy
Target group	Migrants Micro entrepreneurs Unemployed Family households Elderly people
Type of game used to implement the initiative and its use	Virtual game
Contents included in the game	Virtual game - Teacher's guide
Competences developed by playing the game	Budgeting, financial skills, building assets, setting goals, overcoming financial obstacles
Educational and pedagogical approach	Game based learning
Number of users – players	No limit

Transferability – reusability	The game can be used for developing budgeting competences by micro entrepreneurs and household. Schools
Sustainability of the game	The game is available on request
Impact (indicate quantitative and qualitative indicators used to assess it)	The game was tested in different EU countries (partners of the project)
Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	The game was tested and evaluated by observation and questionnaire for the evaluation in different EU countries
Improvement areas	At the moment it is not a social game but a game to be played alone
Further information/ Additional Comments	<a href="http://www.abaco-project.eu/">http://www.abaco-project.eu/</a>

Title of the good practice	THE WAITER GAME
Country	Switzerland
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the good practice	The game is an online training tool, which has been developed to support the training activity of young learners in a hospitality professional school. It is based on simulation.
Promoter of the initiative (person or institution that developed it)	Università della Svizzera italiana -
Target group	Young learners in hospitality professional schools
Type of game used to implement the initiative and its use	Simulation game
Contents included in the game	Online game
Competences developed by playing the game	Different competences based on hospitality (thus also intercultural issues)

Educational and pedagogical approach	Simulation game
Number of users – players	No limit
Transferability – reusability	The game can be used in hospitality professional schools, but can be easily adapted to different topics
Sustainability of the game	The game is available online
Impact (indicate quantitative and qualitative indicators used to assess it)	Evaluation by teachers and users and experts.
Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	Evaluation by teachers and experts
Improvement areas	It is possible to implement more simulations, so teachers and students can adapt it
Further information/ Additional Comments	<a href="http://www.elearning4tourism.com/waitergame_tool/core/show_game.php?token=6d5882cd9b3dddc2ef936d2c4611b8ec&amp;lang=en">http://www.elearning4tourism.com/waitergame_tool/core/show_game.php?token=6d5882cd9b3dddc2ef936d2c4611b8ec&amp;lang=en</a>  Scientific paper: <a href="http://www.computer.org/csdl/proceedings/vs-games/2010/3986/00/3986a083-abs.html">http://www.computer.org/csdl/proceedings/vs-games/2010/3986/00/3986a083-abs.html</a>

Title of the good practice	LEARNING@EUROPE
Country	Italy, Switzerland and European countries
Brief description of the good practice. Why is it worthwhile to be considered a good practice? Highlight the strong points of the good practice	A 3d collaborative environment where students all around Europe can play together to learn contents about history of Europe
Promoter of the initiative (person or institution that developed it)	Hypermedia Open Center - Politecnico di Milano and Tech Lab Lugano - with the support of Accenture Foundation
Target group	Secondary school students
Type of game used to implement the	3d collaborative environment with different

initiative and its use	kind of virtual games
Contents included in the game	3d collaborative environment - guide for teachers and students
Competences developed by playing the game	<p>communication</p> <p>history</p> <p>language</p> <p>negotiation</p> <p>learning to learn</p> <p>technology</p> <p>intercultural communication</p>
Educational and pedagogical approach	Collaborative and competitive environment
Number of users – players	No limit
Transferability – reusability	The game could be used at home and by different target groups, as an example immigrants
Sustainability of the game	To play the game the promoter must be contacted
Impact (indicate quantitative and qualitative indicators used to assess it)	The virtual environment was tested with more than 30 schools all around Europe
Evaluation (indication the qualitative or quantitative methodologies/tools to implement it)	Evaluation by teachers and experts, observation, questionnaires, focus groups
Improvement areas	The game needs a good internet connection and is synchronous
Further information/ Additional Comments	<a href="http://hoc.elet.polimi.it/hoc/">http://hoc.elet.polimi.it/hoc/</a>

## Major findings of the interviews

According to guidelines, we contacted experts in game based learning initiatives in Switzerland and organized with 5 of them a face to face in-depth interviews (just in 1 case we had to organize an interview through skype video-call for logistic reasons). All interviews have been recorded and are available in full version.

In the following pages we will present the 5 expert profiles and indicate answers to questions indicating the respondent (es. E1= Expert n. 1).

### Expert 1 profile:

*Gender:* Male

*Age:* 53 years

*Years of Experience:* 27 years in simulation and gaming

*Job position:* Professor, head of consulting services, lecturer and researcher at Swiss Distance University of Applied Sciences (FFHS)

### *Professional experience and field of expertise:*

The interviewed person is Dipl. El. Ing. FH and a Professor at the Swiss Distance University of Applied Sciences (FFHS). He is head of consulting services, lecturer and researcher. Since 1984, he has been engineer, lecturer and researcher in industrial and academic organisations in the domains of e-Learning, Modelling & Simulation, Computer Aided Engineering, Creativity & Innovation management, E-Collaboration, Communities of Practice, Technology Enhanced Learning and Game & Simulation Based Learning. He is on the steering committee of the Swiss Engineering Association STV section of Basel and also founder and CEO of the Basle Institute of Technology and the Swiss Simulation Engineering GmbH.

### Expert 2 profile:

*Gender:* Male

*Age:* 36

*Years of Experience:* 13 years

*Job position:* Teacher, Reasearcher and Responsible of the research at DFA (Dipartimento Formazione e Apprendimento), executive director at seed.

### *Professional experience and field of expertise:*

The interviewed person has a master in Science of the Communication and Technologies of the Communication and a PhD obtained in the field of training design and digital technologies. He is active in research in education and digital media and game-based learning. He is project manager of different projects and

experienced field work in adult education, online education and social and international development.

#### Expert 3 profile:

*Gender:* Male

*Age:* 49

*Years of Experience:* 25 years in the sector of games

*Job position:* Owner of a store selling games

#### *Professional experience and field of expertise:*

The interviewed person started his activities and studies in the field of games from the curiosity to know more about games from other cultures and their history through written documents and books. In 25 years he collected more than 2000 books about games. He recently opened a shop to sell games and he is the owner.

#### Expert 4 profile:

*Gender:* Female

*Age:* 34

*Years of Experience:* more than 10 years

*Job position:* Post Doc Researcher at Laboratory of Visual Culture, SUPSI

#### *Professional experience and field of expertise:*

The interviewed person has a PhD done at Politecnico di Milano, Italy, about the design process of games. She collaborated in different projects about e-learning and serious games, also working in companies (Imaginary, Milano). As LCV she uses games in didactic and she studies game design and playful mechanisms of virtual games. Now she also works with transmedia and digital storytelling and interaction design.

#### Expert 5 profile:

*Gender:* Male

*Age:* 32

*Years of Experience:* 8

*Job position:* Post Doc Researcher and Project Manager at Istituto di Comunicazione Pubblica, New Media in Education Laboratory, Università della Svizzera italiana

*Professional experience and field of expertise:*

The interviewed person is a Post Doc Researcher at the University of Lugano (USI). He has expertise in informatics, computer graphics, Augmented reality and Human Computer Interaction.

**Here is a synthesis of the answers given by the experts during the interviews:**

- 1. Please analyse the implementation of social games as learning methodologies in professional contexts: last trends and evolution in the past decade.*

One of the interviewees experienced that the game industry is quite large but development is time-consuming and expensive. He thinks there is not high sale of such modules. The games/simulations in management have to cope with the fact that they have to appear serious and not only "games".

Another interviewee stated that playing has always been part of teaching children (primary education), but then tend to disappear from educational methods as learners grow old. Generally speaking he said that we think that "games" are not really "learning" but that, actually, playing IS learning. He thinks that in the last 20 years, games and simulations are coming back, partly because of digital media (and videogames), partly because we rediscovered the importance of "real" situations, and games are somehow "more real" than a speech or regular class. He thinks still, there are many problems in using games in adult education, which are cultural but also andragogical (how can we assess learning from games?).

A third interviewee described the modern evolution as started with civil simulations and role games that adapted to needs. As an example business games are used to make people know about the topics they have to work with. The aim of a game is to teach something. Sometimes games for enterprises are too specific. Then there are games that are simulations that rebuild some situations (political, historical...) where there are some variables that can modify the course of the events. At the beginning it was a market niche, then it become more popular in the 80's and 90's, but now they went back to being niche, maybe because they are too specific and complex, thus not attractive.

Another interviewee stated that in social game contexts there are specific learning dynamics of different kind. As an example negotiation of your own role, especially games that are developed in virtual worlds. Each one has specific features that reflects in roles and you can see outside the game. Participating in virtual worlds with analytical perspective/sight can allow you to understand behaviour and roles of the others and of you own (role playing). This can help to acquire negotiation skills and reach a common goal.

Now social games are more extended. The sense of the game is even more, because you feel as part of a community. So social games are used to improve participation and motivation (as an example systems like Endomondo or similar can be used to study behaviour...) . Also the fact of growing up (CRESCERE) and gaining points are features that are studied and exported to other sectors. They are very practical mechanisms that act subconsciously (especially for a generic user) and this can be useful for teachers. Once I did some tests to motivate and this works very well with Asian and North American societies where there is high competition.

One of the interviewees stated he has been working in virtual environments. Even if they are not actually games, there are many elements that connect those environments to games. The interviewee designed a virtual environment investigating about the use of objects and what are the benefits of using a virtual collaborative 3D environment. Virtual environments work on memory. Visual aspect is important and helps learning and collaboration in terms of engagement and memory. People feel part of a group.

*2. Assess the use of social games in the development of professional competences of adult professionals.*

One of the interviewees stated that social games are sometimes used but not so much and that some people are still sceptical. He also said that he thinks that not all content and goals can be covered with a game. Another interviewee declared to have never seen real results in practices even if I heard there are games functional and that were successful. He thinks that the word GAME sometimes is not adequate in this context because it is not fun, amusing and engaging. Another interviewee quoted as an example "World of Warcraft" as a social game and she thinks those kind of games can be important to see how people react in such social games in order to understand behaviour, how to manage people, learn about interaction competences could be useful also outside the virtual environment.

*3. What pedagogical and educational approaches are being used to develop social games addressed to professional competences development?*

One of the interviewees underlined the importance that with games you learn by engaging. Another one said he thinks games are mostly developed following an experiential learning approach, where the game is a sort of "experience surrogate": within the game's magic circle, the experience is real, however simplified with respect to real life. Another interviewee quoted pedagogy and psychology, while another one spoke about experiential learning first of all and constructional learning that is you learn through constructing concepts and you can do this through graphics and graphic environment in a 3D virtual environment.

4. *What is the added value and benefits (for the companies and the professionals) of using social games as a learning methodology in professional contexts?*

One of the interviewees stated it is a matter of artificial experience, with a deep understanding of complex situations. Another one said it is a “different” form of education, and it is engaging (when it works) and provides deep competence learning (and not surface learning). One of the interviewees highlighted the need that everyone believes in social games even if he is quite sceptical and thinks there is not an evident added value. The main problem he indicates is that often, if the goal is didactic, it precludes fun and amusement. Thus, if the games have low quality and are banal and not fun (he said he saw many of those bad examples), they cannot involve participants, even if he thinks that a game can pass concepts in a faster way, in a deeper sensational level, more than theory can do: learn by doing, many games. He said that he is not against social games in professional contexts, but it must be a very good game.

5. *Which professional competences can be developed through the use of social games?*

Most of the respondents stated communication and dynamic relations (especially using role games).

One of the interviewees said this depends on the game, but generally speaking using games can help working at the attitude level, not just content learning. One of the interviewees spoke about developing the ability to be focus oriented and managing priorities (once she developed a game for managers, in the game they created a sort of a tribe, a village without technology and there were different characters of the tribe and every 2 minutes a new character with different features was coming into the world and the player had to allocate people inside the community. It was a game to be used at the beginning of a lesson for then discussing resources management and priorities. Unluckily the interviewee said that she developed the game but she doesn't know how it was used then and if it had success). According to one of the respondents, games could be useful also to develop competences in problem solving and casualty management (you can test problems in a secure context) and mathematic and strategic thinking.

One of the interviewees highlighted the possibility of using games to help understand how to manage and share different kind of material (which can be important in international projects), in fact in games there are common objects, an ontology that everyone knows while in international project sometimes there are different objects that sometimes it is even difficult to name.

6. *Can you please identify success and unsuccessful factors that influence the use of social games as a learning methodology for professional competences development?*

Among the unsuccessful factors, three of the respondents stated a risk is that people don't get involved in the games or don't want to play or don't enjoy the game. Moreover one quoted technical knowledge as a risk. One of the interviewees listed the following aspects as critical: If the game is a good game, if it is really fun; If the trainer is competent with the game (not only with the content); If the trainer finds the game funny and is convincing in proposing it; If there is a good briefing (why we play the game, what we expect from it); If there is a good de-briefing (what we have learned, making it explicit); If the game is appropriate in terms of number of people playing; If learners are ready to play. Moreover two of the respondents said that an important aspect is that the game need to be not too complicated.

*7. What are the most important risks or barriers identified for the implementation of social games in professional competences development?*

On of the interviewees said a risk is the fact that trainers could not be able to use games for learning (knowing the game in depth, briefing and debriefing, assessment of matching between game and learning goals) and quoted difficulties in learners to accept to play a game. Another respondent spoke about the risk of spending a lot of money and time to produce something that then participants don't like. A third respondent said there is the risk that people get too involved in the game dynamic and they prefer to play than to work, thus they could go off topic. Again, people who could not have the motivation to play was again quoted as a risk or barrier.

*8. Are cultural, linguistic or technological issues barriers to expand the use of social games?*

Most of the respondents said that technology could be slightly a barrier. On the other side, according to 3 of the respondents, linguistic barriers could be present, but could be solved with a good design. Culture is seen as an issue more than a barrier.

*9. Which is the business potential of social games applied to the development of professional competences?*

Most of the respondents can see an hypothetical business potential, even if they see the problems of high development costs in relation to market and use.

*10. How can a social game based learning initiative approach the potential buyer/user?*

One of the respondents stated it could be important to involve a very big company to use a game (such as Siemens or Google...). One other highlighted the importance of declaring the target competences and learning goals + the resources needed

(especially time: learning through a game requires more time than with other methods, usually).

*11. What measures or actions do you recommend to enhance the use of social games in professional environments?*

Respondents gave the following suggestions: engage people by creating a sort of certificate/diploma; creating effective case histories (this depends on having good games); explaining and proving the learning value very well.

*12. What are the most relevant economic sectors and profiles of professionals using social games for professional competences development? Why?*

Respondents quoted military sector and economic sectors, and even something in the psychological sector (as an example for children with learning disabilities using as an example non verbal communication and graphics instead of other channels). One of the interviewees quoted services industries because they can improve communication and project management sector because they have to manage people from different places with the use of digital tools (chat...) so you have to "construct" a common "space" where to share data and communication.

*13. In the specific sector of international project management: would you be able to assess the current context? Are social games used as training resources? Why? Why not?*

Only one of the respondents was able to answer this question, saying that social games can be used as training resources.

*14. Can you please analyse the impact and potential of social games for the development of international project management competences?*

One of the interviewees said social games could be interesting in the tourism sector.

*15. What specific competences regarding international project management can be trained through the use of social games?*

Once again, most of the respondents stated that cultural issue, intercultural awareness and communication, and communication skills could be trained through the use of social games, but also flexibility, readiness to face the unforeseen, planning and strategy making. One of the respondents underlined the importance to create a common collaboration environment where to share materials, finding the right tool

that anyone can understand because most of the times there are communication problems due to previous knowledge and background.

*16. Could you share any good practices regarding game based learning initiatives in professional contexts? If possible, in the international project management field.*

Only one of the respondents said he used games for team building and for instructional design in international projects, even if he never thought about project management.

*17. Can you please make some specific recommendations for the development of the LPMnager social game? (contents, pedagogical approach, etc)*

One of the respondents suggested creating a game to be used also in class and offline, providing an online version (extended) because for most adults playing is already difficult (!!), but playing online can be just too much. Also, socializing in class is much stronger and direct. Another respondent suggested to refer to material such as "A guide to the project Management, Body and Knowledge" (PMBOK Guides). One of the respondent said that maybe a good game is a game where you don't know that you are playing (you create a path and people follow it without being aware). She also see interesting cooperative games where all have the same goal (as an example the game of the fireman) and players have to elaborate a strategy and everyone wins or loose (Also the game Alcatraz). There players can have a common specific goal and they have to find solutions, this way you can understand a lot of people. One last recommendation was to pay attention to the fact that social games sometimes requires some technological skills.

#### **4. Major findings of the questionnaires**

29 results to the online questionnaire were collected in the month of March 2013. The invitation to fill in the online questionnaire in Italian and in English was sent via email (with then a telephone call, in many cases) to different individuals and institutions dealing with international projects and involved in training actions/initiatives addressed to international project management professionals.

In particular we contacted human resources professionals in private companies, universities, NGO and institutions or associations of the former.

### Profiles of the people who answered the questionnaires

Even if all the respondents work in Switzerland, some of them have a different **nationality**, in particular 20 are Swiss, 8 Italian, 1 from Vietnam.

The range of the **age** goes between 26 and 68 years old, but most of the respondents are between 30 to 40 years old.

**Sectors:** most of the people who answered the questionnaire work in the field of education, training, adult learning, academic training (15 of them), technologies and IT (5 of them), health (2 of them), research and communication (2 of them), tourism (1 of the respondent), services to businesses (1 of the respondent), renewable energy (1 of the respondent), engineering (1 of the respondent), social assistance (1 of the respondent). Most of them work as trainers, and project managers, while 4 of them have **position** of management (group head, executive director, administrator), 2 of them are researchers, 1 consultant and 1 IT manager.

As main **training tasks**, they have quite different expertise, in particular: teacher at academic courses (4 of the respondents), trainer in the field of health (2 of the respondents), responsible for the employees training, training in ICT (2 of the respondents), trainer in lifelong training, design and building of training & development programmes for leaders, managers, individual contributors, and our sales people (e.g. product training), globally, training in research methods and communication and ICT, trainer in international projects, trainer for adult and at university, adult training in the tourism sector (using ICT), training for immigrants, trainer in the field of entrepreneurship, trainer to children and disabled people, trainer in the field of intercultural communication and project design, trainer in the field of human resources, training in the field of hospitality.

Most of the respondents have more than 10 years of experience, some of them (4) even more than 25. Only 2 of the respondents have less than 5 years of experience (3 and 4 years).

### Results of the questionnaire

Being asked about the **familiarization with the concept of social games**, most of the respondents said they are familiarized (80%).

About the **use of social games** to perform their professional tasks, 3% of the respondents answered they use them "Always", 10% "Usually", 33% "Sometimes", 30% "Hardly ever" and 23 % "Never". This means that 77% of the respondents have used a social game in training at least once. It must be said that respondents were selected

also because they had previous experience in game based learning and despite of this, less than 50% use games often.

Interviewees were asked to give examples of the games they used and here are their answers. Here are their input:

*"We publish technical questions to an online community, and help that community explore the correct answers (and explain incorrect responses)."*

*"I use offline social games for teaching entrepreneurship, or some simulations for research methods."*

*"I use class games to teach communication and for team building."*

*"I'm not sure it can be considered "Social Game", but sometimes I use Lego Serious Play methodology with managers."*

*"We used a blended training program (fairstart) that included a learning board game (the FairShip game) designed for people working in institutions taking care of abandoned children."*

*"I managed a project called Learning@Europe where students from all over Europe collaborated in a 3d environment with also games."*

*"I used a game "The Waiter Game" in a course about hospitality."*

*"I used some form of social games to promote comprehension about the importance of communication in diving activities."*

*"I used a game, ABACO, for training accounting."*

*"Learning@Europe, Stori@Lombardia, SEE (Shrine educational experience)"*

*"I developed a game for banks' employees (for training new employees) using PSP."*

*"I use social media in training, more than social games, but sometimes they include social games."*

*"Lego bricks and role games"*

*"A team game to stimulate entrepreneurial attitude."*

*"The game "BafaBafa" and social games developed by seed. Theatre and team building exercises. Outdoor activities."*

Respondents were then asked to say which **difficulties or barriers they find to use social games in adult training**. Those are percentages of responses according to possibilities, order from the most to the less selected:

- Lack of social games that answer the training needs of professionals: 48%
- Difficulties to validate and get recognition of the learning achieved through the use of a social game: 39%
- Lack of materials in my mother tongue: 30%
- Difficulties to integrate social games in the training programmes already established: 30%
- I felt I didn't have the necessary competences to exploit this methodology in the best possible way: 26%
- Lack of interest from the professionals: 22%
- The company considered that social games are not a professional educational methodology: 9%
- 7 respondents selected the option "Other" and they specified that:

*"Sometimes not everyone get involves in the activity", "Sometimes people take this kind of activity not very seriously because they think it is only a game" "I don't know advantages of using social games in adult training and who spoke to me about them, didn't convince me of their value in training", "participants need to be willing to play, otherwise they don't involve themselves and they don't learn", "It is difficult to make evident to participants the link between the game and learning goals", "The game must be easy to be used and well designed. After playing it is important to discuss learning outcomes".*

Respondents had to rate **usefulness of using social games** to perform their professional tasks. 13,3% of the respondents chose "Very useful", 30% "Rather useful", 33% "Useful", 13,3% "Not useful at all". 10% chose "Other".

**The impact of social games** in adult education was rated as follows:

- High impact: 17%
- Medium impacts: 53%
- Low impact: 30%

Among the **benefits social games can bring** to the professional competences development, respondents chose the following answers (ordered according to the times they were selected by respondents):

- 60% of the respondents chose: Enable professional training more attractive and motivating
- 53% of the respondents chose: Facilitate the task trainers working in the field of professional competences development
- 50% of the respondents chose: Development of competences that are not approached by traditional methodologies
- 33% of the respondents chose: Enhance the participation of adult learners in further education
- 33% of the respondents chose: Enhance more flexible and adaptable training contexts
- 10% of the respondents chose: Optimization of time and resources both for professionals and companies
- 7% of the respondents chose: Facilitate learner's access to further education:
- 26% of the respondents chose "Other" and explained with:

*"Actually I don't know because I've never participated to social games for the development of professional competences."*

*"Lego Serious Play allows participants, sharing of ideas, communication, innovation, dealing with 'hidden issues'."*

*"Sharing of experiences with other people coming from other places in a collaborative and competitive way."*

*"In some cases social games can help motivation and involvement, also because it is something new."*

*"They allow people to interpret different roles, thus helping the understanding of different point of view."*

Respondents were asked to give **recommendations**. Some of the answers stated respondents should know more about the project to give useful recommendations, the other answers are listed here below:

*"I think it could be useful to create a social game to help people strengthen their creativity and self-esteem."*

*"It is important to take into consideration the kind of target the game is addressed to, also in order to choose the best game dynamics."*

*"The game must be simple to be understood (in terms of rules) and focused on a topic."*

## 5. Major findings of the focus groups

The focus group took place in seed's offices on 18th March 2013 and involved 8 persons, professionals in International Project Management (two of them were also involved in the interviews for WP3).

The profiles of the participants are the following:

Participant 1: she holds a Ph.D. in Communication Sciences with a thesis on the role of tele-centers in socio-economic development. She also completed an executive master in Intercultural Communication and was for many years the executive director of a university lab managing project about ICT for Development. She also worked in some telecenters, as researcher and instructor, in Jamaica, Burkina Faso, Benin, Guinea and South Africa, and collaborated as online teacher for a distance university in Colombia. She is currently a Post-Doc researcher at the London Knowledge Lab, Institute of Education, University of London, working on a project about mobile learning for Community Health Workers in Kenya (mCHW).

Participant 2: he has a university degree in Informatics, and is IT consultant. He was involved in the last 10 years in different projects in developing countries (Ghana, Brasil, Mexico, Cameroon, Kazakhstan, Perù and Ecuador) and he took part to European Projects in the field of adult learning.

Participant 3: he has a diploma in mechanics and more than 30 years experience in software analysis and development in national and international projects. He is actually working as a freelance, helping companies to optimize management issues and get better web applications and sites. In the past he created a company, which became the number one software house in the niche of Microsoft Flight Simulator add-ons products, with thousands of customers all around the world.

Participant 4: she holds a Master degree in Communication Sciences and she have been working for more than 7 years as Project Manager in the field of education and training. She is currently involved in some European and international projects with a Swiss foundation.

Participant 5: she has a bachelor degree in Science of the Communication and she has been working in the last 4 years in projects about integration and communication. In the last 9 years, she has been involved in the development and implementation of international cooperation projects in developing countries.

Participant 6: she has a Master of Science in Business Administration at Virginia Tech (US) and she got graduated in Communication, Management and Health from the

Università della Svizzera italiana. She is project manager in different European projects in the field of education and training.

Participant 7: she is PhD Student at the NewMinE Lab - New Media in Education Laboratory - within the Department of Communication Science at the Università della Svizzera italiana (University of Lugano), Switzerland. Her background is in Latin American Languages and Literatures, and she graduated at the University of Bologna, Italy. Her final dissertation was focused on the rescue of the Mapuche indigenous culture, and was conducted in collaboration with the Universidad Católica de Temuco, Chile, and Gedes, a local NGO. After graduating, she has accrued almost three years of experience working in the Internet field, where she developed a great interest in online communication, participative web and e-learning. Her current research interests are in the ICT4D field.

*Major findings:*

First of all it must be said that the comments were very in line with the comments that came out from the interviews performed during WP3. Participants were quite in accord among themselves during the overall discussion.

Here is a summary of the major findings, according to the topics suggested in the guidelines:

*Training needs to perform their professional task:*

All the participants gave a lot of importance to the knowledge of the language to manage the project. In many cases it is English, but, especially in projects with developing countries, it is fundamental for the manager of the project to know the local language of the partners of the developing countries. The level of knowledge should be quite high.

*Most valuable competences to perform their task:*

- Patience
- Flexibility
- Being able to find alternative solutions
- Organizational capacities
- Empathy

*Labour market demands on their professional field:*

Answers were different according to the professional field of the participants. Participants working in the field of IT said that there is quite a market demand in their sector. About the field of international project management, all the participants agreed that there are in general many people working in the field, but the demand is still quite high and demands different kind of competences.

*Experience and use of social games for learning:*

Most of the participants don't have real experience in the use of social games for learning in the professional field, while some of them used sort of social games and elearning for learning languages (that are actually part of the competences needed in international project management).

*Other types of social and informal learning:*

All the group agreed that, in the professional field and in the field of international projects in particular, every day, even if we are not aware, we learn a lot from experience. Even during holidays if you are visiting foreign countries or when you read articles...

*Recognition and validation of competences in informal learning and contexts.*

In Switzerland in some fields there are validation and recognition of some competences, as an example if you have been a teacher for many years, they recognise you as a teacher. But generally speaking it is difficult to have official recognition and validation of competences in informal learning and contexts. After a long discussion, participants agree on the fact that it could be useful to be more aware and self conscious of learning acquired in informal contexts, but it is not so important to have official validation or certificates.

## **6. Conclusions and remarks**

The researches done in Switzerland in March 2013 for the analysis of the use of game based learning initiatives leads to some main conclusions:

- Desk research showed that research on games seems to be quite creative and active. There are some studies and publications in Switzerland proving that game based learning and initiatives applied to professional environment are existing practices with advantages and recognisable impact, even if some barriers can be highlighted and taken into consideration. 10 examples of games for education were selected. They are games produced mainly in Academic contexts or in LLP projects. Only few practices can be strictly considered as addressing international project management issues, but all the cases are

interesting from a point of view of game based learning and the development of specific competences.

- Interviews of the 5 experts in game based learning initiatives underlined the fact that developing game based learning initiatives can be expensive and time consuming. Even if games are recognized as fundamental and always leading to a form of learning, especially for children, there are only some sectors where they are actually used for adult learning in professional contexts (mainly army and economics simulations). Even if some are sceptical, many states that game based learning can be useful for creating a common working environment, for helping communication, intercultural understanding, negotiation, interactions, understanding of complex situations, creativity, management competences, problem solving, but also for sharing material. Among the unsuccessful factors that influence the use of social games as a learning methodology for professional competences development, most of the interviewed say that it is fundamental that participants are willing to participate and play.
- Results to the online questionnaire showed that most of the respondents (77%) have used a social game in training at least once. It must be said that respondents were selected also because they had previous experience in game based learning, but it must be highlighted that, even if they are familiar with social games, more than 50% said they never or hardly ever use them! Half of the respondents said that there is a lack of social games for professional competences development. Half of the respondents sees a medium impact of social games in adult education. Among benefits social games can bring for the professional competences development, 60% of the respondents thinks they can enable professional training to be more attractive and motivating, while 53% said it can facilitate the task of trainers working in the field of professional competences development and 50% the development of competences that are not approached by traditional methodologies.
- Focus group results were in line with the results of the interviews for WP3. For this reasons results about international project management needed competences we provide further results in the National Report for WP3. About the use of social games, most of the participants don't have a real experience in the use of social games for learning in their professional field.