

Project Acronym: ISE

Grant Agreement number: 325123

Project Title: Inspiring Science: “Large Scale Experimentation Scenarios to Mainstream eLearning in Science, Mathematics and Technology in Primary and Secondary Schools”

D6.1 Specifications on the Participatory Engagements Activities

Revision: V1.0

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Project co-funded by the European Commission within the Competitiveness and Innovation framework programme		
Dissemination Level		
P	Public	X
C	Confidential, only for members of the consortium and the Commission Services	

Task/WP related to the Deliverable: 6

Type ¹: R

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Approved by: INTRASOFT International

Contractual Date of Delivery to the EC: M3 **Actual Date of Delivery to the EC:** 09/04/2014

Abstract: This deliverable is aimed at providing a common operational framework to task 6.1 of the ISE project (Participatory Engagement Activities). The Project description of work has constituted the basic background on which the specifications have been developed, keeping in mind the need to make participatory activities coherent among themselves and integrated with other tasks of WP6, with other WPs and with the overall life-cycle of the project. The stakeholders' consultation activities will be interweaved with the implementation activities in the field (WP7), providing thus the process of further developing the proposed Inspiring Science Learning Design and Scenarios of Use (WP3) with input based on the experiences from implementation in the participating pilot communities.

Keywords: Community building, schools, teachers, stakeholders, networks, workshops

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¹ Deliverable Type: P (Prototype), R (Report), O (Other)

VERSIONING AND CONTRIBUTION HISTORY

Revision	Date	Author	Organization	Description
1	04/07/2013	Nikos Zygouritsas	MENON	
1.2	8/07/2013	Nikos Zygouritsas; Eric Chataigné	MENON, INTRASOFT	
1.3	15/07/2013	Nikos Zygouritsas, Claudio Dondi	MENON	
2	20/07/2013	Nikos Zygouritsas	MENON	Updated questionnaires
2.1	15/10/2013	Nikos Zygouritsas	MENON	Updated templates
3	1/11/2014	Nikos Zygouritsas	MENON	

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1 EXECUTIVE SUMMARY

This deliverable is aimed at providing a common operational framework to task 6.1 of the ISE project (Participatory Engagement Activities). The Project description of work has constituted the basic background on which the specifications have been developed, keeping in mind the need to make participatory activities coherent among themselves and integrated with other tasks of WP6, with other WPs and with the overall life-cycle of the project.

The modernization of science education will be researched in this task through a mechanism engaging a much wider range of voices in the debate over the future, in a series of participatory engagement activities involving all stakeholders (teachers and teachers' trainers, students, school administrators, curriculum developers, policy makers, eLearning tools developers). The stakeholders' consultation activities will be interweaved with the implementation activities in the field (WP7), providing thus the process of further developing the proposed Inspiring Science Learning Design and Scenarios of Use (WP3) with input based on the experiences from implementation in the participating pilot communities. The activities included here are of two types: a) online participatory engagement activities, and b) workshops.

a) Online participatory engagement activities: Online participatory engagement activities will be realized during the life cycle of the project, constituting an important tool in the project's strategy for stakeholders' continuous involvement in reflection and envisioning the effective integration of the use of eLearning tools in school practice.

The major online activity will be a large-scale online survey which will focus on stakeholders' and the wider public's perceptions and opinions about science teaching and learning both now and in the near future. A carefully designed questionnaire, including a mix of closed and open-ended questions, will aim to provoke and enable unconventional thinking about the future. The data produced will provide a solid basis for analyses and comparisons across countries, educational contexts, demographic characteristics, etc. The Inspiring Science Education User Communities and several other existing practitioner networks will be utilised for the promotion of the survey. Beyond the survey, online participatory engagement activities will also include other means of engaging the public, such as opinion challenges through key questions featured in popular websites, mechanisms (e.g., competitions) for the submission of ideas by teachers and teachers' trainers, spaces for online debate, etc. All these activities will be technically supported by the Open Discovery Space Portal.

b) Workshops: The first cycle of workshops will be a series of Visionary Workshops organised locally in the participating countries in the period M3-M8, in parallel with the process of the development of the Inspiring Science Education educational design. The Visionary Workshops will provide direct input from the stakeholders (teachers and teachers' trainers, students, school administrators, curriculum developers, policy makers, etc).

After this initial foundation-laying phase, two further cycles of workshops, the Practice Reflection Workshops, will further support the processes of designing the proposed approach with input from experience and knowledge gained through the large scale implementation (WP7). The Practice Reflection Workshops will be carried out locally in the countries participating in the implementation in the periods M13-M21, M25-M33, during the cycles of implementation of the Inspiring Science Education pilots. Finally a series of Summative Workshops will also be organised at the last phase of the project (M30-M35). After the completion of the last implementation cycle in the pilot sites (WP7 – Phase C), the last practice reflection workshops will take place, in the form of summative workshops in which the User Communities will recapitulate on the experiences and lessons from the long implementation of the support activities (providing input to the Validation process (WP8)). The summative workshops will serve as the participatory engagement tool in the final process. The workshops will be organized by the National Coordinators for each of the participating countries, according to a common generic procedure developed within this task (D6.1, Specifications and Reports of the Participatory engagement activities, first version available in M3), which however will allow for flexibility to adapt to a variety of local circumstances.

2 OVERVIEW OF COMMUNITY BUILDING ACTIVITY

Within the broader scope of WP6 – progressively build the community of users, policy makers and, more generally, stakeholders who will accompany the development of the project from the early phases of Learning Design and Scenarios of Use (WP3) till the full development of the project results into long term sustainability planning – participatory engagement activities – is mostly open and dialogue-centred. It is through this task that stakeholders, even those not necessarily participating in the large-scale pilots, will have a voice to influence the project's activities, a gateway to participate in other work packages, and a possibility to take part in the exploitation of project results. The task 6.1 includes two groups of activities:

a) Online participatory engagement activities: Online participatory engagement activities will be realized during the life cycle of the project, constituting an important tool in the project's strategy for stakeholders' continuous involvement in reflection and envisioning the effective integration of the use of eLearning tools in school practice.

The major online activity will be a large-scale online survey which will focus on stakeholders' and the wider public's perceptions and opinions about science teaching and learning both now and in the near future. A carefully designed questionnaire, including a mix of closed and open-ended questions, will aim to provoke and enable unconventional thinking about the future and about the ways everyday school practices can be enhanced by the adaption of elearning tools. The data produced will provide a solid basis for analyses and comparisons across countries, educational contexts, demographic characteristics, etc. The Open Discovery Space User Communities and several other existing practitioner networks (in cooperation with other European projects like we.learn.it and GoLab) will be used for the promotion of the survey. Beyond the survey, online participatory engagement activities will also include other means of engaging the public, such as opinion challenges through key questions featured in popular websites, mechanisms (e.g., competitions) for the submission of ideas by teachers and teachers' trainers, spaces for online debate, etc. All these activities will be technically supported by the Open Discovery Space Portal and will be clearly visible on the Inspiring Science Education website (inspiringscience.eu).

b) Workshops: The first cycle of workshops will be a series of Visionary Workshops organised locally in the participating countries in the period M3-M8, in parallel with the process of the development of the Inspiring Science Education educational design. The Visionary Workshops will provide direct input from the stakeholders (teachers and teachers' trainers, students, school administrators, curriculum developers, policy makers, etc).

After this initial foundation-laying phase, two further cycles of workshops, the Practice Reflection Workshops, will further support the processes of designing the proposed approach with input from experience and knowledge gained through the large scale implementation (WP7). The Practice Reflection Workshops will be carried out locally in the countries participating in the implementation in the periods M13-M21, M25-M33, during the cycles of implementation of the Inspiring Science Education pilots.

3 SPECIFICATIONS OF VISIONARY WORKSHOPS (VWS)

3.1 Aims of the Workshops

- 1) To reflect on how new technologies and elearning tools change everyday school practices and the role of the teacher as provider of knowledge
- 2) To reflect on how the teachers' participation in the activities of ISE will foster change and innovation both on a personal – professional level as well as on institutional – school level
- 3) To collect stakeholders views on the future of education and the specific role that could be played by the use of existing eLearning tools and resources
- 4) To collect feedback on the pedagogic, organisational and technological elements of the model initially proposed by the ISE project and to use this feedback in the development work taking place in year 1, especially as far as the pedagogical framework is concerned
- 5) To inform national audiences on the ISE project proposal and to contribute to create favourable institutional conditions for the Large-scale Piloting, thus contributing to Dissemination activities of WP9
- 6) To establish a productive dialogue with a set of national stakeholders who will accompany the development of the project in its different phases

3.2 Time and place of Workshops

Two Visionary Workshops are to be organised in each of the 14 main piloting countries (The Netherlands, Greece, Croatia, Finland, France, Ireland, Romania, Belgium, Italy, Germany, Spain, Bulgaria, UK and Portugal).

The DoW indicates months 3 to 8 to organise the Visionary Workshops, it is strongly advised to organise the first V.W. in the period September - December and the second in the period January - February 2013.

3.3 Format

The first cycle of workshops is a series of Visionary Workshops (following a three-step process) organised locally in the participating countries in M3-M8. The Visionary Workshops will provide direct input from the stakeholders (teachers, teacher trainers, school administrators, curriculum developers, policy makers, etc). Visionary workshops can be arranged ad-hoc by National Coordinators (NCs) or be collocated with other “important” relevant events (e.g. exhibition, training event, conference).

The proposed format is a half-day workshop articulated in 3 phases sessions:

Phase A : :	<ul style="list-style-type: none"> • To introduce the project and the participants • To reflect on how new technologies and elearning tools change everyday school practices and the role of the teacher as provider of knowledge • To reflect on how the teachers' participation in the activities of ISE will foster change and innovation both on a personal – professional level as well as on institutional – school level • • To introduce an example - “best practice” in the application of elearning tools • To explore the future (brainstorming, open discussion, space for provocatory and divergent hypotheses)
Phase B:	<ul style="list-style-type: none"> • To design their own scenario of using innovative elearning tools and resources focusing on the way their activities will expand their

	opportunities for professional development
Phase C:	<ul style="list-style-type: none"> To discuss key issues to be considered further and inputs for project development To enlarge the national stakeholders constituency: identifying institutions, schools and people who should be involved to join the Community

On average 15 - 25 participants are expected in each workshop, but what is really important is that a growth in the number of participants can be observed between VW1 and VW2 in each country. A threshold level of 15 participants should be achieved already in the first VW1, while the participation of more than 40 stakeholders is not recommended in this kind of workshops.

Detailed guidelines on the proposed three-step scheme for the organisation of the Visionary Workshops

Phase A - Vision building Workshops (1 hour)
<p>The workshop shall be organized with the support of the National Educational and Training Authorities. The Visionary Workshops could be integrated in existing large scale national events (like teachers conferences, exhibitions) or in the framework of existing training activities (usually organised at local level). They can also be stand-alone events, focusing on specific areas of interest. In such cases it could be designed around a specific event. Each Visionary Workshop has to be designed/developed around a success story, which could be the story of an innovative teacher who is using existing eLearning tools and resources in his/her everyday practice. Such teachers have to be located (e.g. from the existing networks like Galileo Teachers, teachers participating to the CERN programme, teachers from the ESA network or teachers working with ISE partners on other projects like OSR and GOLab) to be invited to present their exemplary cases, how they integrated the technology, what changes they noticed in student learning what changes they have noticed in their teaching competencies and what benefits do innovative practices have over traditional practices. Following the presentation of the teachers the NC representative must coordinate a discussion on the story/ies presented in order to:</p> <ul style="list-style-type: none"> highlight the potential of the use of existing eLearning tools and resources in school practice; identify the pedagogies used in the scenarios; develop the scenario/s into a workshop theme; construct a Q&A about problems/challenges and solutions; develop further themes emanating from the scenario that could be developed into other workshops. reflect on how new technologies and elearning tools change everyday school practices and the role of the teacher as provider of knowledge
Phase B - Turn ideas to implementation scenarios (1,5 hour)
<p>After the first phase of the Visionary workshop, it should be asked to participants to further develop their own scenario of using innovative elearning tools and resources focusing on the way their activities will expand their opportunities for professional development in teams allowing for collaborative evaluation in the topic of their interest, by using the existing eLearning tool and resources introduced as success story or another one they know. Participants should reflect on how their participation in the activities of ISE will foster change and innovation both on a personal – professional level as well as on institutional – school level</p>
Phase C – ISE in detail (30 minutes)
<p>Teachers are presenting their own scenarios with the use of existing eLearning tools and resources. National Coordinators shall coordinate the discussion on specific requirements that must be met in order</p>

these scenarios to be implemented in the school settings. National Coordinator presents a series of possible services that could be offered to schools (crowd support, training, etc).

The proposed organisation of Visionary Workshops is indicative and can be adjusted by National Coordinators. National Coordinators could organise online workshops or adjust the duration of Workshops according to their time restrictions (from organising a multi-session Workshop in one day or extending it having a monthly duration, e.g. a Summer Course having a preparation phase of two months).

The outcomes and findings of the Visionary Workshops in each country will be reported to the National Coordinators at the end of M10. The participants of the visionary workshops will fill a questionnaire and the National coordinators will consolidate a national synthesis report concerning the open answers, which will be sent to MENON.

3.4 Who is in charge

In principle Visionary Workshops are organised by WP6 core partners in collaboration with National Coordinators; even when National Coordinators have no specific resources in WP6, their collaboration in organising the workshops (finding the venue, identifying and inviting relevant stakeholders in the country) is fundamental. WP6 main partners will guarantee the presence of at least two persons to run the sessions (in English) but the presence of the National Coordinator is also necessary along the half-day if English cannot be systematically used as a working language in consideration of the target groups. Other ISE partners representing the WPs that are more directly interested in the results of the Visionary Workshops are welcome to join, but WP6 core partners will guarantee reporting of the event.

List of National coordinators

COUNTRY	National Coordinator
Belgium	ATIT
Bulgaria	BREN
Croatia	CARNet
Finland	UHELSINKI
France	EPS/EA
Germany	UBER
Greece	IEP/EA
Ireland	DCU
Italy	CNR-ITD/ USGM
Netherlands	UTWENTE
Portugal	NUCLIO
Romania	SIVCO
Spain	UNIR
UK	Cardiff

3.5 Reporting

A short report will be produced on each Visionary Workshop by the core WP partners present at the event, if necessary with the support of National Coordinators to overcome possible language barriers. The report will be based on the template of the work package leader. Reporting should be produced within two weeks from the date of the VW.

4 SPECIFICATIONS OF PRACTICE REFLECTION WORKSHOPS (PRWs)

4.1 Aims of the workshops

- To stimulate reflection and formative evaluation on pilot activities among participants and between participants and stakeholders representatives in the countries.
- To identify positive and transferable results and difficulties in the implementation of the ISE model.
- To propose improvements in the subsequent phase of development, and to identify criteria for new schools to join the piloting and new stakeholders to join the community.
- To contribute to Project Evaluation activities
- To evaluate the quality of their own thinking and products for feedback, reflection, and revision.
- To reflect on how their participation in the ISE activities has changed their everyday school practices and the role of the teacher as provider of knowledge
- To reflect on how their activities in the context of ISE has expanded their opportunities for professional development

4.2 Time and place of workshops

According to the DoW four practice reflection workshops are to be organised in each of the 14 main piloting countries respectively in M13-M21 and M25-M33. It is highly recommended that practice reflection workshops are organised on a regular basis in order to keep participating schools and teachers active and reflective of their process.

4.3 Format

The proposed format is a full day workshop articulated in four sessions:

- | | |
|------------|---|
| Session A: | Short update of ISE project development internationally and in the host country, including its relation with the national context. |
| Session B: | Detailed reporting from pilot schools, focussing on achievements, difficulties encountered and solutions envisaged/applied, new ideas and new development emerging. |
| Session C: | Open discussion and synthesis of points of action proposed. |
| Session D: | ISE future steps in the country: how to enlarge the group of piloting schools and the ISE stakeholders' community. |

An average of 25 participants is proposed but larger events are advised in countries in which many schools participate and in the third year of the project. In this case Session C should be run in parallel groups of not more than 30 participants.

4.4 Who is in charge

Participatory Reflection Workshops are organised by National Coordinators in collaboration with WP6 main partners. In practice the same distribution of roles as for Visionary Workshops will apply.

In some cases the support from WP6 partners might be provided through the use of virtual communication tools.

List of National coordinators

COUNTRY	National Coordinator
Belgium	ATIT
Bulgaria	BREN
Croatia	CARNet
Finland	UHELSINKI
France	EPS/EA
Germany	UBER
Greece	IEP/EA
Ireland	DCU
Italy	CNR-ITD/ USGM
Netherlands	UTWENTE
Portugal	NUCLIO
Romania	SIVECO
Spain	UNIR
UK	Cardiff

4.5 Reporting

A short report will be produced for each practice reflection workshops, according to a format proposed by MENON, by the core WP6 partner representatives presented at the workshop. National Coordinators will be asked to collaborate when language barriers exist. Reports will be produced within two weeks from the data of the practice reflection workshop.

5 REPORTING TEMPLATE OF VISIONARY WORKSHOPS

Title	
Country City/Region	
Working language	
Start/End Date	
Organizing Institute	
Coordinator name and email	
Activity Form	
Activity Type	
Total number of teachers/schools	
Implemented eLearning tools	
Brief description	
Learning outcomes	
Website	
Photos or other relevant material	
Event agenda	

6 INDIVIDUAL QUESTIONNAIRE FOR PARTICIPANTS OF VISIONARY WORKSHOPS

This questionnaire is designed for the participants of the ISE visionary workshops. Your opinion is very valuable to us.

Please take some time to fill in this questionnaire in order to share your views with us. This should not take more than 15 - 20 minutes.

Thank you, the Inspiring Science Education team

Fields marked with * are required

Last name *

First Name *

email address *

Country *

Date and place of the visionary workshop *

1. Do you use eLearning tools in your school? *

- Yes
- No

2. How often do you use eLearning tools in your school? *

- Once a week
- Once a month
- More than once a month
- N/a
- Other:

3. Do you cooperate with other teachers during the implementation of activities which include the use of eLearning tools? *

- Yes
- No
- N/A

4a. Is it easy to find eLearning tools on the Internet? *

- Yes
- No

4b. Why? Please indicate.

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5a. Would it be useful to have a digital library with educational eLearning tools? *

- Yes
- No

5b. Why? Please indicate. *

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6. Importance of the way eLearning tools are organised in such a digital library. *

1. not important at all - 4. of primary importance

	1.	2.	3.	4.
Based on the curriculum (and per chapter according to the school book)				
General theme				
Age group				
Based on the object type (application, video, file)				
Key words				
Tags				

7. Would it be useful to have access to educational activities that include the use of eLearning tools or would you prefer to create your own? *

- Have access to educational activities
- Have the possibility of creating my own educational activities
- Both

8a. Would it be useful to create educational activities with the use of eLearning tools in cooperation with various experts? *

- Yes
- No

8b. Why? Please indicate. *

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9a. Which do you believe are the most important problems that have to be dealt with in order to integrate the use of eLearning tools in the classroom and in learning activities in general? *

1. not important at all - 4. of primary importance

	1.	2.	3.	4.
Lack of infrastructure				
Teachers' lack of acquaintance with the use of ICT				
Not enough teaching time - the organisation of the curriculum				
Number of students in the classroom				
Lack of equipment for teachers				
Lack of cooperation				
Lack of motivation in teachers				
Lack of motivation in students				
Teachers' will to learn				
Students attitude				

9b. Please indicate any other important problems overlooked in question 9a.

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10a. Which do you believe are the most important ways to overcome these problems? *

1. not important at all - 4. of primary importance

	1.	2.	3.	4.
Money for education				
Teachers training				

	1.	2.	3.	4.
More sufficient infrastructure				
More teaching time				
Motives for teachers				
More flexible curriculum				
Coordination between teachers, principals and school counselors				

10b. Please indicate any other important ways overlooked in question 10a.

.....

11. In how many hands-on workshops for the use of eLearning tools have you participated in the past? *

- None
- 1 or 2
- 3 or 4
- 5 or more

12. In what ways do you believe that new technologies and eLearning tools change everyday school practices? *

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13. In what ways do you believe that new technologies and eLearning tools change the role of the teacher as provider of knowledge? *

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14. In what ways do you believe that the use of innovative eLearning tools and resources will expand your opportunities for professional development? *

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15. I would like to be kept updated on the next steps of Inspiring Science Education. *

- Yes
- No