

# Intellectual Output 1

## A3 Course Definition & Training Methodology



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# 1. Introduction

## 1.1 The scope of the project

On the point of creativity and innovation being the roots of European cultural and socio-economic growth, respecting others' work becomes a far-reaching need both for professional and personal development of individuals (EUIPO, 2017). On the other hand, nowadays that online sharing of information is rife, one cannot help but wonder whether people are aware of proper ways to attribute others' ideas along with the necessity to reap the benefits of intellectual potential given the fact that most innovations are now highly related to technology.

Au contraire, the absence of Intellectual Property (IP) protection of educational materials and innovations – with online learning only deteriorating the situation – reveals a significant problem in many European countries. In fact, while uncontrolled access is given to educational resources across the Web, the majority of learners are not aware if IP is implemented in their work as well as ways to protect their own intellectual property (Evans, 2016).

On the grounds that STEAM comprises continuous innovation, invention, discovery and understanding of technical knowledge that lead to (commercial) products, the protection of inventions becomes more and more complex (National Inventor Hall of Fame, 2019). Conceivably, this reveals the rationale behind the lack of IP in school education. In particular, recent research has depicted the knowledge and implementation gaps related to IP, resulting in lack of knowledge about working definitions of IP in the field of Arts. In conjunction with the fact that most European countries are not in position to capture the relevance of IP in STEM, the need to integrate IP in STEAM curricula becomes even more significant (Office for Harmonization in the Internal Market, 2015).

## 1.2 The project objectives

In order to address the lack of IP knowledge resulting in inefficient implementation of IP in the world of inventions, the IPinSTEAM project aims at promoting IP strategies in schools and more specifically in STEAM education under the prism of confronting this issue from its roots. To achieve generating awareness about Intellectual Property across European educational institutions, the project will develop an innovative ICT-enabled training package focused on the needs of K-12 STEAM teachers. Towards that purpose, the project will develop and validate training materials tailored to the real needs of school teachers, educational institutions and STEM departments towards giving shape to the integration of IP concepts into STEAM curricula.

## 1.3 The project target group

The **direct target group** of the project involves STEAM teachers, mainly primary school and lower secondary school teachers (ages up to 12). They will learn the key concepts of Intellectual Property along with useful information and guidelines about ways to efficiently implement IP strategies in STEAM-related subjects and integrate them into their curricula. By all means, all school STEAM departments can be regarded as direct target group of the project.

The **indirect target audience** of the project comprises:

- Students up to 12 years old
- Schools and educational institutions teaching STEAM-related subjects
- Law schools and departments
- Policy makers responsible for the design and implementation of actions relevant to ICT strategies for educational purposes
- Other institutions or organizations that are active in school education
- Authorities or organizations that can organize specific actions in order to contribute in the development of high-quality education
- Networks, voluntary associations and other NGOs that are active in school education
- Research communities active in the broader field of lifelong learning
- E-learning enthusiasts

# 2. Training Course

## 2.1 The scope of this document

Teachers, and in general educators, develop practices of teaching with which they feel comfortable and confident. When they mature it is usually difficult to change them, or they feel insecure to adopt innovative methodologies, technologies or practices such as the educational approach and activities to be developed and proposed in IPinSTEAM. However, when asked in surveys, most teachers express the willingness to adopt new methods and models of teaching, that have proven their effectiveness and that lead their students to better results in terms of concept understanding, content knowledge and behaviour or attitude change. A required condition is teachers to have comprehensive training opportunities so that they are thoroughly introduced in practicing these new methods or subjects before applying them to their everyday classroom teaching. This is well inline with the survey results of the needs validation conducted in the framework of IPinSTEAM.

In particular, the survey that was conducted in partner countries shows that teachers in schools, of STEAM or related subjects, consider that they have overall knowledge of what copyright, patent or trademark is and how they are used. However the majority of them express the view that IP related

education in STEAM is important to be integrated in teaching and therefore an offering of a training course is welcome and anticipated. Furthermore, it is also expected that such a course as well will facilitate or encourage the introduction of IP related teaching subjects and practices in school curricula and their proper use by both teachers and students.

In this respect IPinSTEAM aims to develop and offer a comprehensive training programme, encompassing multiple modalities that include support educational materials, example best-practices and resources integrated in an online platform, hands-on practice workshops, that will not only help teachers to explore, adopt, implement and improve an already made educational activity or practice but also assists them to gain confidence and experience towards developing their own ones individually or in collaboration with other teachers and educators.

Herein we discuss and propose the main design considerations along with general and specific recommendations of features that the IPinSTEAM Training Course can incorporate. We also propose a general pedagogical framework on which the development of lesson plans, tutorials or educational activities can be based.

## 2.2 Training course design, objectives and recommendations

In general, when developing educational activities, a training programme or curriculum in partnership it should be emphasized that alongside the process of how an activity is developed, key aspects of the activity itself like aims, learning outcomes, content, teaching and learning methods and assessment methods also need to be considered. Usually in literature (for example see Plomp 2009 and van den Akker 2007) an extended version of key aspects of an activity, and in general the curriculum, is shown in the shape of a spider web, thus metaphorically illustrating that placing additional focus on one of the key aspects this would inevitably influence the shape and the strength of the whole web.

The key aspects of the curriculum are: rationale, aims and objectives, content, learning activities, teacher role, materials and resources, grouping, location, time and assessment. We adopt this spider web model and we suggest that all these dimensions should be clearly defined, be in balance and be addressed in the developed programme and its lesson plans. We believe this will strongly assist and facilitate teachers in better embracing the training concept and its objectives.

Regarding the general process of educational design or development cycle of an activity we follow an approach that focuses on three phases: the analytical, the prototyping and the assessment phase (Plomp 2009). In the former phase teachers are introduced to an example, they practice it taking the role of learners and analyse it in a reflective and collaborative way. In the second phase, the prototyping, they envisage how to implement the activity with their students, taking the role of critical observers. In the last phase, they assess their findings, collaboratively reflect on the results and outcomes. The whole process is implicitly of iterative nature and provide a well-founded overall framework for progressive and gradual acquisition of the proposed training modules or best-practices or the development of new ones. These three phases may not be explicitly imposed or practiced, for example in the mode of three separate distinct workshops, but they can be implicitly infused in the

programme in a single session of hands-on training by well selected and designed learning modules with best-practices and example cases.

In this context, we recommend offering teachers dedicated workshops to help them to pre-practice by following examples, develop further and reflect on their practices, their understandings and past experiences, collaboratively reflect on the proposed instruction models, their main advantages and the common mistakes, etc. These workshops, and as a whole the IPinSTEAM training programme, can be offered in parallel or within the framework of existing professional development programs, or even better in synergy with other similar projects and initiatives so that more teachers from more schools can be involved. They can also be grouped into consecutive cycles in line with the school year schedules in each country where workshops of training activities are implemented first in a small number of school teachers, feedback is collected, and findings are shared with other partners in different countries. The general methodology and proposed guidelines are discussed further in the respective section of this document.

In the framework of the IPinSTEAM project approach and its main goals, the training course is recommended at furnishing, touching upon or strengthening the following educational objectives:

- To enable teachers trying new ideas in practice as a means of improvement and as a means of increasing knowledge about IP related subjects and how to facilitate or achieve their integration in curriculum teaching and learning opportunities within STEAM.
- To raise their level of critical thinking about IP in teaching and learning, and in general about their practice or commonly adopted methodologies in STEAM.
- To engage them in collaborative and reflective implementation and development of practices of IP in school education.
- To facilitate the adoption of innovative approaches or topics in teaching and learning in general.
- To emphasize the importance of sharing experience, expertise and valuable outcomes with other teachers in their community and beyond, at the same time taking into account how IP is related to that.
- To strengthen their capacity and confidence to become active change agents on IP related issues and common practices.
- To empower them in engaging in similar approaches, initiatives or projects for their particular needs or interests.
- To strengthen their capacity to become educational content creators of materials or activities similar to the ones developed in IPinSTEAM.

As per proposal, the training course to be offered to teachers is recommended to include practical learning scenarios, lesson plans ready for in-classroom implementation and example templates that facilitate new content development and integration of IP-related subjects in school curriculum. Namely, the subjects of **copyright, trademarks, patents and designs** will be exemplified and integrated in STEAM teaching, such as in:

- Physics, and in general Natural Sciences including Chemistry, Biology, Geology/Geography
- 3D printing, and in general rapid prototyping technologies including 3D scanning, laser cutting
- Robotics, and in general IT including Informatics, Computer Science, Internet of Things
- Environmental engineering, and in general Environmental Education, Ecology/Sustainability
- Social studies, and in general Arts and Humanities

- Mathematics, with a broader scope including Statistics, Big Data

Taking into account the survey of teachers on needs validation we propose that above four main categories/subjects of IP (**copyright, trademarks, patents and designs**) will be addressed in four separate training modules (each subject corresponding to a module). Each module will consist of several lesson plans or educational scenarios covering or be exemplified in as many STEAM topics listed above as possible. As discussed in the following section we propose the lesson plans to be developed according to a template that facilitates inquiry-based teaching and learning.

In each module more specifically we propose that the following learning topics will be included. For example in Module 1 – Copyright these are:

- What is copyright?
- Do we need copyright?
- How to use copyright? (from the perspective of creator)
- How to use copyright? (from the perspective of user)
- Which are the benefits of copyright?

If we consider to develop and offer at least one lesson plan (or in general tutorials/educational activities) for each subject and STEAM topic then in total we envisage about six to ten of them per module. A similar structure can be followed for the other modules as well.

With respect to the online training platform/virtual tool, which is the subject of IO2, we propose its content, structure and action flow to follow closely that of lesson plans so that teachers but also trainers can easily use it and interchange between online and offline training modalities. As an online tool it can offer greater possibilities of incorporating interactive and engaging dynamic features compared to paper or ready-to-print lesson plans.

We conclude this section by listing and elaborating on specific features and characteristics that we consider important and thus we recommend that the IPinSTEAM course and accompanying virtual tool should incorporate.

- Emphasis on experiential aspects, practical hands-on training and implementation rather than focus on theoretical knowledge acquisition.
- Overall inclusive approach. The course programme and its activities should attract and involve teachers of all STEAM related disciplines, levels of experience, gender, social or ethnic backgrounds.  
Specifically:  
Gender balance. Training examples, proposed educational activities, projects or ideas should attract the interest of teachers and students of both genders avoiding common stereotypes.  
Social inclusiveness and integration. Similarly they should be accessible and attract the interest of teachers or students of social or economic disadvantaged areas or in rural or distant sites.

- Multidisciplinary/interdisciplinary collaborative approach. The course and its activities should address or involve teachers of multiple scientific fields.
- Project-based/Inquiry-based learning approaches. The course and its activities should preferably be structured or follow inquiry-based methodological/pedagogical processes with steps or phases and furthermore put emphasis on problem solving, creativity and collaboration.
- Modular structure. The course and its materials should be modular and staged so that it can be followed by teachers with different level of needs, expertise, experience etc.
- Low-threshold use of ICT technologies. The online resources to be proposed and the virtual tool should enhance and complement traditional teaching and learning and promote digital literacy of both teachers and students without any prerequisites of prior technical knowledge, requirements for pre-installed software packages etc.
- Asynchronous, open and online. This will greatly facilitate the participation of schools and teachers from distant areas that can follow the educational programme at their own time, pace and frequency.
- Effective game mechanics or interactive features. Incorporation of basic gaming elements in the offered training modules and activities of the IPinSTEAM virtual tool (e.g. star rating, award scheme of badges or certificates, scoreboard, wall of fame etc.) greatly attracts the interest of both teachers and students. However, this should be well-balanced and purposeful so to retain interest, enhance conscious learning and influence behavior or attitude change.
- Subject correctness. Training modules and accompanying materials, including links to online resources, public videos, instructions etc, should not create gray areas or matters that may create misconceptions to teachers or students, promote bad practices etc.

## 2.3 Pedagogical framework of educational scenarios/lesson plans

With respect to overall pedagogical framework, the main approach proposed to be adopted by IPinSTEAM is project-based teaching and learning. We consider also implementing inquiry-based methodology which is also commonly utilized by STEM teachers for effective learning. One may draw distinctions between project, inquiry or problem-based learning, however in reality the differences are minor, and all have proven their efficacy in comparison to traditional lecture and worksheet-based forms of teaching and learning. Great projects grow from inquiries in order to solve problems. School students and In general learners found them highly engaging because they are conducting work that is meaningful to them and can connect to real life problems and challenges. Learning begins with a problem to be solved, and the problem is posed in such a way that learners need to gain new knowledge before they can identify or solve the problem. Rather than seeking a single correct answer,

they interpret the problem, gather needed information, identify possible solutions, evaluate options and present conclusions. The whole process gives many opportunities to connect to real-life and real-world challenges, work across disciplines, learn to function and collaborate in teams, communicate their findings and solutions, engage with their peers, experts and communities.

In the following we first present in detail a generic inquiry-based model based on five main phases (Orientation, Conceptualization, Investigation, Conclusion and Discussion) that may be useful teachers to follow in case of more STEM related educational activities. A consolidated variation of this is also adopted in the structure of the proposed lesson plan templates.

It should be noted that this is a proposed structure and not exact content description at the current point of the project. During the course of the project any necessary alterations, adaptations, improvements and extensions will be added.

### **2.3.1 Project and inquiry-based pedagogy**

Inquiry-based learning (IBL) is an educational flexible strategy with phases that are often organized in a cycle and divided into subphases with logical connections depending on the context under investigation (Pedaste et al., 2015). This framework entails five general phases (Orientation, Conceptualization, Investigation, Conclusion and Discussion) and seven sub-phases (Questioning, Hypothesis Generation, Exploration, Experimentation, Data Interpretation, Reflection, and Communication). It can be used by teachers in order to conceptualize a structured way to implement inquiry activities and develop multidisciplinary educational projects in their classroom.

IBL is not a linear procedure and learners should be involved with various forms of inquiry, going through different combinations of the phases, not all of them necessarily. For example, iteration of phases or sub-phases may occur where students can return e.g. to the conceptualization phase and reconsider their question. When students come to a conclusion, new questions can be generated, and the process may start again and progresses accordingly. A description of the processes that each phase encompasses is provided below. More information about the connections between these processes are presented in detail in Pedaste et al., 2015.

### **2.3.2 Phases and sub-phases of inquiry activities**

Orientation or Introduction: Orientation is the phase where the identification of the problem occurs. The topic to be investigated is presented and interest about a problematic situation that can be answered with inquiry is stimulated. The topic under investigation must be relevant to students' daily life, interests and prior knowledge. The teacher's role in this phase is to encourage students to express ideas, prior knowledge and questions about the topic, while promoting interaction and communication between them. For example, students can create concept maps of what they know, do



not know or want to know about the topic under investigation. These kinds of activities can also be useful for the next phases of inquiry.

**Conceptualization or Preparation:** Conceptualization refers to the understanding of the concept, which relates to the problematic situation presented in the previous phase. It can be divided in sub phases (such as questioning or/and hypothesis generation) that lead the learner to the investigation phase. Now the teacher's role is to help students understand how they can formulate questions and/or hypotheses that can lead to an investigation. In questioning, questions are raised and formulated in order to design an investigation that produces answers. As this skill is developed through inquiry, students can gradually understand which question can lead to investigation and which one is more generative and might lead to different or richer processes.

**Investigation:** Investigation is the phase where students collect evidence or consult available resources in order to answer their questions and/or test their hypothesis (National Science Foundation, 2000). In STEM projects it may include several sub-phases such as exploration, experimentation, and data interpretation. The teacher provides materials that the students might need and keeps them on track so that the process they choose to follow is a process that answers the investigative question. Students should determine what constitutes evidence, which sources to consult etc. The teacher can provide or encourage students to think of or to start creating various means of communication and presentation of their work (e.g. graphs, tables, charts, posters etc.) that can help them visualize their work and results or conclusions. In the framework of IPinSTEAM, this phase may have a broader scope. More specifically, in this phase teachers may also setup a debate on a particular topic or describe a role-playing scenario which students read and discuss briefly and then split in two or more groups in favour or against the actions of the person(s) in main role. For example, they may be asked to “change hat” and try to think themselves as being in the position of the main character and explain why she/he acted in the way described in the scenario, even if they do not agree with that, and how this can be corrected. It should be noted that a role-playing scenario is not to promote wrong doing. On the contrary, it describes a common bad practice and encourages students to argue in favour or against it by explaining which they think is the main cause that drives it. Through this process they understand better the aspects of a problematic situation and therefore conclusion on why this is wrong or how it can be improved may come naturally.

**Conclusion:** In this phase students draw conclusions based on their investigation work, question and the interpretation of the data. The teacher's role during this phase is to encourage or stimulate comparison between the students final interpretations and their predictions and initial ideas (that students expressed during the orientation phase). This process can also lead to new questions or hypotheses about the topic under investigation.

**Discussion:** During the discussion phase students articulate their findings through communicating them to others and/or reflecting upon all or some of the stages of inquiry during the process or by the end of it (Pedaste et al., 2015). The teacher's role is to encourage collaboration so that students can present their findings and ideas, provide arguments and give feedback to others. The discussion phase can also include separate sub-phases of communication and reflection. Communication includes discussion with others and representation of results in a manner that is understandable to all (National Science Foundation, 2000). It can be applied to a single phase or the whole cycle of inquiry and is usually an external process (Pedaste et al., 2015). During the reflection sub-phase students

reflect on their overall work, their results but also on the concept under investigation. Reflection can even give rise to new thoughts, ideas and interpretations of findings or conclusions.

## 2.4 Training methodology and guidelines

In IPinSTEAM we propose the training of teachers to be conducted in stages through face-to-face or online workshops. The first stage may correspond into two workshops that can be repeated during the school year or be organized complementary to an event such as conference, exhibition, professional development training that teachers attend. As already mentioned in previous sections, the different stages may not be explicitly imposed or practiced, for example in the mode of separate distinct workshops, but they can be implicitly infused in the training programme in each partner country in a single session of hands-on training by well selected learning modules of lesson plans and example cases to practice.

In the first workshop of the series (Workshop-1) participant teachers mainly are introduced into IPinSTEAM training and related platform through an example educational activity, reflect on the understanding they acquired during training and will act as being learners themselves (“teachers as learners”) or in other words experience, practice and reflect on a given activity from the learner’s perspective. One of the main objectives of these workshops is also to raise awareness and clarify possible misconceptions about IP related subjects, its main objectives, their importance and relevance etc. They will also motivate participant teachers to start developing their own practice or adopt existing ones in collaboration with their fellow teachers.

A workshop of this type may consist of two main sessions. The first session, about 1-1.5 hrs. long, will have presentations of a selected example educational activity, which preferably have been handed-out to teachers in advance. This session will open the discussion among the teachers so that they reflect on their own understanding but also compare with each other’s approaches and views. The second session, about 1-1.5 hrs. long, can be a model practice or group work on a given example educational activity. In this session teachers are asked to identify and discuss strong and weak points, main advantages and barriers, do clarifications and develop further their understanding and confidence on assessing an activity according to the proposed templates. At the end or during the sessions of the workshop participants are encouraged to work collaboratively, to feel free to provide feedback to organizers and to fellow teachers about prior experience, effective approaches, possible challenges and barriers, etc. The workshop finishes with planning an actual activity try-out at participant schools and with a round table wrap-up discussion. Below is a proposed agenda for a workshop of this type.

**Table 1.** Example agenda of Workshop-1 (“teachers as learners”).

Time	Session description
9:00 - 10:00	Introduction and welcome (5 min)

	Presentation of an example educational scenario
10:00 - 10:30	Familiarization with the training platform
	Discussion and reflection
10:30 - 10:45	Break
10:45 - 11:45	Hands-on practice on a proposed activity or group work to develop one on a given theme
11:45 - 12:15	Assessing the activity - Discussion and reflection
12:15 - 12:45	Planning an activity try-out
	Wrap-up presentation or round table wrap-up discussion and conclusions

The teachers' professional development approach of IPinSTEAM is suggested to incorporate a gradual structure to facilitate change of attitude in parallel to knowledge development. Within this structure, teachers can reflect on what they know already about IP in STEAM teaching and learning, if or how they learned or practice them, and what are the achieved results and benefits for the students. Teachers are better able to understand essential aspects of new methods of learning and teaching by discussing and thinking about their adopted instruction practice, and also share their experiences with other teachers. They basically act as critical thinkers, questioning constructively the pros and cons of introducing new learning methods in everyday classrooms. They furthermore discuss or propose how certain learning activities may facilitate students' skills and knowledge. These discussions and reflections of teachers as thinkers, soon after they have tried-out an educational activity can be facilitated in a dedicated practice reflection workshop. This is the main rationale of the second workshop of (Workshop-2), which can be entitled "teachers as critical thinkers".

In this workshop participants discuss in deep and reflect on their tried-out or developed practices. They discuss on difficulties they foresee or expect or have experienced and propose work-arounds or methods to avoid them. The objective of the workshops of this type is not only to motivate more teachers and newcomers to adopt a new methodology or reflect on it and act as critical thinkers themselves but also to provide them with practical answers and assistance on how to break any last barriers or fears they have before an actual educational activity can be implemented in their school. Therefore, if possible, more experienced teachers that have already practiced such activities and learning approach in their teaching can be invited in these workshops to present their best-practices and collaboratively reflect on them or to act as role models and change agents.

A workshop of this type is practically a follow-up and logical sequence of a "teachers as learners" workshop and can be organized soon after that and the corresponding try-out of activities on participants' planning request and convenience. It may consist of two main sessions. The first session, about 1-1.5 hrs. long, consists of presentations of selected best-practices or developed activities on which all participants will reflect on later based on their action research findings. The second session, about 1-1.5 hrs. long, will mainly focus on participant's discussions about difficulties, identified or expected problematic areas, and proposed solutions for improvement. The workshop finishes with round table wrap-up discussion or presentation. During the sessions of the workshop participants are reminded and encouraged on one hand to be openly reflective and critical on all aspects of their experience and on the other to think and act in a constructive and practical way towards possible improvements or needed alterations. If time permits the organizers may schedule at

the end of the workshop an interviewing session with volunteer participants or selected teachers to thoroughly discuss and express their views in an open and critical way. Below is a proposed agenda for a workshop of this type.

**Table 2.** Example agenda of Workshop-2 (“teachers as critical thinkers”).

Time	Session description
9:00 - 10:00	Introduction and welcome (5 min) Round table presentations of educational activities or best-practices focusing on various subjects
10:00 - 10:30	Discussion and reflection on key findings or experiences
10:30 - 10:45	Break
10:45 - 12:15	Discussion on difficulties, identified or expected problematic areas, and proposed solutions/improvements
12:15 - 12:30	Wrap-up

Towards the final period of the project we propose the organization of a second stage of workshops. These may more focused on overall assessment and project formative evaluation after the training of teachers is finished and in-school/in-classroom implementations of educational activities have occurred. They may also be more related to dissemination and sustainability actions of the IPinSTEAM project. Although these objectives are outside the scope of this document, we include them here for completeness. In this stage, teachers have now passed from the states of “teachers as learners” and “teachers as critical thinkers” and are now more reflective practitioners that have started developing the required skills and they are gaining confidence to assess, evaluate, adopt, but also adapt and redesign and develop authentic learning activities on IP education. Additionally, all participant teachers have practiced and implemented at least one educational activity in their classrooms. They are now more capable or in a position to assess their achieved results and so to reflect on the efficacy of the application of the method in their schools or in other schools. The purpose of Workshop-3 and 4 is to build on the experience acquired and continue it in a refined way.

In this context Workshop-3 is similar to Workshop-1 with the addition that teachers are now elaborating and reflecting on educational activities or best-practices that have been developed in different countries for example. If necessary, after appropriate adaptation, possible try-outs at their schools are planned. Below is a proposed agenda for a workshop of this type.

**Table 3.** Example agenda of Workshop-3.

Time	Session description
9:00 - 10:00	Introduction and welcome (5 min) Presentation of a best-practice or success story e.g. from different country(s)
10:00 - 10:30	Discussion and reflection
10:30 - 10:45	Break

10:45 - 11:45	Hands-on practice on proposed activity or group work to redesign or develop new ones
11:45 - 12:15	Discussion and reflection Planning an activity try-out
12:15 - 12:45	Wrap-up presentation or round table wrap-up discussion and conclusions

The main focus of the final workshop (Workshop-4) is to discuss outcomes and propose improvements on the approach of IPinSTEAM in a holistic way, the training offered or needed, possible prerequisites or further training material and content etc. A workshop of this type can have a more official character and be part e.g. of a teachers' national conference or other main educational event. It may consist of a session of invited speakers followed by a session where best case scenarios are discussed, teachers present their work and achieved outcomes to colleagues etc. The closing session can focus on proposed next-steps and improvements along with a critical perspective of the overall approach. If time permits the organizers may schedule at the end of the workshop an interviewing session with volunteer participants or selected teachers to thoroughly discuss and express their views, experiences and achievements. Below is a proposed agenda for a workshop of this type.

**Table 4.** Example agenda of Workshop-4.

Time	Session description
9:00 - 10:30	Introduction and welcome (5 min) Presentations of success stories, best-practices and best outcomes
10:30 - 10:45	Break
10:45 - 12:15	Discussion and reflection on outcomes achieved, methodologies practiced, experiences, proposed next-steps/future improvements
12:15 - 12:30	Closing/Wrap-up

### 3. Lesson plan template

Attached as separate pdf file – IO1.A3\_Lesson\_Plan\_Template.pdf

## 4. References

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