



INTELLECTUAL OUTPUT 2

OLA GUIDELINES FOR TEACHERS

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INTRODUCTION

These Guidelines are developed in the context of the **Enhancing digital Open Educational Resources for inclusion against stereotypes (OLA)** project, which is funded by Erasmus Plus Program Kay Action 2.

Taking into account UNESCO and European Commission priorities, and integrating scientific research knowledge, expert know-how and real educational processes at school, OLA partnership enhanced the following Areas of Action:

- Building the capacity of educational actors and stakeholders to create, access, re-use, adapt and redistribute Open Educational Resources (OER);
- Supporting development and availability of OER for lower and upper secondary schools, reinforcing European cooperation in Open Educational Practices (OEP) and in innovative didactics;
- Encouraging inclusive and equitable OER quality;
- Improving teachers' digital competences and digital literacy competency their knowledge on learning methods for distance and blended learning;
- Promoting a critical and responsible use of digital contents.

A central issue, transversal to the project, is paying attention to recognizing stereotypes – starting from, but not limited to gender – and values implicitly conveyed by school textbooks and multimedia online resources, so as to promote a wider concept of “*digital competences*”, including not only strictly technological competences, but also the capability of using online platforms and information sources critically and responsibly, as a premise for exercising a conscious and informed citizenship

OLA is a spin-off of the previous **INCLUDE** project, funded by Erasmus+ program and coordinated by the National Research Council of Italy.

On the basis of **INCLUDE** experience, in order to give an impetus to “**Open Educational Resources**” (**OER**) and “**Open Educational Practices**” as an opportunity to reduce the digital divide in the European educational context and to **build a more inclusive society**, **OLA** project exploits a similar perspective introducing some novelties:

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- the STEAM framework (Science, Technology, Engineering, Arts, Mathematics);
- a stronger focus on inclusiveness (also considering the issue of stereotypes in educational resources)
- the reference to Open Educational Resources UNESCO framework;

However, **OLA** borrows some methodological dimensions already developed and tested in **INCLUDE**:

- the participatory approach
- the scenario design process
- the evaluation processes

That's why some sections of these Guidelines are an adaptation and improvement from the **INCLUDE TOOLKIT FOR TEACHERS** (sections 2 "Designing OLA educational scenarios and 3 Evaluation).

During the OLA lifetime, **80 interdisciplinary scenarios** related to **STEAM subjects** (Science, Technology, Engineering, Art, Mathematics) have been developed by teachers from the partner countries.

These scenarios are available in the **OLA/INCLUDE Repository**, where, beside the 80 OLA scenario, the 126 scenarios created within the **INCLUDE** project, are also available.

To enhance the **OLA** approach and give a substantial support to teachers in developing Open Educational **OLA** scenarios, OLA community developed 2 tools for teachers: these Guidelines and five asynchronous online courses - MOOCs. These 2 tools are intended as an integrated tools with reciprocal references, where the Guidelines are more theoretically oriented, introducing the teachers to the main reference frameworks; the MOOCs are more practically oriented, giving support with examples and already realized practices:

- **MOOC1** - What OER are
- **MOOC2** – RE-USING OER
- **MOOC3** - Building and evaluating OER
- **MOOC4** - Open Educational Practices and blended education
- **MOOC5** – Creative commons and open licenses

THE OLA FRAMEWORK

1.1 What do we mean by inclusive education?



Promoting inclusive practices in education is one of the main **OLA** topics. To boost the relevance, quality and inclusiveness of European education, **OLA** promotes open educational practices and high-quality education contents, open and free, which are designed to meet the diverse needs of learners, including vulnerable categories, giving all students equal learning opportunities in line with a rights-based approach to education (European Agency, 2018a).

Before going more in deep in the **OLA** practice, a clarification of what we mean by “inclusion” and “inclusive education” is needed.

As a matter of fact, the concept of inclusion is value- and ideology-driven as other similar concepts such as democracy and social justice. So, even if there is a wide agreement on the importance of inclusion in theory, looking at educational practices and the ongoing scientific reflection on them, inclusive education is by no means a clearly defined or universally understood concept and a large debate is still ongoing.

Several studies (Krischler, Powell and Pit-Ten Cate 201, Ainscow et al. 2006, Hansen and Qvortrup 2013) show that for a long time there has been a battle about the interpretation

of the concept and right now it remains ambiguous when put into practice, with definitions that vary according to the policy frameworks of reference, the national education context, the school policies and the individual background of educators.

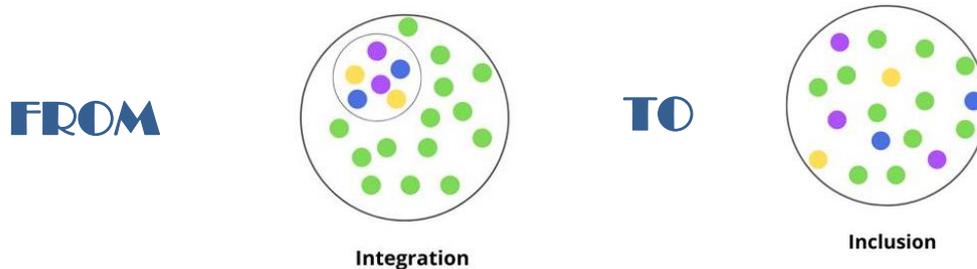
As Haug said (2016) *“it is not possible to find one universally institutionalized definition of inclusive education in practice. The importance of this contest about its meaning is that definitions both reflect the understanding and, in turn, how inclusive education meets and treats different groups of students”*.

The European Agency for Special Needs and Inclusive Education formulate further challenges explicitly in this way: *‘The current debate is no longer about what inclusion is and why it is needed; the key question is how it is to be achieved’* (European Agency for Special Needs and Inclusive Education 2014).

1.1.1 Inclusive education in policy documents

At policy level, the concept of “inclusive education” was introduced by the *“World UNESCO Declaration on Education for all”* in 1990 and the *“Salamanca Statement and Framework for Action on Special Needs Education”* (UNESCO, 1994). In the latter is declared that *“every child has unique characteristics, interests, abilities and learning needs; education systems should be designed and educational programs implemented to take into account the wide diversity of these characteristics and needs; those with special educational needs must have access to regular schools which should accommodate them within a child-centered pedagogy capable of meeting these needs; regular schools with inclusive orientation are the most effective means of combatting discriminatory attitudes, Building an inclusive society and achieving an education for all...”*.

With the Salamanca Declaration a shift was therefore enhanced in policies, from a perspective, predominant in previous decades, in which “integration” of students with Special Educational needs (SEN) by means of “special education” was considered as the most effective way to respond to their “diversity”, to a new perspective to serve all children in regular schools. Inclusion is thus presented as a promising new pedagogical approach and the most effective way to counteract discriminatory attitudes.



Cerna, L., et al. (2021)

As Ruaic noticed, *“the imperative that inclusion should replace integration stems from a view that integration had become a reductive mechanism for measuring students disability with a view to calculating the resources required to make the student fit into the mainstream system”* (Ruaic 2013).

In the “integration” perspective learners labelled as having “special educational needs”, when placed in mainstream education, undergo the same condition that they can fit in with pre-existing structures (UNESCO, 2017). Otherwise, inclusive education is about changing the system to fit the student, not changing the student to fit the system.

Starting from this, inclusive education was intended as an alternative to the “special-school” system, enhancing the inclusion of SEN in mainstream schools. The UNESCO INCHEON DECLARATION 2015, reaffirming that inclusive education is not related just to SEN but involves all students, states that *“all means all”, “irrespective of sex, age, race, colour, ethnicity, language, religion, political or other opinion, national or social origin, property or birth, as well as persons with disabilities, migrants, indigenous peoples, and children and youth”,* and *“No education target should be considered met unless met by all”*. Another step forward was done by international organizations in more recent times (European Agency, 2018, European Pillar for Social Rights – 2017), moving the focus from individual limits and fragilities to the schools’ capacity and barriers to meet the diverse needs of all learners, not only of specific target groups (European Agency, 2018).

In line with this approach, the Council of Europe (2018) invited all Member States *“to promote inclusive education for all learners, notably by: (a) including all learners in quality education from early childhood and throughout life; (b) providing the necessary support to all learners according to their particular needs, including those from disadvantaged socioeconomic backgrounds, those from a migrant background, those with special needs*

and the most talented learners;...". This view is enhanced, not only as a direction for changing the education of people with disabilities, but also as a new model for school, specifically responding to the diverse needs of contemporary societies and being consistent with the democratic values on which these societies are built.

1.1.2 Inclusive education in practice

As we showed, in recent policy documents the focus of inclusion shifted from weaknesses and deficits of some students to quality education for all. Coming to the empirical one, inclusive education is still a debated idea conceptualized in many different perspectives. Göransson and Nilholmb (2014) suggest to categorize this variety of conceptualizations adopting 4 main categories:

- a) **Placement definition** – it refers to the approaches which consider inclusive education the placement of pupils with disabilities/in need of special support in general education classrooms.
- b) **Specified individualized definition** – this category places the issue of inclusion within a SEN discourse, rather than within a general education discourse, keeping the focus on the students with SEN or disabilities.
- c) **General individualized definition** –this category groups the approaches which consider inclusive education as meeting the social/academic needs of all pupils, meeting the needs of each one;
- d) **Community definition** –*“this category points to characteristics of the culture/group as a whole rather than to the situation of individual subjects only. The successful participation of students with disabilities in a general education classroom is premised on the creation of classroom communities that can nurture the qualities of equity and care”* (Göransson and Nilholmb 2014). Inclusive education is so intended as the creation of communities (educational contexts) with specific characteristics and in which all students (SEN and not SEN) take part actively.

Summarizing, A+B focus on students with SEN placing the issue of inclusion within a special-educational needs discourse, rather than a general education discourse, otherwise C+D focus on all students (SEN and not SEN).

In empirical contexts , as highlighted by Kielblock and Woodcock (2012), the predominant view fits in A and B categories: this view, constructed around and within discourses of

comparison—around normality and abnormality, success and failure, the functional and the dysfunctional-, is focused on catering for students at risk of exclusion and inclusive education often referring to a situation in which students with SEN are taught in mainstream schools and spend at least some of the time in the classroom together with their peers without SEN.

Some authors (Thomas 2013 and Messiou 2016) evidence that this perspective, focusing on the ‘exceptionality’ and weaknesses of a student, makes it difficult to challenge implicit beliefs about the students’ (dis)ability and might decelerate progress towards more equity in education and society.

Rather, Coles (2005) pointed out that students fall behind at school for several reasons, most of them having little or nothing to do with SEN or disabilities. Data confirm this view. As evidenced by the Council of Europe (Recommendation 2018), PISA results emphasize the link between educational inequalities and students’ socioeconomic background. They illustrate that students from poorer families are three times more likely to perform worse than their wealthier counterparts and that students of migrant background are more than twice. As evidenced by Göransson and Nilholmb (2014) *“the question that needs to be answered is how and why characteristics such as race, disability and gender operate on students’ learning at school. How are problems at school constructed out of these characteristics?”* What these data seems to suggest is that it is not diagnosis and separate treatment that are decisive, but rather the learning environment and the existence of the right conditions for learning. It means to widen the perspective, acknowledging the fact that more effective teaching strategies in the school may likely have a positive impact on all students’ (SEN and not SEN) outcomes: strategies as control of task difficulty, teaching in small collaborative groups, and “directed response questioning”, or frequent feedback, cooperative learning, work effectively for both SEN and not SEN learners.

However, coming back to the educational practices, schools tend to reactively adapt to the increasing number of students with SEN rather than proactively plan and re-organize a school in such a way as to make it ready for the effective education of heterogeneous groups (Giangreco & Suter, 2015). From this point of view teachers’ ideas and attitudes towards inclusive education are a corner stone, because: a) the ideas connected with a particular approach towards inclusion influence teacher’s attitudes towards it (Göransson and Nilholm 2014), b) teachers’ attitudes trigger inclusive teaching behavior, c) attitudes are highlighted in policies as being of major importance, and d) are one of the most commonly researched topics in the field of inclusion.

Starting from these points, **OLA** identifies teachers as the main target of the intervention proposed to enhance inclusivity of the educational environments.

1.1.3 Inclusive education in OLA

OLA approach embraces the idea that inclusion of all students, irrespective if SEN and not, is a matter of schools' capacity to meet the diverse needs of all learners, without focusing only on specific target groups and requires new approaches, pedagogies and practices, acknowledging the fact that more effective and inclusive teaching strategies in the school may likely have a positive impact also on not SEN students' outcomes.

With this focus, **OLA** aims to give a contribution in reducing the existing gap between policies and school practices providing a methodological approach to design inclusive educational scenarios and resources. With reference to the categories proposed by Göransson and Nilholmb, **OLA** suggests a step forward the **General individualized definition** of inclusion (category C), where the school is view as the place where teaching means meeting the needs of each children giving value to the differences among individuals.

In **OLA** perspective the tension toward inclusiveness should switch from looking at the individual characteristic, to look at the culture/group as a whole pointing at *“classroom communities that can nurture the qualities of equity and care”* (category D).

Thus, **OLA** aims at creating inclusive learning environments through the design of inclusive open educational scenarios.

Inclusiveness of the educational resources is put into practice by **OLA** in 2 different ways:

1. The **accessibility** of the resources and of the learning process

- **Technological accessibility:** while designing the educational resources, teachers must take into account the variability of conditions in which students have access to the resources. Not all have high performing hardware and ICT devices, nor proprietary software; some of them could have access to the resources through computers, some others by smartphone or tablets, with much smaller screens; some of them have high speed internet connections, some others not. The **OLA** educational scenarios must give all students the opportunity to access the same information and enjoy the same service.
- **Learning accessibility** (in terms of considering different learning styles) through multimodality: while designing the educational resources, teachers must take into account the different learning and cognitive strategies, to give each student the same opportunity to acquire information, and reach the learning outcomes expected. **OLA** scenarios include a variety of digital resources and tools for teaching and learning purposes. Such interactive objects, an integral part of an **OLA** educational scenario, include videos, digital texts and worksheets, links to websites, presentations, interactive learning objects (H5P), etc. (to deepen these aspects please refer to OLA MOOCs: [Building & evaluating OER; Reusing OER](#))

Taking into account the different perspectives, personnel histories, with the aim of making every student feeling part of the community, *“irrespective of sex, age, race, colour, ethnicity, language, religion, political or other opinion, national or social origin, property or birth, as well as persons with disabilities, migrants, indigenous peoples, and children and youth”* (UNESCO 2015). In this case, the focus is on the capability of the teachers/authors to detect possible **stereotypes** in the available educational resources, analyzing them

critically, and to avoid to vehicle stereotypes in the scenarios developed, taking into account a plurality of points of view, also of their students (*to deepen these aspects refers to OLA MOOCs: [Building & evaluating OER](#)*).

→ [An entire module of the MOOC “Building & evaluating OER” is focused on stereotypes, giving theoretical inputs and practical examples. Please refer to it to go more in deep, as it is a crucial point in OLA approach.](#)

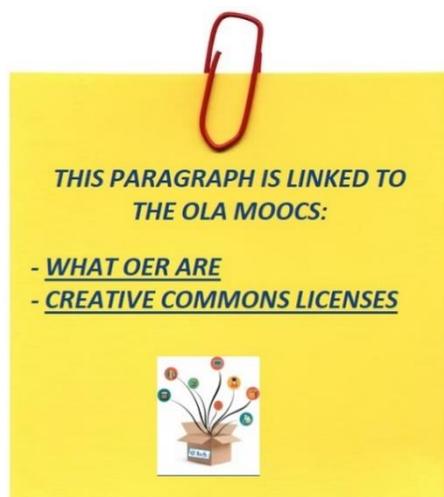
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1.2. Open Educational Resources in OLA



1.2.1 What OER are

Firstly introduced by UNESCO in 2002 at the UNESCO forum on Open Courseware (UNESCO 2002) as a concept with great potential to support educational transformation, the concept

From 2009 to 2016 the interest in OER increased and in 2019 the UNESCO Recommendation on OER was adopted worldwide as a standard setting. The recommendation adopts the following definition: *“open educational resources are digitized materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research”*. To clarify further, OER include:

- **Learning contents:** Full courses, courseware, content modules, learning objects, collections and journals;
- **Tools:** Software to support the development, use, reuse and delivery of learning content, including searching and organization of content, content and learning management systems, content development tools, and online learning communities;
- **Implementation resources:** Intellectual property licenses to promote open publishing of materials, design principles of best practice and localize content.

of “Open Education Resources” (OER) describes “*learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution*”(UNESCO 2019). Moreover, “*it describes educational resources that are openly available for use by educators and students, without an accompanying need to pay royalties or licence fees*” (Butcher 2015).

In summary, OER can be any of the following: textbooks, lesson plans, quizzes, assignments, learning modules, simulations, online courses, videos, audios, presentation slides, programs, outlines of course, Software.

OER and Agenda 2030

With reference to the Sustainable Development Goals – Agenda 2030, OER can contribute to the achievement of the:

- **goal 10 “Reduce inequality”**: *OER can help overcome disparities in education and ensure equal access to all levels of education and training for vulnerable individuals, including persons with disabilities, indigenous peoples and children in vulnerable situations*
- **goal 4 ‘Quality education’**: *by enhancing the free share of knowledge and resources, OER have the potential to improve the quality of education. Moreover, they can promote a rapid transition to digital education.*

1.2.3 What the 3 terms “Open”, “Educational”, “Resources” imply

A closer look at the OER definition shows that the concept of “open educational resources” is both broad and vague. A wide variety of objects and online materials can be classified as educational resources, from courses and course components, to museum collections and open access journals. Over time the term has come to cover not only contents, but also learning and content management, content development tools and standards and licensing

tools for publishing digital resources, which allow users to adapt resources in accordance with their cultural, curricular and pedagogical requirements.

Thus, it is useful to better clarify the 2 central terms of OER:

- **Openness:** openness is a central but wide concept in OER (UNESCO policy brief 2014). In practice, when related to OER, the two basic aspects of openness have to do with free accessibility on the web and as few restrictions (technical, legal or costs) as possible on the use of the resource (OECD 2007). As evidenced by Tuomi (2006), besides the technical characteristics which make a resource open (the use of as much as possible open standards and open software to allow interoperability), two more aspects make a difference: social characteristics and the nature of the resource itself. These two aspects involve the accessibility of the resources in terms of availability without cost to the user, the use of open licenses (*this aspect is explored in the paragraph 2.4*) and the kind of software needed to read or use the resource (*this aspect is explored in the [OLA MOOC revising OER](#)*). From the latter dimensions (licenses and software) it derives the possibility “to modify, repackage

In conclusion, as evidenced by UNESCO (2019) and OECD (2007), openness implies the concept of open educational resources as “public goods”, accessible irrespective of economic or geographical constraints and enhancing co-creation of knowledge and collaboration. As evidenced by UNESCO, this approach enhances the inclusiveness of the educational systems: education is a social investment, and should be protected as such to fulfil its potential in creating a more equal world.

and add value to the resource. This kind of openness blurs the traditional distinction between the “consumer” and the “producer” (OECD 2017), introducing the concept of the user- producer, who has the right and the possibility to modify, adapt and edit already existing OER. The idea of user-producer leads us to the other aspect implied by the concept of openness in OER: the idea that “knowledge is a collective social product and therefore it is also desirable to make it a social property” (Forum on the Impact of Open Courseware for Higher Education in Developing Countries, UNESCO, Paris, 2002 – Prof. V.S. Prasad). It follows that sharing knowledge in open environments allows to build innovation based on a common intellectual capital, rather than duplicating similar efforts (Butcher N., 2015). This approach is opposite to the one followed in the 20th century, where education was treated like business,

with many negative consequences. One for all, *“educators and educational institutions have been rewarded for competing with one another and withholding their intellectual property from others”* (Butcher 2015). Differently, OER push educational institutions and teachers *“to abandon a free-market approach to education in favor of collaborating to build and share knowledge”* (Butcher 2015). From this point of view, *“OER has the potential to re-focus educational systems, restoring the core values of building and sharing knowledge that underpin good education, and systematically encouraging us to work with and learn from one another.”* (Butcher 2015).

- **Educational Resources:** are educational resources only materials produced for formal educational purposes? As evidenced by OECD (2007), educational resources are *“anything that can be used to organize and support learning experiences”* (Tuomi 2006), used in formal and not formal education irrespective of the context in which are produced.

1.2.3 The 5R OER

Through the time some basic dimensions of OER were identified in terms of the so-called 5R:

RETAINING: Copies of the content may be kept for personal records or reference (e.g. download, duplicate, archive); this aspect is regulated by the type of Open License assigned;

REMIXING: Different contents can be combined to create something new (remix or mashup). It is rare to find existing OER that fit perfectly ‘as is’, for example when educators need to develop materials and resources to match a local curriculum.

REVISING: The content can be modified for specific needs and to suit multiple contexts (e. g. translated into another language, or enriched by local case studies/examples to make it relevant to students in a particular context).

REUSING: The content can be reused in its original unaltered format in various ways (e. g. at school, in a study group, on a website, in a video);

REDISTRIBUTING: Content can be shared with anyone in its original or modified format.

1.2.4 The Creative Commons Licenses

“Open” doesn’t mean that the author gives up own rights to this material: authors are guaranteed by the attribution of open licenses, that permit their free use, adaptation and re-purposing by others. This kind of licenses were introduced to *protect a copyright holder’s rights* in environments where content (particularly when digitized) can easily be copied and shared via the Internet without asking permission.

The best known is the Creative Commons licensing framework (www.creativecommons.org), which offers creators digital tools to decide and attribute the desired level of openness for the resources created. When applying a Creative Commons (CC) license to their work, authors retain copyright over that work, but agree to give away some of those rights.

Before the Creative Commons licenses, other licensing tools were used: the Open Publication License (OPL) and the GNU Free Documentation License (GFDL). However, the substantial difference between these licenses and Creative Commons is that they provided for a use with transparency declaration (references to the original work) but not for revising / remixing.

Creative Commons was officially born in 2001 from an idea of professor Lawrence Lessig, of the Universities of Stanford and Harvard, one of the leading copyright experts in the United States.

The first version for the public of the Creative Commons 0 license dates back to 2009 in US and takes into account different copyright laws in different countries or jurisdictions and also allows for different language versions. With this license the author waives any right to the work, which can be used by anyone, in any way, forever and without conditions.

The type of licenses created by Creative Commons ranges from the least open with the indication “*all rights reserved*”, which refers to resources that cannot be shared, reused or remixed, to the most open with the indication “*Public Domain*” which refers to resources that are no longer restricted by copyright.

The symbols therefore represent the spectrum of the Creative Commons license.

At present, there are six Creative Commons licenses and they are defined by the combination of four attributes.

Creators choose a set of conditions they wish to apply to their work establishing which rights are reserved, represented by symbols; they can also be used in combinations to better define the possibilities for the user:



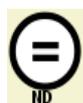
Attribution: the potential user is allowed to copy, distribute, display, and perform the copyrighted work — and derivative works based upon it — but should make reference to the original author



Share alike: if the potential user reuses, remixes, revises or redistributes the resource, she/he must share it with the same licenses as the original



Non-Commercial: the potential user is allowed to copy, distribute, display, and perform the copyrighted work — and derivative works based upon it — for non-commercial purposes only



No-Derivatives: the potential user cannot change the resource.



Creative Commons provides also the mark  to indicate resources whose authors or copyrights owners have waived any rights concerning their work .

To make the licensing process as simple as possible for users, the Creative Commons website (www.creativecommons.org) makes use of a license generator that suggests the most appropriate license based on response to specific questions regarding how the work can be used.



TIPS

Clarifying some common misunderstanding on OER

Are OER online courses?

OER is not synonymous of online learning or e-learning, although many people make the mistake of using the terms interchangeably. Openly licensed content can be produced in any medium: paper-based text, video, audio or computer-based multimedia.

Are Open Learning and OER synonymous?

Although use of OER can support open learning/open education, making ‘open education’ or ‘open learning’ a priority has significantly bigger implications than only committing to releasing resources as open or using OER in educational programmes. Open learning is an approach to education that seeks to remove all unnecessary barriers to learning, while aiming to provide students with a reasonable chance of success in an education and training system centred on their specific needs and located in multiple learning arenas.

What does “Open resources” mean? Does the author give up all of his/her rights to this material?

No. On the contrary, the emergence of open licences has been driven strongly by a desire to protect a copyright holder’s rights in environments where content (particularly when digitized) can so easily be copied and shared via the Internet without asking permission. Open licenses provide legal mechanisms to ensure that authors of materials can retain acknowledgement for their work while allowing it to be shared.

Does use of OER preclude use of commercial content?

While the use of commercial contents is ideally in contrast with the philosophy of OER, it must be considered that “there are many high quality educational materials available for purchase and that, in certain circumstances, their use may be more affordable than attempts to produce that content openly... OER and commercial content can thus be used together in courses and programmes, although course developers need to be careful not to create licensing conflicts by integrating materials with different licensing conditions when designing teaching and learning materials” (Butcher, 2015)

Are OER open access publishing?

No, even if the openness is the characteristic of both of them, Open access publishing is typically referring to research publications of some kind released under an open licence. OER refers to teaching and learning materials released under such a license.

1.2.5 OER in OLA

In the **OLA** context an OER is a digital learning resource called «**Educational scenario**». An educational scenario is a structured plan which describes the educational process of a course and aims to guide teachers during this process; it includes the description of expected learning outcomes and competences, the sequence of learning activities and an outline of the teaching techniques, the tasks and roles that teachers and students undertake, as well as the interactions between them (for a deeper explanation see Annex 1-General guidelines for the design of scenarios).

OLA educational scenarios aim at promoting:

STEAM and Multidisciplinary approach (see paragraph 1.3): using Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking

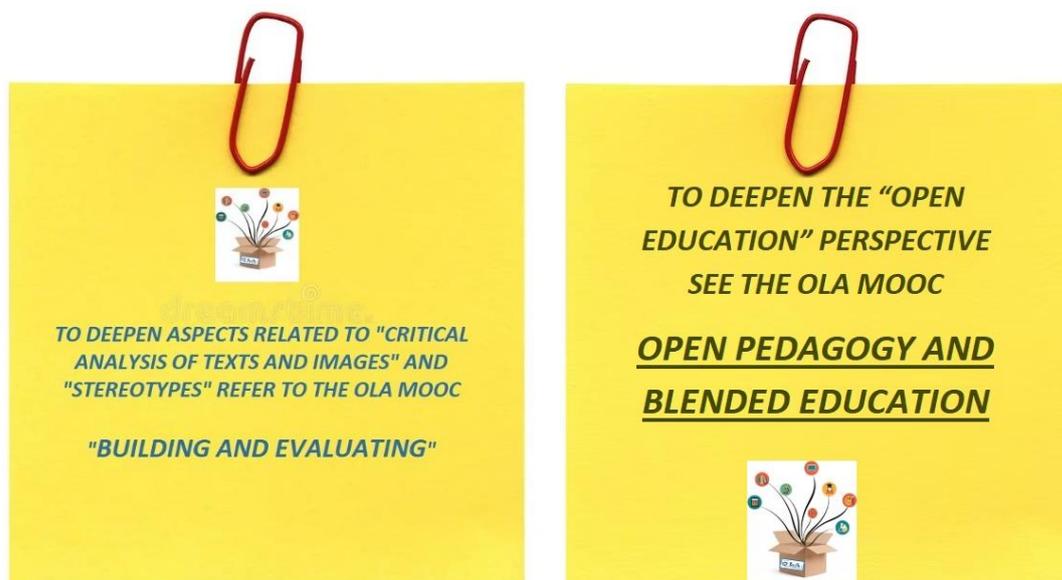
Target competences (see paragraph 2.2):

With reference to the Council Recommendation of 22 May 2018 on key competences for lifelong learning (2018/C 189/01):

- Literacy
- Digital
- Mathematic competence and competences in science, technology and engineering
- Personal, Social and Learning to Learn
- Citizenship Competence

Moreover, **OLA** scenarios enhance the **Video Literacy** competence as identified by ENVIL in the Revised Common European Framework of Reference for Visual Competency

Inclusive education and inclusion: see section 1.1.3

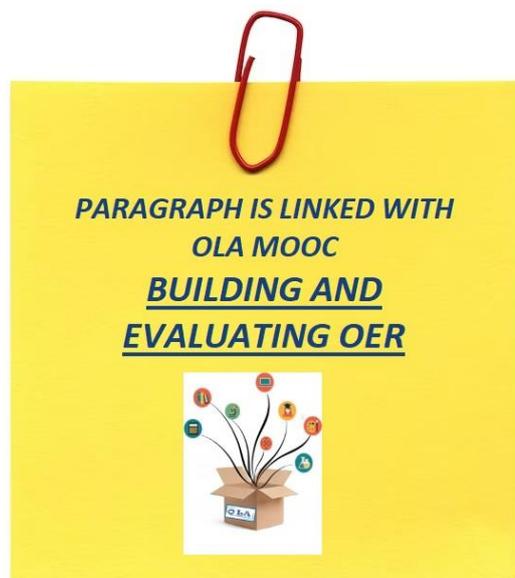


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1.3 The STEAM approach



1.3.1 From STEM to STEAM

One of the key characteristics of an **OLA** scenario is the adoption of a STEAM approach. Thus, clarifying what we refer to while speaking about STEAM is pivotal. Indeed, there is no shared understanding of the term ‘STEAM’, which is adopted with different meanings and nuances. STEAM represents an evolution of the STEM approach (Science, Technology, Engineering, and Mathematics, attributed to the American National Science Foundation, 1998). As argued by Colucci Gray (2017), over the years, limits of STEM education emerged:

1. Lack of interdisciplinarity: in school curricula the STEM disciplines are often managed as silos, without creating a real connection among them. *“STEM education does not prepare pupils to engage in ‘wicked problems’ which require interdisciplinary and, perhaps, transdisciplinary capabilities”* (Colucci Gray, 2017). Most of the time, students are inducted into a range of disciplinary forms, without seeing connections. This lack of interdisciplinarity was perceived as a criticism, while students and societies are facing to an increasingly complex and uncertain reality, in which urgent issues, personal and collective values are under discussion

(Funtowicz, Ravetz, 1994). In this context, monodisciplinary approaches are ineffective in addressing contemporary problems. Education has to reflect the complexity of reality, where people concepts and things are interconnected (Morin E., 2001), making the learning process able to restore the complexity of the phenomena (Morin 2002). School programs – also as regarding natural sciences - should be transdisciplinary and “relevant” to the growth of the individual. To this aim, as a first step, it is necessary to overcome the traditional “disciplinary” educational approach, promoting *“‘pluralism’ as a necessary option in order to tackle situations in which stakes are high, knowledge is contested and there is a need to make decisions in conditions of uncertainty and ignorance. Pedagogically, ... science education should aim at: a broader set of higher order cognitive skills, developing thinking creatively through different viewpoints; and an openness to dialogue which allows a multiplicity of ways of sensing, expressing and communicating”* (Colucci Gray 2017).

2. Lack of inclusiveness: as documented by several studies (e. g. PISA), there is a differential achievement in STEM subjects for different groups (gender and economic status); *“These arguments call for a reconsideration of the content and pedagogies of STEM education in schools”* (Colucci Gray 2017).

Starting from this criticism, some authors evidenced the need to overcome the traditional caesura between scientific and humanistic culture, recovering the natural unity of knowledge (Morin, 1993), where arts and humanities are crucial for human development in society (Belfiore and Bennett, 2007); where the engagement with the arts in education enhance young people’s development (Trowsdale, 2015) and transdisciplinarity helps perceiving things in a more complex way. The idea, however, is not completely new, having historical precedents such as those of the Renaissance.

At the same time, a growing body of literature in the last century enhanced the idea of knowing as action, experienced through the body (as opposed to cognitive transmission), recognizing the close interaction that exists between mind, body (as already underlined by Dewey, Pestalozzi and Montessori) and environment in the cognitive process, as also highlighted by Braidotti (in Quinn, 2013, p. 739).

As emerged from the working table *“Art & science in dialogue”* of the educational community realized by IRPPS-CNR in 2023 in the framework of the Officina Educazione

Futuri 2023 ([here the report](#)), knowledge and learning arise from the sensory-motor dynamics between and the natural environment in which it is embedded. The interaction between mind, body and (natural) environment supports and improves the learning process of the embodied agent. This is even more applicable to the STEAM topics (Gallagher & Lindgren 2015), where knowledge is thus connected to a practical exemplification, an experience and a context and therefore becomes meaningful. In this effort to enhance embodied knowledge, art education comes in handy bringing the sensory and emotional component back to the heart of the educational process.

To address this need to connect young people to their natural world, arts can play a decisive role providing perspectives on how the complex network of interrelationships between body, mind and environment can be exploited in practice. Thus, the STEAM approach seems to dialog constructively with these issues.

We must underline that there is not accordance in the literature on the meaning of the 'A' in STEAM (arts? Arts and humanities? All the topics not included in STEM underlining the need to connect different subject and enhance interdisciplinarity?), and there is a fervent debate around which disciplines are more suitable to define a single meaning of STEAM. However, authors agree on the following aspects:

- the addition of an A to the STEM is not a simple enlargement with the Art of separate summation areas, but it is a better representation of the reality in which creativity, in scientific research and in art, returns to be the innovation principle; it enhances different ways of knowing and experiencing the world through art forms, practices or even specific pedagogies that have to be part, not only of education, but of society in general. Thus, it plays a central role in the redefinition of school curricula;
- art (in the wide sense) is identified as an important part of a broad and balanced curriculum in which multi- inter- and transdisciplinary approaches are applied to the production of knowledge: *"firstly, there are arguments that the arts and creative approaches will contribute to the effectiveness of STEM education. Secondly, that the inclusion of the arts emphasizes the possibility of multi and trans-disciplinary practices, reflecting long-held, historical, social, and educational views of the arts and sciences as naturally connected. Thirdly, it identifies the value of the arts in promoting an engagement with 'the human condition', the values we collectively*

espouse, and the productive exploration of controversial issues”. (Colucci Gray 2017).

- the introduction of the “A” topics alongside STEM skills and disciplines implies a mutual enrichment.
- the continuous development of digital technology is a clear and evident example of this. Mathematical processes, communication engineering, computational thinking, all applied to digital are constantly reimaged through creative processes, up to arriving at artificial intelligence, even recalling neuroscience and the need for a new human ethics (Colucci Gray 2017).

1.3.2 STEAM in OLA

Joining the debate on the meaning of the ‘A’ in STEAM, **OLA** approach embraces the view of the “A” as arts & humanities.

Thus, **OLA** educational scenarios are characterized by an interdisciplinary approach, connecting and integrating scientific and humanistic topics. Arts and humanities, as ways of apprehending and comprehending human reality and society, are considered as powerful instruments of pedagogy that can augment, integrate and unify the whole curriculum.

A wide and structured example of STEAM is the [Global Science Opera](#) a permanent initiative, which received in the last 3 years the support of the Erasmus plus program within the European project [GSO4SCHOOL](#). Each year the GSO partnership (CNR-IRPPS is partner of the initiative) launches its STEAM proposal for the production of a science opera with a specific theme (last topics were energy, environment, neurosciences). Several schools from different countries around Europe and the world create together the opera (deepening the topic, creating the libretto, music, set, costumes). Afterwards, students perform the opera which is edited by the GSO team and made available online on the GSO website and Youtube channel.

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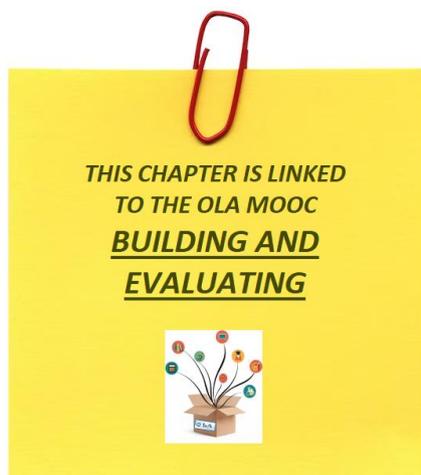
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DESIGNING OLA EDUCATIONAL SCENARIOS



2.1 What is an OLA educational scenario

As explained in the paragraph 1.2.3 an OLA scenario is an Open educational Resource. In the next pages we further define what we mean by “educational scenario” in OLA, specifying its main characteristics and components and making reference to the tools developed to support educators interested in designing one of them.

According to Komis, Tzavara, Karsenti, Collin, Simard (2013), *“an educational or teaching scenario that integrates ICT describes the teaching activities and the tools used (abstract tools such as schemata or software and/or physical tools such as special artifacts), which constitute both the starting point for the teaching and learning activities and the framework within which they will take place”*.

In the OLA approach, *“a scenario is digital structured teaching unit which describes the educational process of a course and is aimed at guiding teachers during their teaching process. It includes the description of expected learning outcomes and competences, the sequence of learning activities and an outline of the teaching techniques, the tasks and roles that teachers and students undertake, as well as the interactions between them”* (OLA MOOC “Building and evaluating”).

An **OLA** scenario has a duration of **2 to 3 teaching periods** (each period lasts 45-50 minutes). Each scenario is **interdisciplinary**, has a concrete subject, identifies **target competences** and **learning outcomes**. The topics of the scenario can be chosen from various subject areas in line with the **STEAM** approach (see paragraph 1.3)

An **OLA** educational scenario is based on five pillars:

- **INCLUSIVENESS:** (see paragraph 1.1) OLA scenarios enhance the inclusion of all students, regardless “*sex, age, race, color, ethnicity, language, religion, political or other opinion, national or social origin, property or birth, as well as persons with disabilities, migrants, indigenous peoples, and children and youth*” (UNESCO 2015). All students should:
 - have **access** to the scenario from both a **technological** and a **cognitive** point of view
 - feel comfortable with the way in which the topics and issues are discussed and represented, the scenario taking into account the possible different points of view avoiding possible **stereotypes**. No one should feel underrepresented or excluded.
- **STEAM:** **OLA** scenarios are interdisciplinary, embedding both scientific and humanistic topics (see paragraph 1.3).
- **Target competences:** (see *Annex 5 OLA competences*) **OLA** scenarios, besides disciplinary competences, develop transversal competences. According to the UNESCO International Bureau of Education Glossary, transversal competences are “*skills that are typically considered as not specifically related to a particular job, task, academic discipline or area of knowledge and that can be used in a wide variety of situations and work settings*”. **OLA** target competences are:
 - Literacy, Digital, Mathematic competence and competences in science, technology and engineering, Personal, Social and Learning to Learn, Citizenship Competence (“Council Recommendations on key competences for lifelong learning” 2018)
 - Visual Literacy competence (Revised Common European Framework of Reference for Visual Competency developed by ENVIL)
- **Multimodality:** all scenarios should include a variety of digital resources and tools, to increase accessibility and engagement, considering different learning styles: some students may learn easily by reading texts, others using maps, graphics and images, some others by listening or through concrete and practical activities. ICT and digital

educational resources support teachers to develop the same learning object in different ways:

- customizing the way information are presented
- presenting the same learning object in multiple formats (videos, digital texts and worksheets, links to websites, presentations, interactive learning objects (H5P), etc.)
- providing inclusive planning of activities that the learner can perform
- giving learners a variety of ways and media through which they can learn at different levels without compromising the set learning outcomes
- Formative evaluation (see Chapter 3):
Having and ongoing evaluation throughout the learning process enhances students' autonomy and consciousness. In formative evaluation students perform one or more of the following steps:
 - evaluate their initial situation and their initial knowledge
 - set goals and objectives
 - define their strategy and the activities to be implemented
 - figure out where they should focus on learning, based on the results of self-assessment
 - self-assess their experience.

➔ If you want to try to develop an OLA scenario, in Annex 1 you find specific guidelines to follow : *Annex 1- General guidelines for the design of scenarios.*



2.1.1 Constitutive elements of an OLA educational scenario

An OLA educational scenario consists of:

- the “**scenario submission form**” (see Annex 3 - scenario submission form)
- the “**scenario script**” (Annex 2 - Scenario script template): the description of the sequence of activities
- **accompanying material**: supporting educational materials needed to implement the scenario
- the scenario metadata.

The “**scenario script**” includes the canvas which support the teachers in implementing the scenario. Here the activities are divided in teaching periods. For each activity the following elements are identified:

- the estimated time needed for its completion
- type of activity
- the class organization
- students and teachers’ roles
- specific tasks and actions for students and teachers during the activity.

The **accompanying material** may contain worksheets, interactive learning objects (such as h5p content), links to websites, videos, etc.

The **metadata** include:

- the scenario identity (title, creators, subject areas, module/unit, English language level, duration, requirements, key words),
- key competences promoted, categorized by Knowledge, Skills and Attitudes
- learning outcomes

Specific types of metadata must be provided: Descriptive, Structural, Administrative and Accessibility metadata.

The metadata format follows the IEEE 1484.12.1 - 2002 Standard for Learning Object Metadata. This standard defines what a learning object is. Learning Object Metadata is a

data model. The purpose of learning object metadata used to describe a learning object, similar digital resources and used to support learning, is to support the reusability of learning objects, to aid discoverability, and to facilitate their interoperability.

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All OLA scenarios are freely available on the [OLA-INCLUDE REPOSITORY](#), which hosts more than 200 scenarios for lower and upper secondary schools focused on STEAM (OLA scenarios) and on CLIL approach (INCLUDE scenarios)

2.2 OLA target competences

The concept of competence, although central in the educational context and in use for decades, is still in the middle of an open debate characterized by different theoretical frameworks. Following the reflections developed over the past years at European level by the European Commission (2018), the Council of Europe (2016), UNESCO (2013)¹ and the ENVILL framework for Visual Literacy (Wagner & Schonau2021), OLA adopts the conceptual definition provided by the Council Recommendation 2018: “... a combination of knowledge, skills and attitudes, where:

- **knowledge** is composed of the facts and figures, concepts, ideas and theories which are already established and support the understanding of a certain area or subject;
- **skills** are defined as the ability and capacity to carry out processes and use the existing knowledge to achieve results;
- **attitudes** describe the disposition and mind-sets to act or react to ideas, persons or situations”

As reaffirmed by UNESCO (2013) “typically, competence does not depend on any one single skill, attitude, or type of knowledge, instead engaging a complex set of skills, attitudes, and knowledge”. Competences overlap and interlock; skills such as critical thinking, creativity,

¹“Competence refers to having sufficient skill, ability, knowledge, or training to permit appropriate behavior, whether words or actions, in a particular context. Competence includes cognitive (knowledge), functional (application of knowledge), personal (behavior) and ethical (principles guiding behavior) components, thus the capacity to know must be matched to the capacity to speak and act appropriately in context; ethics and consideration of human rights influence both speech and actions”.

problem solving, team work, communication, analytical and intercultural skills are embedded throughout different competences and can be applied in a variety of combinations.

2.2.1 Key competences for lifelong learning

Some competences are identified as essential to a successful life in society and preliminary to the acquisition of more advanced ones. The Council Recommendation identifies 8 *Key competences* defined as “those which all individuals need for personal fulfilment and development, employability, social inclusion, sustainable lifestyle, successful life in peaceful societies, health-conscious life management and active citizenship.” (European Commission 2018): **OLA** scenarios strongly promote the development of the following Key competences:

- *Literacy*: the ability to identify, understand, express, create, and interpret concepts, feelings, facts and opinions in both oral and written forms, using visual, sound/audio and digital materials across disciplines and contexts. It implies the ability to communicate and connect effectively with others, in an appropriate and creative way.
- *Mathematic competence and competences in science, technology and engineering*: the ability to develop and apply mathematical thinking and insight in order to solve a range of problems in everyday situations; the ability and willingness to explain the natural world by making use of the body of knowledge and methodology employed, including observation and experimentation, in order to identify questions and to draw evidence-based conclusions.
- *digital competence*: critical and responsible use of digital contents and platforms; filter and assess information
- *personal, social and learning to learn competence*: critical thinking, collaboration and communication, creativity and innovation and autonomous learning, capacity to evaluate and perceive texts with critical sense and open minded approach;
- *citizenship competence*: act as responsible citizens and to fully participate in civic and social life

2.2.2 Visual competency framework

OLA enriches the Key competences for lifelong learning with dimensions more focused on the Visual Literacy. The aim is to strengthen the consciousness of teachers and students on the way in which women, migrants and cultures others, disability, gender and its fluidity are represented (or underrepresented).

Thus, with reference to the Visual Literacy competency framework developed by ENVIL (2016; 2021) **OLA** scenarios enhance:

the capability to look at images with an open mind;

the capability to research images;

the capability to evaluate images;

the capability to report about images (communicate, present, and use).

These capabilities are referred to the two sub-domains identified by the ENVIL framework: producing work and responding to work made by others.

All **OLA** scenarios must contribute to enhance the above mentioned competences (for a deeper description of these competences please refer to the *Annex 5 OLA competences*).

In OLA approach “*visual literacy*” acquires special relevance:

- in the STEAM approach, with reference to the “A” subjects. Indeed, the researchers of ENVIL (Wagner & Schonau 2021) “believe that the lack of clearly defined competencies was the reason why there were no connections between current empirical educational curriculum development in school subjects such as art (...) and design.”
- in developing responsible and empowered citizens: it is intended as a complement of the literacy area of competence already provided by the Council Recommendation 2018, where the focus is mostly on the capability to critically analyze texts. In a society in which people are more and more exposed to visual stimulus (on the web, in social networks, by newspapers), visual literacy helps to strengthen the capability to act in a visual domain including images and to

evaluate, fully understand and critically analyze visual stimulus. Awareness on the representation of diversity, women, migrants and other cultures is crucial in the perspective of a fair social development.

Thus, with reference to the sub-domain *'responding' to work made by others*, the Visual Literacy competences are included in OLA target competences because of their strong focus on empowering people capability to develop "generate an informed understanding of the image" and to identify *"the meaning(s) of and in the image, its purpose, the way this meaning is expressed by the visual characteristics of the image, and the contextual information that supports a better understanding about the reasons why the image was made and why it was made in this specific way"* (Wagner & Schonau 2021).

2.3 Design by competences and/or learning outcomes

In order to integrate the **OLA** scenarios within the school educational programs, it is essential to define the final objectives to be achieved by the students through the scenario experience. With reference to this point, we need to consider the various existing approaches adoptable while designing educational programs. European countries have two main different approaches: educational design focused on **learning outcomes** and on **competences**; considering OLA partner countries, Spain and Italy design school curricula by competences, while Greece and Romania by learning outcomes.

Competences and learning outcomes are somehow complementary and both relevant. However, Europe is promoting a competence-oriented education, training and learning, in the effort of building a common educational framework for all countries in the European Education Area, as a driver for jobs, social fairness and active citizenship and to ensure resilience and adaptation to change. Already in 2006 the European Parliament and Council published a document of recommendation on key competences for lifelong learning, reviewed and updated in 2018 (European Council, 2018).

DEFINITION

Competences²

As stated in the European Council recommendation 2018 on key competences for lifelong learning, competences are a combination of knowledge, skills and attitudes, where:

- knowledge is composed of the facts and figures, concepts, ideas and theories which are already established and support the understanding of a certain area or subject;
- skills are defined as the ability and capacity to carry out processes and use the existing knowledge to achieve results;
- attitudes describe the disposition and mind-sets to act or react to ideas, persons or situations

In other words, in the educational process **competences** detail the desired knowledge, skills and attitudes of students graduating from a course or program (Kennedy D., Hyland A., Ryan N., 2009), whereas the **learning outcomes** precisely specify what the students are expected to become able to do in order to demonstrate that they have acquired a particular competence (Hartel, .R.W. and Foegeding E.A., 2004).

DEFINITION

Learning outcomes

Learning outcomes are defined as ‘sets of knowledge, skills and/or competences an individual has acquired and/or is able to demonstrate after completion of a learning process, either formal, non-formal or informal’ (Cedefop (2014a).)

Learning outcomes should be **observable**, **assessable** in some way, and both **rigorous** (they specify the complexity of expected learning) and **flexible** (the learning may be demonstrated in a variety of ways).

² see Annex 5 for an overview on OLA target competences

Learning outcomes support the competences, are at a greater level of detail and form the basis of both learning and assessment. Properly constructed, competences and learning outcomes are precisely formulated to indicate what the students should know about, what the students should understand, and what the students should be able to do and how well (Oliver et al, 2008). **Learning outcomes: are not outcomes of learning, but desired targets.** Thus, the challenge for the teacher is to “*select appropriate learning outcomes which will lead to achieving the competencies, specify evaluation indicators and develop a functional delivery system*”(Neary, M. 2002).

EXAMPLE

(From Coyle Do, 2015, Planning Tool for teachers, University of Nottingham)

1. The content of the learning unit, is the starting point for the planning. So, define your topic.
2. Then define the teaching aims (general) and the teaching objectives (specific) of your topic.
3. What are the learning outcomes?

Topic: sustainability and water

The aim of this unit is to study specific aspects of water cycle.

The teaching objectives are:

- to understand the water cycle
- to raise awareness of the effects of climate and climate change on water supply
- to explore ways of saving water

The learning outcomes:

- By the end of this unit learners will be able to:
 - give a small-group power point presentation explaining the water cycle;
 - discuss the concept of drought in a range of countries and create a policy for reducing its effects;
 - design a water saving poster and questionnaire to work with data on how the class saves water; discuss and evaluate how to improve saving

The role of learning outcomes seems to be mainly to support the evaluation process: “*in order to assess competence development, key competence descriptions could translate into frameworks of learning outcomes that could be complemented with suitable tools for diagnostic, formative and summative assessment and validation at appropriate levels*” (European Council, 2018). In other European documents (CEDEFOP 2017) a similar vision of learning outcomes - as statements of what a learner is expected to know, understand and do at the end of a learning sequence, that can be functional for the educational assessment and evaluation - emerges as well.

Many studies are in line with a conception of learning outcomes as more specific, context-related and tangible/verifiable aspects that operationalize competences and make easier the educational assessment and evaluation when dealing with competence orientation (Murtonen, e alt. 2017, Wilhelm e alt, 2019, Hartel e alt. 2004, Barros 2019, Caena,2019), although there are some studies that, viceversa, emphasize the need to think the learning outcomes in terms of competences (Peñaranda e alt 2018).

In conclusion, the awareness of interconnection and complementarity between competences and learning outcomes in the European context and the differences between European countries in terms of educational planning approach (based on competences or on learning outcomes), convinced us to explicitly introduce in the OLA scenario’s template a section devoted to both competences and learning outcomes - as interconnected elements, in order to allow student assessment.

In the template, competences to be promoted by means of the OLA scenarios are categorized according to the Recommendation on key competences for lifelong learning 2018 (European Council) and the ENVIL framework for Visual Literacy.

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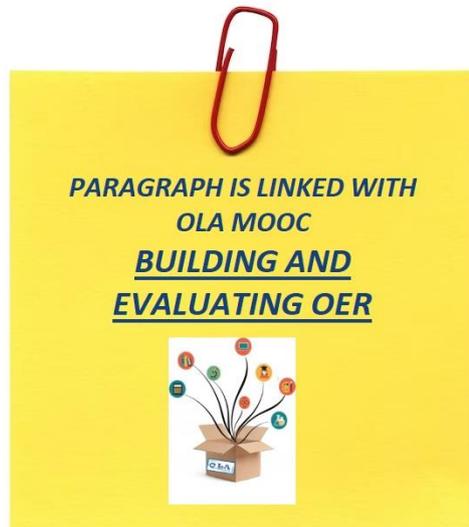
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EVALUATION



3.1 Aims of evaluation and its modularity in OLA approach

3.1.1. Creating windows instead of doors

What do we exactly mean when we talk about evaluation within the OLA approach?

OLA embraces the suggestion to think about evaluation as a window on what and how the student is doing, instead of something external that the student must overcome (*Shannon Dea, Philosophy teacher*). This window also represents an opportunity for the student to have a view on his/her learning process and reflect on him/herself (self-evaluation).

Evaluation acquires 2 different - but interconnected - roles in the OLA approach:

- **The evaluation of student learning – at individual and class level:** The evaluation provides:
at individual level:

- the breadth and depth of student learning and the improvements of student competences
- the progress of each student
- the level of learning outcome achievement

at class level:

- the learning process of the class as a whole
- the capability of the student group in debating, sharing knowledge and ideas, co-creating new knowledge on a specific theme

Moreover, by promoting “student-centred learning”, OLA approach also proposes a shift in relation to the role of evaluation, as suggested by Nicol and Macfarlane (2006), where students have a central and active role in monitoring and evaluating their own performance in relation to both desired goals and strategies used to reach these goals. Evaluation becomes an integral part of the students’ learning process, where they acquire crucial key competences needed to prepare them for learning outside school and throughout life and to reflect on themselves and their life environment.

In other words, in OLA perspective evaluation is more than grading. It plays an important role in the whole student learning and motivation process, enhancing reflexivity and critical thinking skills: students reflect on their own/peer learning, “specifically its achievements and its results” (Boud & Falchikov 1989).

- **the scenario evaluation:** at the course level, evaluation provides important feedbacks on the adequacy and effectiveness of the implemented scenario in promoting the development of:
 - the EXPECTED learning outcomes
 - the target key competences (see *Annex 5 – OLA target key competences*)
 - STEAM subject competences
 - a participative and inclusive approach

The Authors can evaluate their scenarios using the Annex 4 - OLA check list. The emerging data/outputs represent a guideline for the teachers to revise and improve the scenario and/or tools.

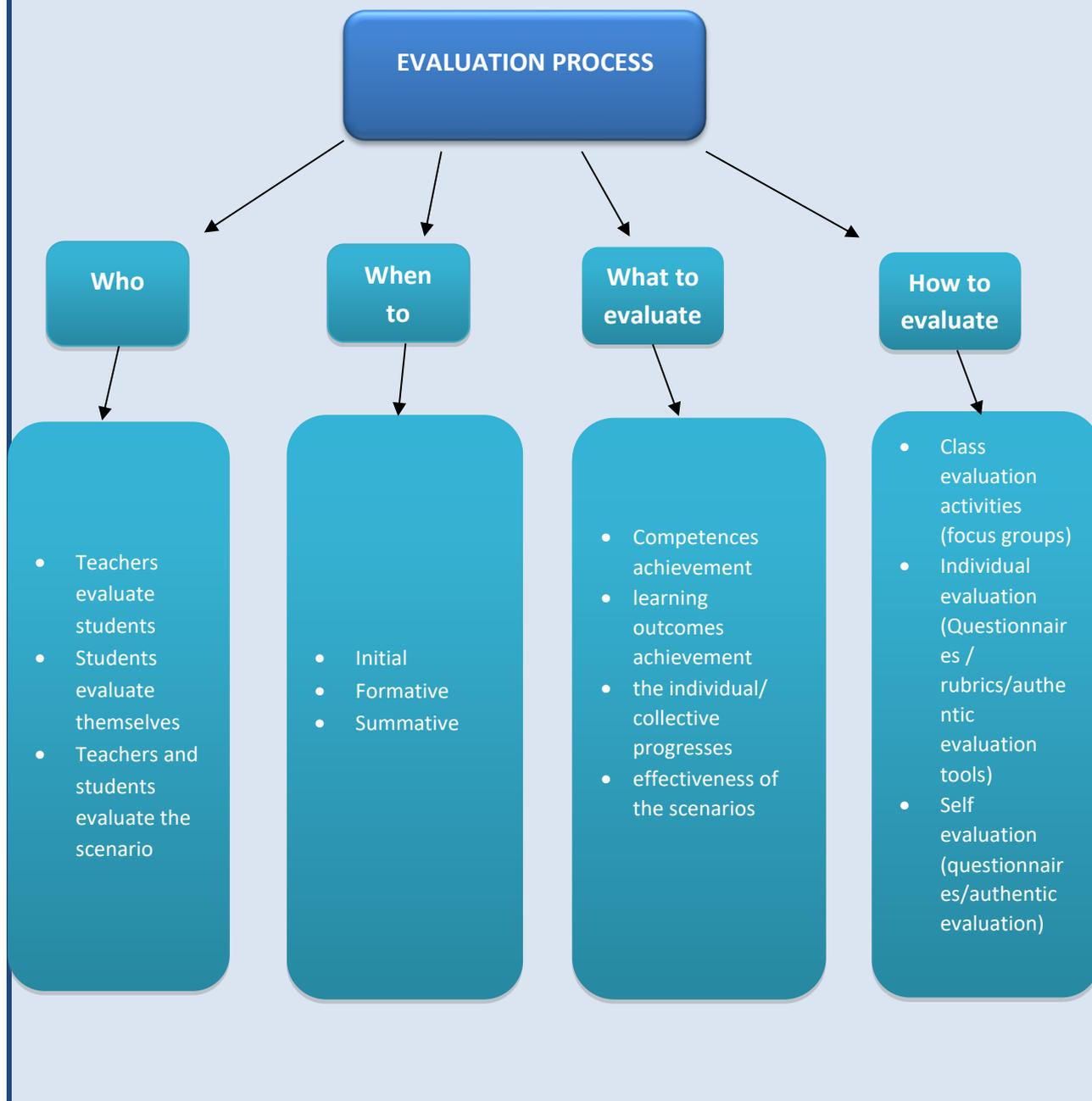
Thus, in the OLA approach evaluation should integrate grading, learning, reflecting on and telling us (and students) what students learned, how well they learned, and where they

struggled; at the same time, it should give us (and students) indication on the effectiveness and adequacy of the scenario *vis a vis* of the learning outcomes provided.

Finally, OLA evaluation approach is characterized by a **high level of modularity** depending on the different subjects considered, the learning outcomes expected, the duration of each scenario. Moreover, modularity can help the teachers in adapting the teaching strategies to the different learning strategies and in paying attention to the student individual needs. For example, the distance or blended learning, or the educational process of students at risk of drop-out, require high flexibility and a continuous adaptation of the educational plan and teaching strategies.

In this section the main phases of the OLA evaluation process and reference frameworks are described; possible approaches and tools are suggested. Teachers can select and choose approaches and tools that best fit for their specific scenario and can find useful and synthetic guidelines to build their personal tools.

A SUMMARY OF OLA EVALUATION



3.1.2 How to define what to evaluate

As previously described, OLA evaluation focuses on 2 main aspects:

- students' learning and progresses
- effectiveness of the scenario implemented.

A main characteristic of OLA is to assess all these competences **in a holistic manner**.

Students' learning and progresses

OLA approach introduces a strengthened focus on some specific competences

COMPETENCES TO BE EVALUATED	
Content-related competences	Content-specific competences
KEY COMPETENCES FOR LIFELONG LEARNING	<ul style="list-style-type: none"> • Literacy • Mathematic competence and competence in science technology and engineering • digital competence (critical and responsible use of digital contents and platforms; filter and assess information) • personal, social and learning to learn competence (critical thinking, collaboration and communication, creativity and innovation and autonomous learning, capacity to evaluate and perceive texts with critical sense and open minded approach);



	<ul style="list-style-type: none"> • citizenship competence (act as responsible citizens and to fully participate in civic and social life)
VISUAL COMPETENCY	LITERACY <ul style="list-style-type: none"> • the capability to look at images with an open mind; • the capability to research images; • the capability to evaluate images; • the capability to report about images

Effectiveness of the scenario implemented

Moreover, the OLA approach evaluates the adequacy and effectiveness of the scenario implemented in:

- achieving the target learning outcomes
- achieving OLA target competences
- promoting a participative and inclusive approach

Thus, the following points are the focus of OLA evaluation:

- acquisition of STEAM topic-related competences
- acquisition of OLA competences: literacy, personal, social and learning, digital and visual literacy, citizenship
- quality of the scenario, depending on the results obtained (effectiveness)
- involvement of teachers and institutions in the learning process with students

3.1.3 From competences to learning outcomes

As already clarified in section 2.3 considering the different normative framework assets at national level, OLA approach provides 2 different perspectives in designing scenarios:

- Design by competences
- Design by learning outcomes

That's the reason why, in each scenario, target competences and learning outcomes must be linked to each other's.

Thus, clarifying the existing relationship between competence and learning outcome is crucial, also considering the latter as the main object of evaluation.



3.2 Evaluation phases in OLA: INITIAL/FORMATIVE/ SUMMATIVE evaluation

DEFINITION

INITIAL EVALUATION

When: at the beginning of the scenario implementation

Who: Teachers evaluate students, Students evaluate themselves (self evaluation)

What to evaluate: the individual and collective (student and class) situation before the scenario implementation in terms of:

- View on the topic of the scenario
- Competences (knowledge, attitudes and skills)
- Co-creation process between students and within the class

at student level: to have a freeze frame needed to evaluate the individual progress and the changes produced at the end of the implementation phase. The data collected will be useful to evaluate the individual and collective changes after the scenario implementation

at class level: to evaluate: the learning process of the class as a whole; the interactions among students with reference to the capability of the student group in debating, sharing knowledge and ideas, co-creating new knowledge, on a specific theme.

How:

- students are evaluated (by teachers and by themselves) by means of traditional tools (questionnaires and rubrics)
- authentic evaluation tools, focus groups etc.

DEFINITION

FORMATIVE EVALUATION

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When: ongoing during the scenario implementation. Depending of the duration of the scenario, in one or more sessions

Who: Teachers evaluate students, Students evaluate themselves (self-evaluation), students and teachers evaluate the scenario

What: Formative evaluation refers to a continuous monitoring of the quality of the educational processes, providing feedbacks that facilitate the improvement of the educational processes in order to monitor the application of the OLA specificities. It assumes continuous cycles of consultation and feedback, thus fostering collaboration and reflection among students and teachers.

Formative evaluation has three essential properties:

1. is **planned** since the beginning
2. is **reactive**, because teachers try to adjust and modify their activities “in the light of the information they gain”.
3. is **reciprocal**, due to the fact that “teachers and learners may improve the quality of the studies according to the information they get from formative assessment” (Barbero, T. 2012).

Formative evaluation

1. provides students:
 - with the tools to take control of their own learning, i.e., to become self-regulated learners
 - with active involvement in monitoring and regulating their own performance
 - helping correct misconceptions or inappropriate task strategies
 - with higher motivation and more efficient task strategies
2. provides teachers with:
 - making learning barriers visible
 - evidence about students’ current level of performance
 - tools to adjust their educational activities to fit with the students’ current level of learning

How:

- traditional tools as questionnaires and rubrics for self-evaluation
- teacher manage evaluation by means of traditional tools as questionnaires and rubrics submitted at individual and/or collective level

Moreover, other and more participative approaches could be provided, such as focus groups or authentic evaluation tools – for example a project work or a role playing, already provided as practice exercises from the scenario or some more innovative approaches such as service learning, cooperative service learning.

DEFINITION

SUMMATIVE EVALUATION

When: at the end of the scenario implementation

What to evaluate: individual and collective (students and teachers) situation after the scenario implementation in terms of:

- Expectative compliance
- Competences acquired (knowledge, attitudes and skills)

At student level: achievement of learning outcomes provided. It is important to make a comparison with data collected in the INITIAL evaluation, to evaluate the individual progress and changes produced through the scenario implementation.

At class level: the learning process of the class as a whole; the interactions among students; the capability of the student group in debating, sharing knowledge and ideas, co-creating new knowledge, on a specific theme

At scenario level: the effectiveness of the scenario and tools in producing the expected changes/learning outcomes achievement.

How:

- traditional tools as questionnaires and rubrics for self-evaluation

- teacher manage evaluation by means of traditional tools as questionnaires and rubrics submitted at individual and/or collective level

Moreover, other and more participative approaches could be provided, such as focus groups or authentic evaluation tools – for example a project work or a role playing, already provided as practice exercises from the scenario or some more innovative approaches such as service learning, cooperative service learning.

DEFINITION

SELF EVALUATION IN PRACTICE

Through **self-assessment**, students:

- identify the gaps in their competences, skills and knowledge
- identify the weaknesses in these competences, skills, etc.
- figure out where they should focus on learning, based on the results of self-assessment
- find out whether the objectives they have set for themselves have been achieved
- set actual objectives for future learning,
- are able to revise what they have already learned
- track their progress in learning new learning tasks and activities.

The ability to assess the one's own work is a complex duty that requires specific skills, to be developed over time by means of guidance and practice.

It is essential to give the students the opportunity to develop their capacities to provide substantive feedback and make informed judgements about what can be evaluated as a good work in a particular domain of knowledge.

The most important conditions of self-assessment are (Panader, E. & Alonso-Tapia, J. 2013):

- Awareness of the value of self-assessment
- Access to the criteria on which assessment is based from the beginning of the task.

- The task to be assessed needs to be specific. If the task is too broad or not well defined, carrying out self-assessment can be complicated. Teachers should bear this fact in mind and try to choose tasks that are well-defined and with clearly established steps.

Clearly, the process would require some in-class time at the beginning, but the time-investment is well worthwhile, as it will lead to better self and peer assessments and more positive response from students.



3.4 Evaluation Tools

Below you find some examples of the different evaluation tools and means that we propose and some suggestions on how to implement them in your scenario.

Questionnaires

Use proposed in the OLA evaluation system

Initial	students teacher	At student level
Summative	students teacher	At student level
Formative	Teacher	At student level

Questionnaires can be used:

- in the **Initial** and/or **Summative** evaluation, to measure the students learning progress and/or the achievement of learning outcomes and knowledge acquired
- In the **Formative** evaluation, to monitor/check how learning is going

The questionnaire for the evaluation by teachers should be short and topic-centered (few and effective questions).

The questionnaire for self-evaluation should be filled in by the students before starting and at the end of the scenario implementation.

Here is an example of self evaluation questionnaire (to be adapted to the class level and needs, teacher views and choices and to the topic)

SELF EVALUATION QUESTION	BEFORE 1-5 SCORE	AFTER 1-5 SCORE	REFLECTION ON your changes
--------------------------	---------------------	--------------------	-------------------------------

How much are you interested in this topic?

How much are you interested in examining in depth this topic/argument (search new information, by means of traditional channels and/or the net)?

In your view, how competent are you in this subject?

In your view, could you actively participate in a discussion/ debate with your schoolmates on this topic?

.....

What did you like about the scenario?
(open question)

TOTAL SCORE

Rubrics

Use proposed in the OLA evaluation system

Initial	teacher	At student level
Summative	Teacher	At student level



OLA approach fosters the use of rubrics to evaluate students' performances with reference to different skills and competences and then to seek plausible solutions to improve them. This process will result in not only assessing, but also in facilitating learning and acquisition of competences (see also Kirby-Lintonet *al.*1996; McTighe& Wiggins, 1999). A rubric defines both what students know and what they are able to do with what they know. Teachers can adopt Rubrics in the **initial** and/or **summative** evaluation.

The rubric consists of a scale of predetermined scores and a list of criteria that describe the characteristics of each score of the scale. It takes the form of a matrix consisting of rows listing the features of the performance to be assessed, and columns with descriptors. Descriptors in rubrics usually indicate the performance qualities and the corresponding scores (Barbero 2012). Based on the information obtained from rubrics, teachers know how, when, where, and how to support the learning process, enhance students' motivation, and guide students to what to do and how.

A sample of general rubrics

Scores	Descriptors
Excellent	Complete and thorough knowledge of the subject matter
Good	Complete knowledge of the subject matter
Satisfactory	Essential knowledge of the subject matter
Almost satisfactory	Lack of necessary background knowledge
Unsatisfactory	No knowledge of the subject matter

Table below is suggested as a tool that may help in this task:

Item	Excellent	Very Good	Satisfactory	Unsatisfactory
To modify and edit existing digital resources, where this is permitted				
To combine and mix existing digital resources or parts thereof, where this is permitted				

To create new digital educational resources				
To jointly create with others digital educational resources				
To consider the specific learning objective, context, pedagogical approach, and learner group, when adapting or creating digital learning resources				
To understand different licenses attributed to digital resources and the implications for their re-use				

Focus group

Use proposed in the OLA evaluation system

Initial	Teachers facilitate debate among students	At class level
Summative	Teachers facilitate debate among students	At class level

OLA Evaluation Focus groups are meaningful conversations between students on a specific topic, guided by the teacher, aiming at evaluating, through listening and observation, the **learning process of the class as a whole**; the interactions among the students with reference to the capability of the student group in debating, sharing knowledge and ideas, co-creating new knowledge, on a specific theme.

In order to manage the focus group, the teacher must identify some few key questions (at least 3 or 4) to stimulate and guide the conversation in a relaxed atmosphere. The conversation should last max 1 hour and data emerges from group interaction.

Below we suggest some possible questions:

1. General topic (to encourage conversation and participation)
2. Primary topic (one of the main areas you want to explore).
3. Secondary topic
4. Third topic....
5. Close – summing up

In framing questions, it is vital that the teachers encourage students to define subjects and areas in their own terms, and allowing the active contribution of all participants. To this latter aim, we suggest to adopt the Metaplan methodology (Mayer, Valente 2009):

- At the beginning participants are invited to think silently about the topic/questions on their own, possibly collecting ideas on personal template, in order to stimulate “tacit knowledge”, the kind of knowledge that is difficult to transfer to another person (Polanyi, 1966)
- Then participants share their ideas and discuss about the different inputs collected
- the emerged ideas are collected on a shared template and collectively debated

Authentic evaluation tools

Use proposed in the OLA evaluation system

Summative	Teacher	At student level
Formative	Teacher	At student level

In authentic evaluation students are expected to perform real-world tasks, demonstrating that they have acquired essential knowledge, attitudes and skills. Authentic evaluation fosters ways of thinking and problem solving used in real life.

For example, authentic evaluation in the field of home economics would demonstrate increasing ability of the student in making a family weekly budget.

Authentic assessment has several factors which should be taken into consideration while performing this process. These factors also entail some questions as a consequence of applying them in teacher's assessment (Barbero, 2012).

- Providing authentic tasks: "What tasks are typical of that subject?"
- Developing a set of standards consistent with the teaching objectives: "What will students be able to do?"
- Identifying the criteria: "What are the essential elements of the task?"
- Identifying competence levels for each criterion (generally between two and five) and attributing a score for each level: "What is the level of competence achieved?"
- Finding competence descriptors for each level and for each criterion. Descriptors may be expressed synthetically (for example: excellent, good, satisfactory, almost satisfactory, unsatisfactory, or: complete, partial, not at all), or analytically: "How can integrated skills be described for each score and in relation to each criterion?"
- Creating a scored rubric to be drawn upon and adapted to each performance: "What kind of feedback is provided to the learner?"

Taking these factors into account while conducting authentic assessment is expected to be fruitful and to lead to a successful evaluation by both the teacher and student.

Some example of authentic evaluation:

- **Presentation:** The idea to take a work and present it within the classroom encourages students to invest more into their work and enhances the development of transversal and specific skills. Key aspects that make presentations authentic are the preparation time, the practice and appropriate use of ICT tools and linguistic competences, the growth of working either individually or collaboratively, as well as the improvement of gesture and verbal, visual, written communication skills.
- **Report:** A report requires the students to address for example a research question in a professional manner. This type of assignment also familiarizes students with the language of the specific field.
- **Case study and simulation games:** Case studies present a scenario that leads up to one (or more) dilemma requiring problem solving or decision-making. Common

simulation games are simulation of city council, corporation stockholders or school boards.

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ANNEXES

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Annex 1 - Guidelines for the design of scenarios



1. The OLA educational scenario lasts **2 or 3 teaching** periods
2. each teaching period should be a normal teaching period, that is **45-50 minutes**
3. the design of the scenario should start from the definition of the **expected learning outcome** or the **target competences** (for target competences see *Annex 5 OLA Competences*), creating a link among themselves. Each activity proposed should be connected to a learning outcome.
4. Each activity within a teaching period should be described in detail in the Scenario Script (*Annex 2 Scenario script template*) by mentioning **Time, Type of Activity** (whole class, individual/pair/group work) and **Actions/Tasks** (what the teacher/students do step by step)
5. There should be worksheets with activities so that other teachers who are going to implement the scenario have something to rely on, although they could be adapted according to target group.
6. the scenario must comply with **STEAM subject** and being **interdisciplinary**
7. For the **Multimodality** component, input should be provided in various forms (videos, texts, websites, interactive activities, custom-made video lessons, interactive presentations etc) but also students' output should have similar features so that we can develop their media/digital literacy. Collaborative digital tools promote Collaboration / Communication / Creativity which are features of Transversal Skills and Multimodality.
8. Always have in mind when designing a scenario that other teachers and students from other countries are going to implement it, so it must be easy for them to **follow the step-by-step** teaching/learning procedure



9. Self-evaluate the scenario using the **OLA Scenario Checklist** (*Annex 4 OLA scenario check list*)



Annex 2- Scenario Script Template

Title:

Author/s:

--

Adjust the number of teaching hours according to your scenario. Add the number of activities for each teaching hour.

Remember to cite properly all OERs used in this scenario.

1st teaching period

1st Activity:

<i>Time:</i>	
<i>Type of activity:</i>	
<i>Class organisation:</i>	
<i>Actions/Tasks:</i>	

2nd Activity:

<i>Time:</i>	
<i>Type of activity:</i>	
<i>Class organisation:</i>	
<i>Actions/Tasks:</i>	

3rd Activity:

<i>Time:</i>	
<i>Type of activity:</i>	
<i>Class organisation:</i>	
<i>Actions/Tasks:</i>	

2nd teaching period

1st Activity

<i>Time:</i>	
<i>Type of activity:</i>	
<i>Class organisation:</i>	
<i>Actions/Tasks:</i>	

2nd Activity:

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<i>Time:</i>	
<i>Type of activity:</i>	
<i>Class organisation:</i>	
<i>Actions/Tasks:</i>	
3rd Activity:	
<i>Time:</i>	
<i>Type of activity:</i>	
<i>Class organisation:</i>	
<i>Actions/Tasks:</i>	
<i>Suggestions for future development and expansion of the scenario</i>	
<i>Differentiation</i>	



Annex 3 – Scenario submission form

Scenario submission form

Section 1

Title: *Fill in the title of the scenario*

Creators	<i>Fill in the names of all teachers involved in the creation of the scenario</i>
School	<i>Name of the school</i>
Module	<p><i>Fill in the module (the set of interdependent units) in the curriculum which your topic fits in.</i></p> <p><u>Example</u></p> <p><i>Scenario Title: Your product, your rights</i></p> <p><i>Subject Area: Home Economics</i></p> <p><i>Module: Consumer Behaviour</i></p> <p><i>Unit: Economic Reality and Family Budget</i></p> <p>1.</p> <p>2.</p>
Unit	<p><i>Fill in the specific unit in the module that the topic of your scenario fits in.</i></p> <p>1.1</p> <p>1.2</p>
Subject areas:	<p><i>Check the subject areas in which your scenario belongs to. In case of interdisciplinary scenarios check more than one subject areas</i></p> <p><input type="checkbox"/> Mathematics</p> <p><input type="checkbox"/> Physics</p> <p><input type="checkbox"/> Chemistry</p>

- Biology
- Geography
- Language (L1 e.g. Greek, Romanian, Italian, Spanish)
- Literature
- History
- Religion
- Art
- Music
- Informatics
- Technology
- Physical education
- Home economics
- Civic education
- Other (specify)

Student age *Choose the age of students you think your scenario is suitable for. You can check more than one ages.*

- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17 +



English Language Level	According to the Common European Framework reference for languages
Requirements	Fill in special requirements needed for the implementation of the scenario in terms of equipment and materials (e.g. interactive board, access to PC lab, electronic devices, equipment for experiments).
Duration	Choose the number of teaching hours needed for the implementation of your scenario
Key words	Fill in up to 5 keywords describing your scenario. Do not use as keywords the subject area, the module or the unit filled in previously in the form

Section 2 Key competences

Key competences Check in Annex 5 the key competences that your scenario promotes

- Literacy competence
- Mathematical competence and competence in STEM
- Digital competence
- Visual literacy competence
- Personal, social and learning to learn competence
- Citizenship competence

Knowledge	
Attitudes	
Skills	



Section 3 - Learning outcomes

Learning outcomes Write the learning outcomes expected from your scenario for both subject area and English language. Please consider that the learning outcomes are used by the teacher for the evaluation of students

SECTION 4 - Digital materials

The scenario folder	
The scenario script file	The scenario script is the actual description of the activities involved in each teaching hour
List of digital files	List here the filenames of all the files you have uploaded in the scenario folder that are used in the scenario as described in the scenario script (e.g. worksheets, document files, multimedia files etc)
List of OER used in the scenario	



<p>List of URLs used as resources</p>	<p>List here the URLs given in the scenario as informational resources. For example in the scenario <i>Your Product Your Rights</i> among other tools listed in this section there is:</p> <ul style="list-style-type: none">• an online video on budgeting and money management (https://player.vimeo.com/video/239510067)• A european community web site on consumer rights (https://europa.eu/youreurope/citizens/consumers/shopping/index_en.htm)
<p>List of digital tools used in the scenario</p>	<p>List here digital tools used in the scenario either by the teacher or by the students for the scenario activities (e.g. H5P tools, web 2.0 tools, online simulations). For example in the scenario <i>Your Product Your Rights</i> among other tools listed in this section there is:</p> <ul style="list-style-type: none">• a concept map created by the teacher with cmap tools (https://cmapscloud.ihmc.us/viewer/cmap/1S7ZYH9YN-75C6R9-DH1)• the digital tool canva which is meant to be used by the students to create their own digital posters (https://www.canva.com)

Annex 4 – OLA check list



OER REQUIREMENTS COMPLIANCE

- 1) open license materials and resources (e.g. images, audio, videos, activities) are being used?
 - YES
 - NO
- 2) open formats allowing teachers to easily revise, remix and adapt the educational materials are provided?
 - YES
 - NO
- 3) easy access to additional resources – e. g. through free links- is provided?
 - YES
 - NO
- 4) Can the scenario be adapted to different school contexts (eg. different subjects, territorial contexts in your country or at transnational level)?
 - YES
 - NO

MULTIMODALITY/ACCESSIBILITY

- 5) Does the scenario take into consideration the different supports students have/not have access to (for example, technological facilities in terms of hardware, software, internet connection, size of the screen)?
 - yes
 - no



- 6) Does the scenario consider **different learning styles**, which means providing a good level of **multimodality** in terms of a variety of educational resources - video, texts, images, conceptual maps -?
- Yes
 - no
- 7) Does the scenario take into account special educational needs (e.g. dyscalculia, dysgraphia, dyslexia, visual disability, cognitive disability, hearing disability, speech disability, motor disability, social vulnerability, foreign students) by providing one or more of the following:
- *simplified texts*
 - *headings and subheadings*
 - *conceptual maps besides texts*
 - *descriptive texts beside images*
 - *contextual or supporting details describing the graphs, charts, and maps*
 - *images and graphs that not rely on colour to convey information*
 - *subtitles/transcript in videos,*
 - *audios besides videos*
 - YES
 - NO

STEREOTYPES (in SCENARIO educational materials)

Does the scenario

- 8) use an inclusive language?
- YES
 - NO
- 9) use inclusive and not-stereotyped images and videos?
- YES
 - NO



STEAM APPROACH

10) Does the scenario promote a multidisciplinary approach?

- yes
- no

11) Does the scenario promote a STEAM approach, integrating sciences and arts/humanities?

- yes
- no

TARGET COMPETENCES

12) Are target competences and learning outcomes correctly and clearly explained in the scenario description?

- Learning outcomes
 - yes
 - no
- Competences
 - yes
 - no

13) Does the scenario promote the development of:

- digital competences?
 - YES
 - NO
- citizenship competence?
 - YES
 - NO
- critical and responsible use of digital contents and platforms?
 - YES
 - NO
- students' capacity to evaluate and perceive images and texts with critical sense and open minded approach (visual literacy)
 - YES

- NO
 - students' capacity to filter and assess information
 - YES
 - NO
- 14) Does the scenario promote the ability to detect prejudices and stereotypes within, texts, images, videos in the students?
- YES
 - NO
- 15) Does the scenario encourage:
- student autonomous learning?
 - YES
 - NO
 - collaborative learning among students and participatory approach?
 - YES
 - NO



Annex 5- OLA Competences

OLA Scenario must intercept one or more of the following competences, enhancing some of the skills, attitudes and knowledge listed above.

Based on the Council Recommendations on key competences for lifelong learning (OJ L2018/C 189/01)



1. Literacy competence

Knowledge

- the main types of verbal interaction
- a range of literary and non-literary texts,
- the main features of different styles and registers of language.

Skills

- communicate both orally and in writing in a variety of situations
- adapt their own communication to the requirements of the situation
- distinguish and use different types of sources, to search for, collect and process information
- critical thinking and ability to assess and work with information

Attitudes

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- disposition to critical and constructive dialogue
- awareness of the impact of language on others
- understand and use language in a positive and socially responsible manner

2. Digital Competence

Knowledge

- understanding how digital technologies can support communication, creativity and innovation
- awareness of the opportunities, limitations, effects and risks of digital technologies
- understanding the general principles, mechanisms and logic underlying evolving digital technologies
- knowledge of the basic function and use of different devices, software, and networks
- adopting a critical approach to the validity, reliability and impact of information and data made available by digital means
- awareness of the legal and ethical principles involved in engaging with digital technologies

Skills

- ability to use digital technologies to support active citizenship and social inclusion, collaboration with others
- ability to use digital technologies to support creativity towards personal, social or commercial goals
- ability to use, access, filter, evaluate, create, program and share digital contents



- ability to manage and protect information, content, data, and digital identities
- ability to recognize and effectively engage with software, devices, artificial intelligence or robots

Attitudes

- engagement with digital technologies and content with a reflective and critical, yet curious, open-minded and forward-looking attitude to their evolution
- ethical, safe and responsible approach to the use of digital tools

3. Mathematical competence and competence in science, technology, engineering

Knowledge

- sound knowledge of numbers, measures and structures, basic operations and basic mathematical presentations
- understanding of mathematical terms and concepts
- awareness of the questions to which mathematics can offer answers
- basic principles of the natural world, fundamental scientific concepts, theories, principles and methods, technology and technological products and processes,
- understanding of the impact of science, technology, engineering and human activity in general on the natural world

Skills

- apply basic mathematical principles and processes in everyday contexts at home and work (e.g. financial skills),
- follow and assess chains of arguments
- be able to reason mathematically, understand mathematical proof and communicate in mathematical language
- use appropriate aids including statistical data and graphs

- understand the mathematical aspects of digitalisation
- understanding of science as a process for the investigation through specific methodologies, including observations and controlled experiments
- ability to use logical and rational thought to verify a hypothesis
- readiness to discard one's own convictions when they contradict new experimental findings
- ability to use and handle technological tools and machines as well as scientific data to achieve a goal or to reach an evidence-based decision or conclusion
- recognise the essential features of scientific inquiry
- ability to communicate the conclusions and reasoning that led to them.

Attitudes

- respect for truth and a willingness to look for reasons and to assess their validity
- critical appreciation and curiosity
- concern for ethical issues and support for both safety and environmental sustainability, in particular as regards scientific and technological progress in relation to oneself, family, community, and global issues.

4. Personal, social and learning to learn Competence

Knowledge

- understanding the codes of conduct and rules of communication generally accepted in different societies and environments for successful interpersonal relations and social participation
- knowledge of the components of a healthy mind, body and lifestyle for personal, social and learning to learn competence
- knowledge of one's preferred learning strategies



- knowledge of one's competence development needs and various ways to develop competences
- search for the education, training and career opportunities and guidance or support available

Skills

- ability to identify one's capacities, focus, deal with complexity, critically reflect and make decisions
- ability to learn and work both collaboratively and autonomously
- ability to organize and preserve with one's learning, evaluate and share it
- ability to seek support when appropriate and effectively manage one's career and social interactions
- ability to cope with uncertainty and stress
- ability to communicate constructively in different environments, collaborate in teams and negotiate
- ability to show tolerance, express and understand different viewpoints
- ability to create confidence and feel empathy

Attitudes

- respect diversity of others and their needs and being prepared both to overcome prejudices and to compromise
- ability to identify and set goals and motivate themselves
- ability to develop resilience and confidence to pursue and succeed at learning throughout their lives
- individual's ability to handle obstacles and change for a problem-solving attitude in the learning process

- desire to apply prior learning and life experiences and the curiosity to look for opportunities to learn and develop in a variety of life contexts

5. Citizenship Competence

Knowledge

- knowledge of basic concepts and phenomena relating to individuals, groups, work organizations, society, economy and culture
- understanding of the European common values
- knowledge of contemporary events as well as a critical understanding of the main developments in national, European and world history movements
- awareness of the aims, values and policies of social and political movements and their underlying causes
- awareness of the aims, values and policies of sustainable systems, in particular climate and demographic change at the global level and their underlying causes
- knowledge of European integration as well as awareness of the multi-cultural and socioeconomic dimensions of European societies
- knowledge of how national cultural identity contributes to the European identity

Skills

- ability to engage effectively with others in common or public interest, including the sustainable development of society
- develop critical thinking and integrated problem solving skills
- develop arguments and constructive participation in community activities as well as in decision-making at all levels, from local and national to the European and international level
- ability to access, have a critical understanding of, and interact with both traditional and new forms of media

- ability to understand the role and functions of media in democratic societies

Attitudes

- willingness to participate in democratic decision-making at all levels and civic activities
- support for social and cultural diversity, gender equality and social cohesion, sustainable lifestyle
- promotion of culture of peace and non-violence
- readiness to respect privacy of others and to take responsibility for the environment
- develop an interest in political and socioeconomic developments, humanities and intercultural communication to ensure social justice and fairness

Based on Common European Framework of Visual Competency (ENVIL, 2020, Competencies in Visual Literacy: The Revised Common European Framework of Reference for Visual Competency, European Network for Visual Literacy (ENViL)



1. Look at images with an open mind

This first new competency relates to the phase in which a new visual sensation is seen as an image, before any additional information is intentionally looked for in order to arrive at a deeper understanding of the image:

- experiencing the visual qualities that make this image ‘powerful’
- connecting oneself emotionally and intellectually with what is there to be seen

2. To research images

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The next phase – to research images – is needed in order to arrive at a deeper and more complete understanding of an image. Research with regard to an image can be understood in the same way as research in science: a systematic exploration. Here the object of study is the meaning(s) of and in the image, its purpose, the way this meaning is expressed by the visual characteristics of the image, and the contextual information that supports a better understanding about the reasons why the image was made and why it was made in this specific way.

- Analyse an image
- Describe an image
- Interpret an image

3. To evaluate images

It refers to what makes an image relevant, successful, and powerful.

- Judging images: use of criteria, be they aesthetic, ethic, political, legal, economic, etc., to arrive at a systematic appreciation or valuation of an image in a comprehensible and intersubjective way.
- Valuing images: the image is appreciated for its uniqueness and its expressive qualities, as well as for its contribution to one's own life or to the life of others or society at large.

4. To report about image

This domain is related to the capability to present the results of the other three sub-competencies:

- communicate,
- present
- use