EAGLE

EnhAnced Government LEarning

www.fp7-eagle.eu

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Objective 8.2 Technology-enhanced learning;

Target outcome c): Holistic learning solutions for managing, reaching and engaging learners in the public administrations

Deliverable 7.3

Cross-European Collaboration Best Practices and Guidelines

WP 7 – LOCALIZATION
Lead Participant: HRW

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Glossary

EC	European Commission
EAGLE	EnhAnced Government Learning
EU	European Union
FP7	Seventh Framework Programme
WP	Work Package

Executive Summary

The deliverable D7.3 develops good practice guidelines for Cross-European collaboration. It provides feedback from EAGLE users and the corresponding improvements.

This Deliverable is a documentation of

1. Good practice requirements for collaboration
2. Showcases and guidelines how to work together in EAGLE
3. Validation of results (best practice guidelines) from EAGLE users

Need for the Deliverable

The project EAGLE aims at introducing an open learning and knowledge sharing platform in local public administrations (hereafter called EAGLE platform). The goal is to foster and sustain learning in and across local administration at national and European level. In this respect, collaborative activities between public employees across administrations and country borders are a central element to success. The deliverable addresses the topic collaboration and provides best practice guidelines to public employees. The guidelines will help those interested in collaboration throughout different steps and roles in collaborative learning and knowledge exchange.

Objectives of the Deliverable

One objective is to showcase good practice for “OER adaptation in different cultural contexts”; the second is to showcase good practice for “OER collaborative development”.

Recipients of the deliverable shall be guided to avoid and overcome socio-cultural, technical and procedural challenges in corresponding activities.

- Elaborate which collaboration practices are likely to happen and to succeed
- What kind of guidelines are most useful for EAGLE users
- How results are received by EAGLE users

Outcomes

The outcome is a set of minimum requirements and corresponding, illustrating guidelines. Criteria are validated both in dedicated validation trials as well as in expert discussions. Hence, the deliverable offers a multi-disciplinary validated set of guidelines for EAGLE users.

Next steps

The introduction provides an overview of issues revolving around online collaboration and correspondingly to this, which aspects are important for EAGLE. Subsequently, we discuss concepts for collaboration behind the EAGLE guidelines. The second chapter we introduce the methodology adopted to identify relevant practices that support cross collaboration. In the third chapter, we present the results of our investigations: best practices and guidelines to Cross-European collaboration.

1 Background

The introduction provides an overview of general issues revolving around online collaboration and why it is important for EAGLE. Subsequently, we discuss concepts for collaboration behind the EAGLE guidelines.

1.1 Introduction to the topic

The goal of the deliverable is to showcase collaborative activities across cultural borders including adaptation scenarios. But what does collaboration in OER development mean? The goal of the deliverable "Cross-European Collaboration in OER" refers in the most general sense to "**a situation in which two or more people learn or attempt to learn something together [in a heterogeneous group context]**" (Dillenbourg 1999:1). Collaboration is promoted because the mode of solving tasks seems to result in superior outputs. However, experiences make clear, that "collaboration is not simply a treatment which has positive effects on participants" (Dillenbourg et al. 1995:21). Challenges may be the effect of learner isolation (Palloff & Pratt 2005:8), conflict within groups or mismatch of collaborating partners. According to (Hogan & Tudge 1999:40):

> "*... collaborative problem solving (as to anything else) requires more than pairing a child with a more competent other and focusing simply on the interactions between them (or, for that matter, on the results of those interactions). Rather, it requires an interweaving of different aspects of development, involving the individual and the cultural-historical as well as the interpersonal, and focusing on the processes of development themselves."*

Hence, **to generate positive effects in collaboration, challenges need to be avoided and conditions to create positive interaction are needed**. People who are unfamiliar with collaborative tasks need to be guided to avoid resistance and generate quick visible outcomes.

Collaboration is dependent on individual prerequisites (participant's roles and characteristics); on the context or shared cognition, on the group heterogeneity and the task features, just to mention a few (Dillenbourg et al. 1995). As those aspects interact, it becomes difficult to pick and concentrate on one major point. 'Collaborative learning' in this respect, is an even more flawed term in research and practice. Apart from discussions about "collaboration", the term intersects with cooperative learning, face-to-face and online learning. Learning may itself be organized by different cognitive mechanisms, pedagogical or psychological approaches ((Dillenbourg 1999; McInnerney & Roberts 2004). So where to start elaborating on guidelines in view of the broad topic?

Generally, a first frame is offered by the pedagogical frame for EAGLE. WP4 has developed a socio-constructivist perspective (Guerra, Traxler, Royle, Prakash 2015.) which gives emphasis on social interaction as a main pillar to generate skills, competences and internalize new knowledge. Thus, EAGLE users should be guided in **social interaction** to generate positive effects among participants. Second frame is to focus on **practices relevant for users who collaborate at the workplace**. The relevance to practice and to sharing experiences is essential for generating good practice recommendations. Third but not least, **guidelines have to be valid across different contexts**. Hence, it is best to offer guidance by help of basic requirements and process guidelines that diverse users bring into life within their contexts.

Following these first considerations, relevant fields and concepts associated to "collaborative learning" will be introduced briefly. This will further help to tailor the EAGLE approach and focus on activities dedicated to Cross-European collaboration in OER.

1.2 Concepts for EAGLE guidelines

The previous introduction has indicated that several scenarios are associated to “collaborative learning”. It needs to be further clarified which concepts have to be included to foster cross-EU collaboration in OER, (particularly in OER adaptation and OER collaborative development). The clarification is needed to extract good practice requirements and guidelines in a second step.

To elaborate relevant concepts, differences in collaboration and cooperation, the role of learning, and cross-cultural borders and role of technology will be assessed. Addressing each aspect, it will be clarified whether or not EAGLE guidelines will be specified as well.

1.2.1 Collaboration

The term collaboration “for” OERs / learning is ambiguous. It can refer to scenarios where two people meet to create OERs jointly or they create OERs separately and then jointly discuss about the results for means of learning but whether it is online, offline or both is open. Hence, the phase of interaction, kind of learning and collaboration is indefinite per sé (Dillenbourg 1999). Yet, there are minimum criteria to allow classifying collaborative learning. According to (McInnerney & Roberts 2004:205); learners have to do the work together, jointly, in interactive communication. They have to develop shared knowledge regarding their use of terms and experiences. Hence, not only exchange of perspective on the topic of the task is at stake but rather the togetherness, work and identification of the team during most of the time.

This understanding of collaboration is centered on **social-interaction and most suitable scenario** for EAGLE pedagogical perspective (Guerra et al. 2015). However, another understanding posits that learners perform as individuals; instead of mutual enhancement, reaching the task is the main goal (Ingram & Hathorn 2004:218), (McInnerney & Roberts 2004:206). Social-interaction is not the focus since learners mainly elaborate on “their part” of the tasks, but do not further engage with the other parts and knowledge of a task.

Would guidelines have to address both concepts and would they separate guidelines? The concepts overlap in several respects, such as the forming of teams, coordinating of tasks. Yet, the mode of task-completion and personal interaction diverges. Still, according to Panitz (1999:3) “collaboration is a philosophy of interaction and cooperation a type of collaboration that is more structured”. To structure processes (and thus to guide learners) one can orient on the same elements, for example: authority, members’ abilities, acceptance of responsibility, closeness of the tasks and motivation. Based on experiences in EAGLE, collaborating in OER-development and adapting OER would have to address both, social interaction given the interest in personal exchange (Stoffregen et al. 2014, Barrier 2.4.a) and individual, cooperative work in adaptation OER due to the restricted time (Stoffregen et al. 2014, Barrier 2.4.b.). **Hence, it will be sought to create one process that allows guiding through both collaborative and cooperative activities. Despite that the process is generic to these scenarios, different guidelines and good practice requirements will be offered depending on the mode of task completion and task structure.**

1.2.2 Learning in and collaboration

Collaborative learning (addressing both cooperative and social-interactive scenarios) is a connoted term. According to Dillenbourg (1999), collaborative is the keyword while the role of learning is neglected. Learning is rather the expected mode or context of use. Hence, instead to exploring and testing whether or not something has been learned, a prescriptive perspective is followed that assumes

knowledge was acquired (Dillenbourg 1999:4). In other words; as long as collaborative activities are executed, it will not be subject to analyze the development of actual learning outcomes in a pedagogical sense (Dillenbourg 1999:4).

Orienting on the pedagogical frame in WP4, however, this prescriptive perspective is not sufficient. According to Vygotsky, learning is enmeshed in intra- and interpsychological processes that results in both social and cognitive development. Hence, while collaboration is the umbrella mode for solving a task, cognitive processes have to be enabled within and across individuals (Guerra et al. 2014).

Hence, a collaborative process recommended to EAGLE users will have to specify requirements and guidelines for enabling learning processes for individuals (reflection, intra-psychological processes) and across learners (shared understanding, inter-psychological processes).

1.2.3 Cross-EU Collaboration

Apart from collaborative scenarios, another aspect is the “cross-EU” component in this deliverable. Cross-EU specifies the context of collaboration and thus directs to a particular scenario. From a pedagogical perspective, the term addresses the aspect ‘heterogeneity of groups’ which is focal to collaboration. “Cross-EU collaboration” implies that peers from different countries, different administrations, thus, different geo-spatial and work-situational backgrounds are involved.

Following socio-constructivist pedagogy as defined in Guerra et al. (2014) such differences in backgrounds and competences will create space for conflict and a “zone for proximal development” (Hogan & Tudge 1999). This means, it is not important “what a single person can do in his developmental state [actual competence level] but what s/he can do with support of a more competent person [proximal competence level]” cf. (Hogan & Tudge 1999:44). Hence, differences in (socio-constructivist) cognition confront collaborators with conflict, not in a negative sense but as a difference in conceptions that asks to evolve a synthesis of knowledge.

It is clear, that pairing a competent expert with a beginner may not be sufficient to enable learning processes (Hogan & Tudge 1999:40). Collaborative learning benefits of some kind of symmetry between learners who are involved (Dillenbourg et al. 1995:9) (symmetry as mutual contribution). Collaborators need to be encouraged to reflect on their developments individually and collectively.

The interest to foster Cross-EU collaboration in the EAGLE project is ambitious in this respect. EAGLE users (Stoffregen et al. 2014.) raised major concerns such as differences in language, expertise, and structure of administration to mention just a few. While internal collaboration with peers was asked for, collaboration across national borders was seen with doubt. Since several EAGLE users are not familiar with open e-Learning activities, including collaboration (Stoffregen et al. 2014) so guidelines shall allow making small steps. In order to maximize potential for collaboration, **we include scenarios for heterogeneous groups in which at least one participant is not located at the same administration.**

1.2.4 Technology in Collaboration

Following the previous sections, a crucial point to ask is; what role does technology have in collaboration, particularly in Cross-EU scenarios. There are apparent differences in f2f and online collaboration, such as the depth of information, communication and coordination effort. So (why) should EAGLE guidelines address both situations?

First argument in favor to involve both f2f and online interaction, stems from results of the barrier analysis. EAGLE users clarified that personalized interaction (offline) needs to be included (Stoffregen et al. 2014). Online communication reduces the depth of information. In this regard, guidelines that include f2f-activities are needed to impinge upon tacit knowledge exchange mechanisms that support EAGLE users in exchanging experiences. Second, familiarity of EAGLE users with online-collaboration will have to be increased step by step. Online collaboration is no simple translation of exchange mechanisms but confronts involved learners with new problems such as: "...accepting computerised partner makes silly mistakes" (Dillenbourg et al. 1995:17). A process which allows for a blended-collaboration concept (interweaving f2f- and online exchange) will be most suitable for this point. Technology can support familiarizing, for example, by managing the task distribution and sequences of interaction. Third and last argument follows the socio-constructivist pedagogy (Ras, Foulonneau, Guerra Correa, Lübcke, Scepanovic, Zugic 2014) and focuses on the role of "learning" mechanisms. On the one hand, personal contact is important to foster reflection times. Guidelines should include processes that foster inter-psychological / internalization mechanisms. On the other hand, socio-psycho-structures are patterned the more learners are confronted with different kinds of tasks to complete. Technology can contribute to this step by scaffolding, for example, the prompting of interaction rules through design or the displaying of buttons that suggest utterances to keep interaction.

Altogether, a process for cross-EU collaboration including scenarios defined in previous section will have to guide through both online and offline processes to maximize success, i.e. the advancing of insights, skills and competences of collaborators. **EAGLE collaboration guidelines will thus address both online and offline steps in collaboration.**

1.2.5 Good or best practices?

So far we have elaborated for which aspects different guidelines shall be defined. The term "guideline" thereby enabled to avoid confusion about "best practice" and "good practice" premises. In this deliverable, good practices are defined. Hence, they are suitable and validated for the purpose of collaboration. However, they might not be tested in the context of public administrations. These, context sensitive practices can evolve on base of practicing good practices at one's individual working place. Hence, our generic model guides users in applying good practices and reflecting about them, thus generating best practices.

1.2.6 Synthesis: One Process for learning in / and collaboration

The previous sections have elaborated what kind of scenarios and aspects need to be included to develop a sound set of guidelines for EAGLE users aiming at collaborating in OER development and adaptation. Summarizing the points, a process behind EAGLE guidelines shall:

- Be generic enough to support both tight and loosely coordinated interaction
- Include the step learning to enable inter / intra-psychological internalization mechanisms
- Be sensible to different forms of heterogeneous groups
- Guide through blended (synchronous / and asynchronous, off- and online) forms of interaction

Further criteria to elaborate "good practices" such as context of origin will be specified in the next section. Yet, to avoid re-inventing the wheel, it will be briefly screened, which collaboration processes are commonly considered in the field of OER-collaboration.

In the project Open Educational Ideas (Hudak & Pirkkalainen 2015), for example, five steps are defined to proceed from an idea to the outcome. First, an idea is defined; second, the workspace is prepared, third, a team is defined; fourth, mode of production is defined, and fifth, the outcome is derived.

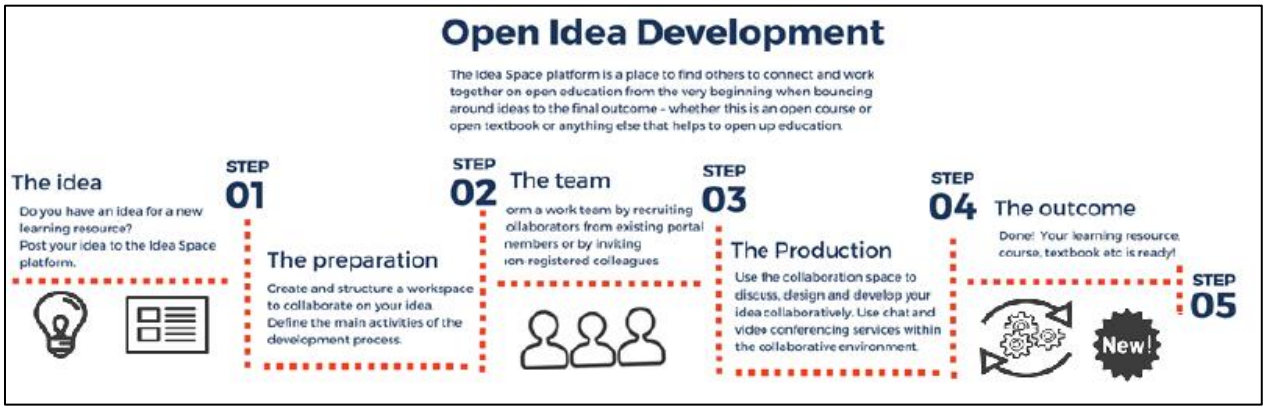


FIGURE 1: OPEN IDEA DEVELOPMENT (HUDAK & PIRKKALAINEN 2015: 62)

This process is quite generic and offers no details concerning collaborative scenarios. While OER dedicated another, cyclical process to further describe the open idea development, (see Figure below), is developed. It specifies core hints to scenarios relevant for EAGLE, such as kind of tasks, roles and deadlines signifying the mode of interaction). Yet, the step “learning” which is crucial for EAGLE users is not explicitly included.

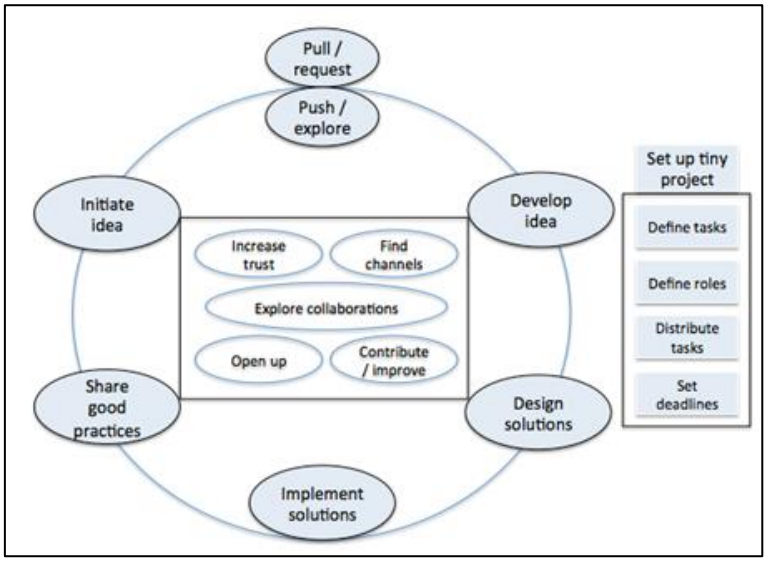


FIGURE 2: IDEA SHARING CYCLE (HUDAK, PIRKKALAINEN 2015:63)

Hence, guidelines specified for enabling Cross-EU collaboration in OER-development / adaptation can be developed with regard to existing collaboration processes applied in the field. However, a more in-depth review is needed to define selection criteria and proof its suitability to cover all relevant collaboration scenarios.

So far, background was provided that is relevant to navigate through the topic “guideline development for collaborative learning”. With each addressed aspect it was argued whether or not to include particular scenarios, such as collaboration and cooperation. Criteria to generate a suitable process model

were derived as well. Now, the next step is to clarify what practices in guidelines can be considered as “good” practice. Corresponding criteria lead (have led) the review of literature to prepare guideline development and validation.

2 Method for review and validation

This chapter will represent criteria that have led the literature review. The review served to elaborate a suitable collaboration process as well as good practice model behind EAGLE guidelines as well as to review which forthcoming good practices can be recommended to EAGLE users. Moreover, the validation approaches are documented. They serve to evaluate the relevance of guidelines in practice and for improvement in the future.

2.1 Criteria to generate collaboration and good practice models

As elaborated in previous chapters, several collaboration processes can be found for orientation. However, they have to suit EAGLE scenarios and allow placing a good practice model within (to recommend to users). In Husson et al. (2007), a systematic process for developing such a collaboration / good practice model is defined.

First, practices around collaboration need to be collected. Care must be taken regarding the field of origin; hence, whether the same domain and sector is addressed or whether practices are specifically dedicated to one group of collaborators. Second, findings must be documented. Differences can be made, in a first step, between mandatory information about the practices (such as context description, instruments, risks, objectives of collaboration) and optional information (such as results). Third, the list of practices is given to dedicated experts who validate the results. They have to find consensus as to whether practices are effective, potentially scale in practice, and contribute to innovate routines. Depending on the consensus, the rejected / accepted criteria go back to authors who revise and let experts validate the list anew.

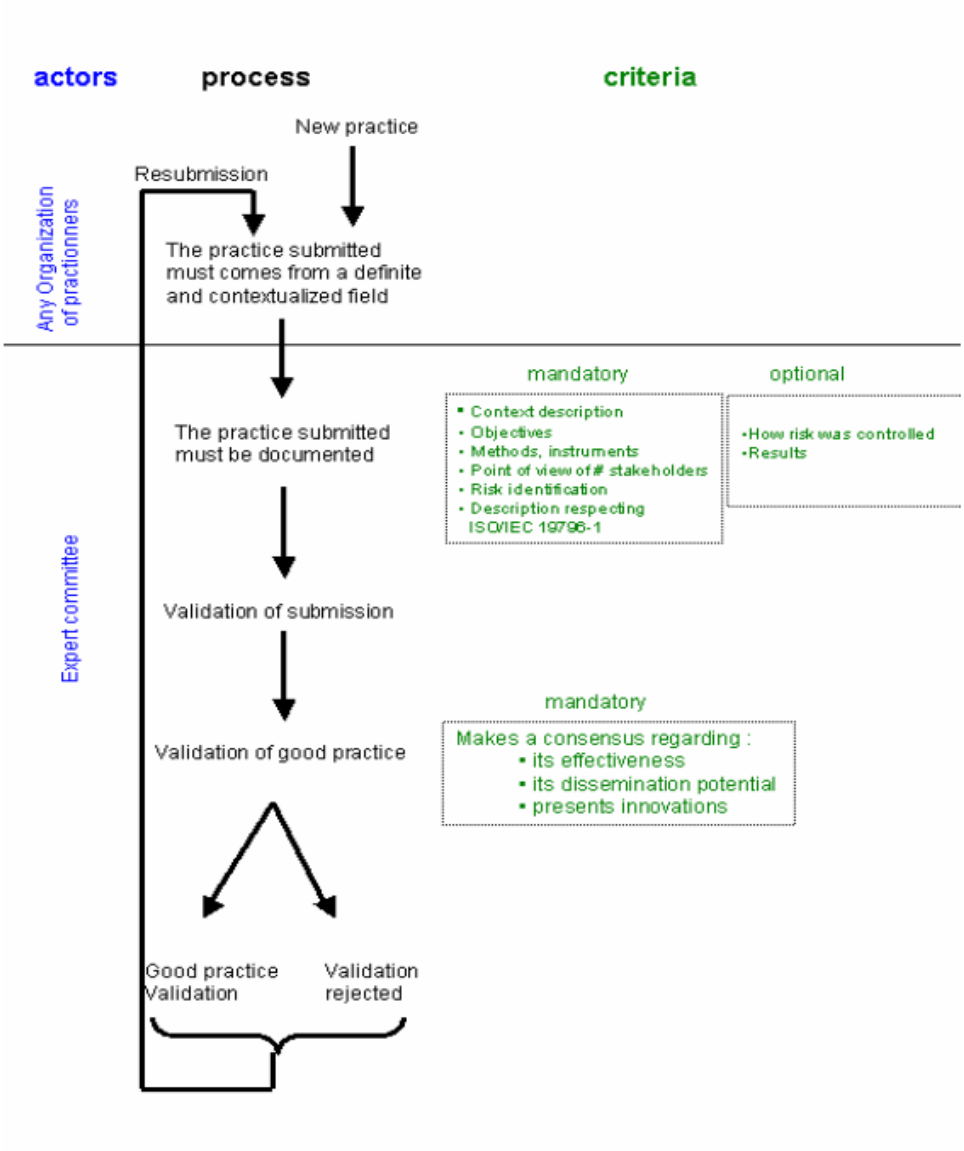


FIGURE 3: PROCESS TO GENERATE GOOD PRACTICES (HUSSON ET AL. 2007:7)

Orienting on this systematic process, we started to review literature in associated contexts (educational, OER-usage) to secure transferability of practices and guidelines. For example, findings from the project OpenScout, OEI, and standard contributions on online collaboration (e.g. Palloff & Pratt 2010) were used among public sector specifics. We used QDA Miner Lite[1] to facilitate the analysis and coding of criteria in literature. In iterative meetings and discussions, we selected minimum criteria for successful collaboration scenarios; more precisely, criteria that need to be fulfilled in any kind of collaborative learning scenario. Having this analytical grid at hand, we then reviewed studies and papers again for guidelines.

[1] See exemplary: https://docs.google.com/spreadsheets/d/1HjymHJRn600FUtavAcUhsUbR8Ww2SwSbwrIlWXhDCik/edit?usp=sharing.

Findings concerning the question: what can be counted as “good practices” for collaboration activities among public employees are presented in the following (from Husson et al. 2007). As stated before, we create good practices that can be transferred across contexts for a given purpose of OER use. By applying and noting tips and tricks, EAGLE users create their own, context-dependent best practice.

Requirements, activities and practices may be counted as “good practices”, if:

- They come from practice (are applied and tested in practice)
- They appear in different but one dedicated context, such as higher education
- They support innovation in collaboration and learning
- They address identified problems, needs and requirements
- The criteria can be documented and disseminated to others
- Fulfil technical requirements:
    - Practices can be completed in one environment
    - *Tools enhance awareness, and centralize certain activities (where to get information)*

These criteria will serve as a checklist both for gathering and synthesizing good practices found in the literature. The discussion and evaluation of the deliverable will address the criteria again.

2.2 Validation of Criteria

The interest is to validate whether or not collaboration guidelines have positive effects and help learners in reaching a shared goal. There are multiple paradigms (Reeves & Hedberg 2003). To prove effectiveness of guidelines, it should be sought to elaborate a change of behavior, knowledge and skills in learners. Given the delay of validation trials we have tried our best to elaborate on each component. Due to this we went through a three-staged process.

1. Observe guidelines in use
2. Integrate feedback of step 1 and conduct expert discussions
3. Integrate feedback of step 2 and conduct expert discussions
4. Integrate guidelines in dedicated validation trials and re-observe

We will briefly state the procedure for each stage in the following.

2.2.1 Observe Guidelines In Use – Stage 1

The use of guidelines shall indicate how the interaction of group members is shaped by the instructions. Furthermore, group members shall develop a shared view on the validity of guidelines. This feedback is invaluable for the improvement of the guidelines.
We proceed to observe the guidelines in use as follows:

- Organisation of people
    - EAGLE Team member: Creates at least 2 groups with at least 2 people → Asks about their state of knowledge (any experience in OER creation) → Distributes 2-3 different collaboration tasks → Monitors (begins and ends) collaboration phase → Collects the tests and asks for major problems, brief statements
    - Individuals: Outline their experience → Collaborate with a peer → Reflect on guidelines and experiences
- Organisation of collaboration guidelines / tasks.
    - The collaboration tasks differ in their depth of information and guidance to learners:

- **Version 1**:
  Task is: Work with your colleague. Create an OER (format and topic is free to you), hence, no guidelines are provided.
- **Version 2**:
  Task is: Work with you colleague. Create an OER. Consider the following guidelines. Decide about the topic, title, format and length of use. Clarify whether and how long you are available and how you will work together during the next 2 weeks. Use the chat to collaborate; hence, some basic guidelines are provided.
- **Version 3**:
  Task is: Work with you colleague. Create an OER. Consider the following guidelines. Decide about the topic, title, format and length of use, and who uses the OER. Clarify whether and how long you are available to work on this OER. Clarify who will work on which part or whether you co-create the content synchronously. Use the chat if you work coordinated on different text-parts. Use a collaborative tool to work synchronously; hence, several guidelines are provided.

It is very difficult to measure effects of guidelines in use (Dillenbourg 1999:12). Coding schemes to analyse interaction can be taken from (Ingram & Hathorn 2004:227). Both online and offline aspects can be considered. The number of statements, messages and request for clarification should be noted down as can be seen in the following figure.

Categories	*Details of Categories*			
Participation	Individual Group	Number of statements	Number of messages	To instructor
Interaction	Off task	Negative and positive comments unrelated to the discussion, e.g., community building (introductions)		
	On task	Social and management of the group	Comments about the discussion that promote or inhibit it. Procedural tasks and technology problems and advice. Thanks for input or compliments.	
		Direct discussion of the scenario	Comments further coded into patterns of discussion (Table 3)	

TABLE 1: CATEGORIES REFLECTING CHARACTERISTICS OF COLLABORATION

From this observation we can judge about collaboration and learning processes from a socio-cultural perspective; interacting with others; inner speech is used to talk to ourselves, reflect, think; inner speech self-regulates (Dillenbourg et al. 1995:5).

2.2.2 Integrate Feedback and Conduct Expert Discussions - Stage 2 and 3

Expert discussion serve to validate the guidelines and hard criteria for collaboration according to the best practice generation model (Husson et al. 2007:7). Experts are purposefully selected according to the criteria: years of experience in local public administration, age, gender, experience with EAGLE. They were sampled out of the pool of suitable persons selected from country leaders. They were asked to look for persons who are (a) either familiar with public administrations – *like an expert*; (b) is working in a public administration – *some employee or public manager*; (c) is using EAGLE in their country – *any kind of user* (d) or is *any expert* you know in the field of OER / e-Learning in the country in the public sector.

The validation was conducted according to (McKenzie et al. 1999). Their expert validation is a mixed-method approach in which experts are both asked to elaborate their perspectives and to rate the appropriateness and quality of a construct.

Discussion participants were instructed to prepare for the discussion by reviewing the validation questions and taking some notes (see below).

1. **Check out the attached document** (IV_eng.docx) of this mail. In this document you will find a set of **validation questions**. Look at the questions briefly to get an idea (what to look at when validating the guideline).
   → 2-3 minutes

2. **Click and open the link of the guideline**: **https://h5p.org/node/29333**
   → 2-3 minutes

3. **Browse the guideline in a natural manner**- as if you would use them because you are actually looking for help how to collaborate in OER creation processes. (This means, you may spend as much time as you like online.)
   → depends on your interest and availability; minimum 5 minutes

4. **Open the document (IV_eng)**
   a. **Answer the questions**: **you may simply write down some bullet points**.
      If something is unclear to me in the end, I may drop you a line via email. But you don't have to write down a full response.
      You may have the screen with the OER opened while answering the questions.
      → minimum 10 minutes
   b. **State your opinion**: you may simply **replace the "O" with an "X"** to indicate your opinion.
      → 5 minutes
   c. **Save the document**

In the online discussion (performed via Adobe Connect), they were asked to elaborate on their perspectives concerning the questions:

1) How important are our criteria for the selection of guidelines?
   a) The guideline comes from practice.
   b) The guidelines come from relevant context.
   c) Guidelines are meaningful to experts, colleagues, employees.
   d) The guideline supports innovative work in your administration.
2) How do you rate the guidelines overall?
   a) The guideline is concise (the formulation of contents is concise).
   b) The guideline is clear (the instructions are clear).
   c) The guideline is complete in itself (no aspect is missing).
   d) It is essential that all instructions (guidelines) can be executed in one spot (i.e. in one platform like EAGLE).
3) Agree upon a ranking of good criteria with other experts.

The record of discussions started well but was disrupted and lost throughout the call. Nevertheless, the EAGLE Team took notes and clarified unclear points with participants during and after the call. The analysis of the data proceeded from the qualitative discussion to the quantitative discussion. A qualitative content analysis is applied (Mayring 2010). Due to language issues, the expert discussions were performed iteratively; first with German and Luxembourgish speaking participants; second with English / Montenegrin speaking participants.

Results will be documented according to each stage.

3 Documentation of results

3.1 Collaboration Process

The following chapter provides an overview of our view on collaboration processes. The start phase of collaboration serves to “define conditions” of collaboration. The middle phase serves to “do collaborative activities” agreed upon. The end phase serves to formalize learning, to reflect and apply knowledge. Each step will be explained in the following (see Figure 4; KN means knowledge).

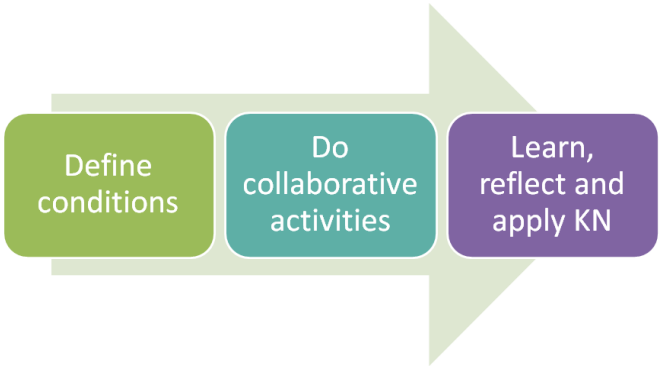


FIGURE 4: COLLABORATION PROCESS

3.1.1 Define conditions

The steps in the phase ‘define conditions’ can be summarized as: Common objective is defined, team is setting up, coordination principles are defined, tasks are defined and planned (action plan).

Define common objective(s): Improving the chances of a successful collaboration implies to be clear about the aims and benefits of joint work and set realistic expectations. People involved in collaboration should be able to identify why this work is meaningful/important to them. A shared objective brings focus to the team and avoids team members to pursue conflicting agenda.

Definition of a common objective is an opportunity to identify and discuss key issues or anticipated barriers to the collaboration success. It is also the perfect moment to describe what success would look like if the team succeeded in achieving their aims. As far as possible, try to translate expectations into measurable performance goal; it will be useful to monitor collective work progress.

The best way to buy in people in collaborative task is to involve them into the definition of the objective. In addition, it will help us to start to build trust required to make collaboration successful.

It should be noted that objective may change during the collaborative process due to, for instance, lack of resources (people, time,…).

3.1.1.1 Setting up the team

By definition, collaboration is a team work. Based on a first idea of what you want to achieve, you have to identify who have the expertise (knowledge, skills and experiences), willingness and time availability to participate in collaboration. There is different ways to identify people who potentially can be members of the team. Ask yourself about:

- Who is impacted by the problem or issue?
- Who can help solve problem or address the issue?
- Who brings knowledge about the issue?

Trust is central and fundamental to developing collaborative working relationship between team members. Indeed, a lack of trust may make participants hesitant to work as a team and reluctant to share knowledge and time needed for the collaborative effort. To build trusting relationships you should:

- Make personal one-on-one contact with potential team member.
- Adopt an open and sensitive listening to what the team member has to say rather than trying to persuade him/her to your ideas.
- Adapt your objective in order to take into account team member visions and expectations.
- Involve your potential team members into the definition of coordination principles and members roles and responsibilities.

3.1.1.2 Coordination principles and roles

Working together effectively supposes a minimum of organization. It implies to define and attribute role to each team members, establish and maintain open communication, and clarify decision-making rules. Roles and responsibilities definition allow specifying how team members can contribute to the success of the collaboration. For each role, it is necessary to define:

- What does it mean to assume this role?
- What the team member is responsible for if he/she agrees to take on this role?
- How long will team member have to serve in this role?

A successful collaboration implies open communication between team members. To establish such communication, it is necessary to:

- Develop a common language by defining basic terms, acronym and jargon
- Give importance to individual's opinions
- Solicit feedback on collaboration process
- Define rules to manage potential conflicts between team members.

3.1.1.3 Decision-making

It is very important that how decisions are made is agreed upon right at the beginning of the collaboration. There is no single type of decision, so you should adapt decision-making principles according the nature of the decision to make. Decisions can be differentiated along two dimensions: importance and urgency. Considering these two dimensions, you should define rules and responsibilities for four types of decisions:

- Neither urgent, nor important;
- Urgent, but not important;
- Important but not urgent;
- Both urgent and important.

3.1.1.4 Action plan

The action plan is designed to guide collaboration. It specifies what will be done, by whom, and when. Ideally, the action is defined and accepted by all team members.

3.1.2 Do collaborative activities

The step do collaborative activities can be summarized as a phase of OER adaptation and OER co-development, in which work progress is regulatory monitored and discussed. During the work process, it is necessary to evaluate both the process and the outcome of the collaboration. On a regular basis, all team members should ask themselves these two following questions:

- Are we doing what we said we would do?
- Are we accomplishing the intended results?
- Results of the monitoring may lead to adapt the action plan and/or outcomes expected

3.1.3 Learn, reflect and apply means

The step learning in the collaboration can be summarized as a phase of OER adaptation and OER co-development in which:

- The learner checks which cognitive knowledge / skills / attitudes s/he has gained
- Collaborators check which insights they gained concerning their shared working process

It is important to make both, cognitive developments about the topic of concern as well as about the process of interaction explicit. Users perform the actions: reflection, in-/formal tests of knowledge, discussion of results, formalisation of adapted good practices (best practice documentation).

So far, the steps and phases are described in general. In the following, criteria are defined more particularly that guide collaborators and learners in working together, irrespective of chosen collaborative activity.

3.2 Set of criteria for EAGLE users

When collaborating with peers, it is not always possible to take a manual and time to read and evaluate whether all important steps were made. On the other hand, quick links and check lists in the Web may not be intelligible for users to apply in collaboration phases. In order to reply to both needs and situation, we have developed a set of requirements for users. These requirements or “criteria” can be used for orientation in collaboration phases irrespective of the particular collaboration process. The criteria depend on each other, particularly in the step “define”. For example, you cannot define common objectives if you haven’t found participants and agreed to collaborate. Hence, the sequence of good practice is important to consider.

In the following, the criteria will be elaborated and explained. They stem from the QDA of the papers Husson et al. 2007, Hudak, Pirkkalainen et al. 2015; Geser 2007, Maywell et al. 2011; Palloff & Pratt

2010; Felder & Brent 2007, Sussex 2014; UMC CCEL 2015; Kennedy & Nielson 2008 and others specified in the next guideline chapter.[2]

Phase: Agree to participate

1. **Identify people**: means to search for people who are collaborating with you. Good practice requirements for this step are: (1) to check whether people have heterogeneous background and (2) are confident or have a similar competence in language / terminology / domain. This enables to discuss easily about topics.
2. **Define objective**: means to agree on the main pillars of the collaborative work, good practice requirements for this step address the kind of objectives discussed. Check whether you have defined: (1) Operational objectives which care about the purpose of collaboration and what you want to achieve and (2) Learning goals which are about the quality of content, success of teamwork.

Next criteria normally evolve in parallel.

3. **Define roles**: means to distribute roles and related tasks among each participant. (1) Typical roles are content developer, quality manager, and scheduler.
4. **Define accountability mechanisms**: means to secure after all, how an exit or non-contribution of member is handled.
    a. **Define coordination principles**: means to refine the planned activities by (1) defining the sequencing of meetings where it is good practice to secure one or iterative f2f meetings; (2) to define policies- such as interaction ethics where it is good practices to agree upon confidentiality issues.
5. **Agree to participate**: means that people you identified are actually willing to participate and *agree to participate. Good practice in this respect is to s*ecure people are available and how- (see roles).
    a. **Define activities**: this criterion means that basic steps to reach your objectives are defined. Good practice requirements are: (1) to note down activities and generate a description of work; what when and how to achieve (PM-issues).

Phase: Do collaborative activities

1. **Monitor progress**: means to check and discuss work progress is regulatory. Good practice in this respect is to differ regular checks in-between roles (either internal group or formal tutor or superiors) and goals
2. **Implementation of activities with EAGLE**: means to use and try out platform tools that go beyond current collaboration activities. Good practice is to agree with collaborators what tool to choose and what success criteria an output shall hold

[2] See excerpt of the QDA analysis. https://docs.google.com/spreadsheets/d/1HjymHJRn600FUtavAcUhsUbR8Ww2SwSbwrIlWXhDCik/edit?pref=2&pli=1#gid=0.

3. **Do reflection phases**: means to incorporate active learning phases in the activity phase. Good practice is to reflect about whether technical and social goals among group members are reached, and if problems occur, how to steer for a solution.

Phase: learning for content and best practice generation

1. **Reflect on the output** means to check the content and generated knowledge from your personal view. Good practice is to ask: did you encounter any conflicts, does the quality of the result meets the agreed upon goals; how / which skills were developed; what kind of tools were actively used.
2. **Reflect on your process experience**: means to assess the way how collaboration proceeded with the goal to improve in the future. Good practice is to ask: what went well, what went bad? And to elaborate on the group interaction. You may ask: Did you a) establish common goals; communicated well as a team? b) Chose a leader without difficulty, assigned roles without difficulty? c) Contributed equally to the process and equally to the final product; we had adequate time and resources to complete our task, I was satisfied with the way we worked, I was satisfied with the final outcome, I feel that I have learned from this activity (Palloff & Pratt 2010).
3. **Summarize lessons learned with peers**: means to assess the output and experiences together with peers. Questions for the previous requirements can be used for orientation.

Based on these requirements, we have developed guidelines for EAGLE users.

3.3 Guidelines and Showcases for users

The following sections will provide both, short overviews of good practice criteria as well as illustrated cases how to apply the criteria. **The section will not show all guidelines** as **they are not the final guidelines** but only the baseline for evaluation (The full set of initial guidelines are provided in the Appendix). The final full version is provided in chapter five.

3.3.1 Identify People

Prerequisite:	***none***
Phase in collaboration process	Identifying People is a step in the first phase of collaboration. Identifying people is the first requirement to get started. The guideline is oriented on recommendations to "forming teams" according to (Felder & Brent 2007).
Role of reader	You may use the guideline if you are the owner of the tasks, the idea, the coordinating person or a tutor.
Context of application	Does this guideline suit to your specific needs? The approach "forming teams" was developed in a school context for classroom cooperation. Hence, for activities where each group member gets his own share of work including responsibilities. Yet, the criteria are generic so they will definitely provide guidance for the first steps in your collaboration process.
Hard requirements	Consider the following: • Create groups no bigger than 3-4 people • Make sure your group is heterogeneous, hence, peers have different skills, interests, background, experiences, ideas etc.
Description / showcase	**Trace how Biljana identifies people.** Biljana aims at translating a water-waste management document that she had written in Montenegrin. Biljana does not have much time to look for people so she asks one colleague in her office and four persons she knows from EAGLE; that means, she has seen that they are interested in water waste management as well. These EAGLE peers are two women and two men. One women has the same position as Biljana; the other is not working in the same field as Biljana as well. Biljana needs diverse perspective wherefore she decides to invite the other peers. Thus, three peers Biljana is contacting come from three countries. Her colleague Tom works in legislation, Sonia in Germany works at pipeline controls and Marijan from Luxembourg is working for project management and speaks several languages. Biljana has prepared a brief introduction about her aim. Now, she simply sends a mail and asks whether are interested to hear more about the topic.
Comments, tips, tricks	You may use the tool "groups" in the EAGLE platform to create a group environment online.

3.3.2 Monitor progress

Prerequisite:	***Step define.***
Phase in collaboration process	This step is set in the middle of collaborative work and follows first agreement phase: define collaboration. The requirement monitor progress can only apply if work activities of the group are clear and progress can be traced.
Role of reader	Everyone in the group can check the guidelines to get an idea of monitoring activities. If you are a tutor or coordinator, you may check the guideline to get an idea of how to proceed.
Context of application	Kennedy & Nilson (2008) elaborate on successful strategies for teams in organisations. They follow a managerial perspective which is quite generic and can be transferred to public administrations.
Hard requirements	Do the following: • Note down what is the envisioned goal (you may focus on schedules, deadlines, parts of the product etc.) • Note down what the current status is • Note down the gap between goal and status • Note down necessary actions
Description / showcase	**Check out the example** Ms Green is new in the group of Mr Brown and Mrs Streicher. She is interested in the topic and glad that the collaboration is well organized and transparent concerning the efforts and steps to take. Yet, she has problems with her own tasks as well as with the progress of her leading-team. Before she wants to talk to the co-leader, she notes down what the goal of the tasks is and how it contributes to the overall objectives. She looks in her calendar and makes a reasonable planning how she can contribute in the next week. Also, Ms Green notes down what tasks are delayed and what actions need to be taken in this respect. She decides that, if she doesn't manage to complete the work by the end of next day, contacts Mrs Streicher to ask for advice.

3.3.3 Reflect on process

Prerequisite:	***Step define, step doing.***
Phase in collaboration process	This step is set at the end of collaboration and follows the phase of doing collaborative activities. The requirement to reflect on the content is tied to the "doing reflection" and is nurtured from this regular part of group activities. However, this criterion is rather about the question "how collaboration succeeded", instead of "what did I learn".
Role of reader	Are you part of the collaborating team? Are you a coordinating person? This is all for you!
Context of application	The requirements are derived from (Palloff & Pratt 2010:52). They elaborate on experiences with online communities in a higher education context. Identifying is a key step in their approach to collaboration. Despite the educational background, check out the criteria to see that they are generic enough and

	helpful.
Hard requirements	Rate the following statements for yourself from 1-5 (Strongly agree - strongly disagree) • We established common goals • We communicated well as a team • We chose a leader without difficulty • Everyone contributed to the process • Everyone contributed equally to the final product • We had adequate time and resources to complete our task • I was satisfied with the way we worked together • I was satisfied with the final outcome • I feel that I learned from this activity. If your score is equal or below neutral / disagreement, consider steps how to improve future group work in this respect.
Description / showcase	**How would this look in practice** Mr Brown has heard from Ms Green that she performed some reflection and was happy to apply her insights in future collaboration work. He wonders how he could learn as well. Similar to Ms Green he uses EAGLE to support his learning phase. Unlike Ms Green, however, he wants to spread his experiences in a Wiki; this will allow him to show future collaborating peers what experiences he made and how he would like to work in the future. To learn about the process, he asks himself the questions noted above. In this moment, he notices that he requires his peer to validate his view on the process and then create a Wiki entry.

4 Documentation of Results [User Validations]

The validation of guidelines went through a three-staged process as explained in chapter two. The following three sections show the results from “guidelines in use” and the subsequent discussions conducted with experts.

4.1 Observing guidelines in use

In total, 12 public employees in different domains of one administration participated in this step. First, EAGLE members presented the meaning of OER, EAGLE and platform. Second, groups were formed and people were asked to complete the task in pairs of groups. The tasks were distributed simply on a paper given the fact that different collaboration tasks were distributed (see chapter two). During the group work and afterwards it was noted (compare Table 1):

Categories		Kind of statements	To instructor
Interaction	**Off task**	Negative statements: unclear instruction, difficult to choose a topic in 15 minutes, unfamiliar platform; also views whether it is needed to corporate in this group task Positive statements: idea which topic to choose, nothing else that documenting notes in a digital format; good to be told to learn by repeating tasks	Asking for reasons: what is the goal of this task?; expressing great concerns: If I was told to sit down and answer these questions.. I’d feel very stupid
	On task	Negative statements: the tone of guidelines is negative Positive statements: good to distribute tasks but not in 15 minutes	Details concerning the use of the platform

TABLE 2: OBSERVING GUIDELINES IN USE

Subsequently, groups were asked to report about their experience and how far they have come. Some have created a bullet point list; others outlined that they would have liked to create a screencast. While no one of the participants was familiar with OER, it was easy to see that IT-affine employees had no problems using and exploring the platform. Other than that, it appeared that the groups guided in detail did not follow the guidelines in detail because every member contributed with his or her ideas how to proceed. The fact that guidelines may not have been OER-specific enough was explored only in later discussions but we will come to this in the next section.

A remarkable point was the gap of opinions concerning the learner instructions. One group prepared some bullet points but underlined their discomfort with views and request for explanation how to follow guidelines as stated. One group member indicated eventually, that she has strong reservations against the learner’s instructions. She would prefer not telling her colleague how to acquire this knowledge and thus claim that this knowledge is worth elaborating upon. Another group turned out to really like the learner’s instruction. Neither a reason nor a common viewpoint was found here. Key seemed to be the expert-role that one claims in case that you instruct colleagues to learn.

To improve guidelines we extracted the following requirements for the content and outlay:

ToDo's Stage 1

- Needs to be shorter- easy to read like bullet points
- Needs a more appealing design
- Needs more details or explanation if interest exists
- Needs to leave learners the choice of selection (not reading through all parts)

4.2 Expert discussions and feedback- stage 1

Subsequent to the first feedback, guidelines in Chapter 3 were developed[3]. Furthermore, an online design was created using hotspots (see the plusses in the picture below) that can be integrated in the EAGLE platform. A snapshot (Figure 6 and Figure 7) is provided below.

FIGURE 5: OER 1ST STAGE (1/2)

[3] See https://h5p.org/node/23348 and https://h5p.org/node/22460

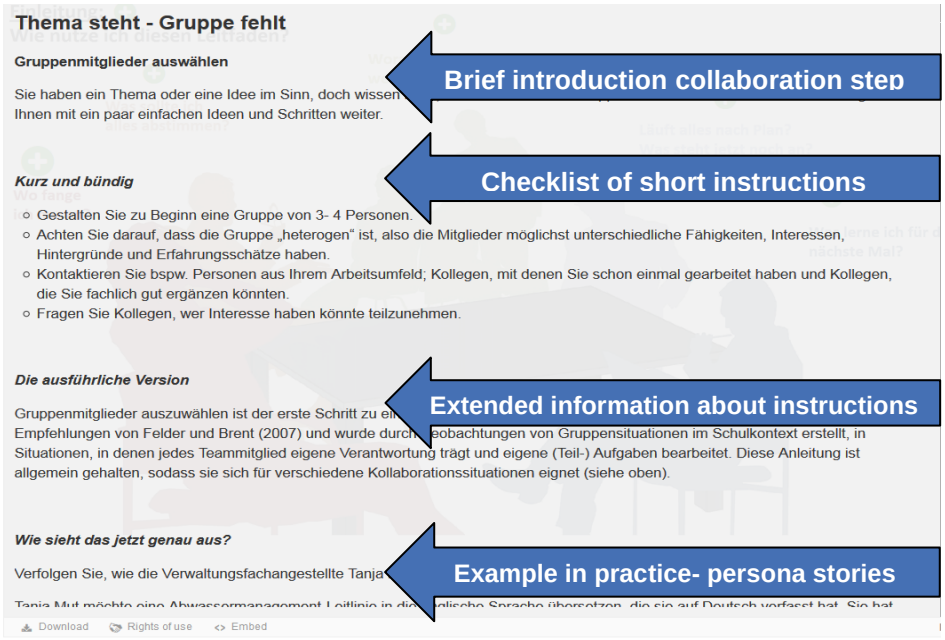


FIGURE 6: OER 2ND STAGE (2/2)

Throughout the process experts were consulted. In total, two men and four women participated in the process (n=6). One man and woman came from different Luxembourgish administrations. One men came from Germany having an albeit international experience in Open Educational Practice. Another woman came from an Austrian institute who is pioneer and founder of several online media for OER design and use. Last but not least, a female public servant gave feedback. While half of the participants gave individual feedback by mails and telephone calls, the other half achieved to meet in Adobe Connect and discuss about their views for about an hour. Results are summarized in the following.

Individual voices

One expert found that the guidelines are very clear and easy to understand. She had no problems to use the guidelines. She used them as should would have naturally, in brief, during working hours. She did not encounter any problems in this respect. The structure was very intuitive and she had no problem to find what she wanted. She liked the formulation of questions as headers to the guidelines. However, the guidelines were showing too much text. It was good that bullet points outlined the most important points quite prominently.

A second expert disagreed and did not like the guidelines. He did not find them useful and could not find what he wanted. He did not even know where to start. The sequence of guidelines was unclear therefore he asked for a better hierarchical representation. He did not understand some terms and methods. Also he criticized some common points that are not useful as they are helping people who never collaborated before.

The third participant disagreed with the positive opinion of the first one as well. She did not like the guidelines at all. She could understand which link was the first one to use and felt they were redundant. The sequence of use was unclear to her and the information spot for this concern was not prominently perceivable. Concerning the content, no common OER-guidelines were used or integrated. She missed the reference to other OER about collaboration; OER as a topic for this guideline was marginalized.

Most points were addressing collaboration not OER collaborative creation. Further, cornerstones for OER creation were missing such as didactical design, decision of target group, setting, learning goals, formats. Hence, the OER is at a very low level.

The discussion served to deepen the view on particular points and standardize responses according to the interview guideline.

Structure and design of the OER:

Overall, a hierarchical structure is expected that tells visually: where to start, where to go, what to do. Enumerating guidelines would be helpful. Also the navigation in technical terms is unclear. Once clicking on an information spot- how do you get back. There is no explanation for this. Further the figure shows only male persons which is inadequate with regard to culture-contextualization matters. Given that different didactical designs are integrated (text, checklists, stories, learning instructions) they can be more graphically highlighted by symbols.

Content-specific aspects:

Experts disagreed whether the content was specific enough or too unspecific with regard to OER concerns. On the one hand, participants argued that general collaboration matters have to be posted to get started. Others argued that the matters are commonplace and do not have to be conveyed anymore at all.
Experts agreed that further OER-specific information need to be referenced. Among these are: when to agree on learning goals (cornerstones of OER), licenses, attribution, didactical design, and format. Also the mode of collaboration and editing rights needs to be included.

Evaluation criteria

Asking experts about the criteria was not particularly needed anymore as most aspects were mentioned or addressed before. The following points summarize the stated opinions:

- **Guidelines come from practice and familiarity of context**
  Participants did not look whether the guidelines come from practice. However, the language was identified as „too academic“ though easy to understand. Due to this the context was perceived as alien. Is not particularly important, is identified as alien but suitable.

- **Supports innovation**
  Participants addressed this point by stating that guidelines are commonly known and practiced. Hence, no innovation will be particularly inspired though it is considered as an important point.

- **Can be disseminated to others**
  Participants outlined that they would not forward the guidelines to colleagues at the moment; however, this indicates the importance of the criteria.

- **Technical requirements**
  Some participants argued that it is very important to tightly integrate instructions and thus promote EAGLE platform with guidelines. Others argued it would not matter as they are experienced in multi-platform or tool usage.

- **Addresses relevant needs**
  Participants did not find any missing collaboration step. However, it should be more specific to OER issues.

Ranking of clarity, preciseness and completeness.

The ranking of the guideline reflects the discussion. Guidelines are perceived as quite clear (1.5/5 strongly agree). The instructions are formulated not as precise as expected (2.5/5 neither agree nor disagree) and they are not complete (one ranking 5/5) with regard to OER issues, although public sector servants were not missing these aspects in the first place.

Summarising all points, we defined the **next requirements for improvement to be**:

ToDo's Stage 2

- Enumerate guidelines and create a clear sequence in terms of collaboration phases, different aspects of collaboration, specific OER points
- Include different resources according to different target groups (pro users vs newcomers)
- Integrate more specific points for OER-use or creation in guidelines
- Reduce the text and bring in more vivid content
- However, keep the bullet-point style
- Use a neutral background illustration that is gender neutral

4.3 Expert discussions and feedback - Stage 2

Subsequent to the previous feedback, the OER was redesigned[4]. A snapshot (Grahpic 9) is provided below.

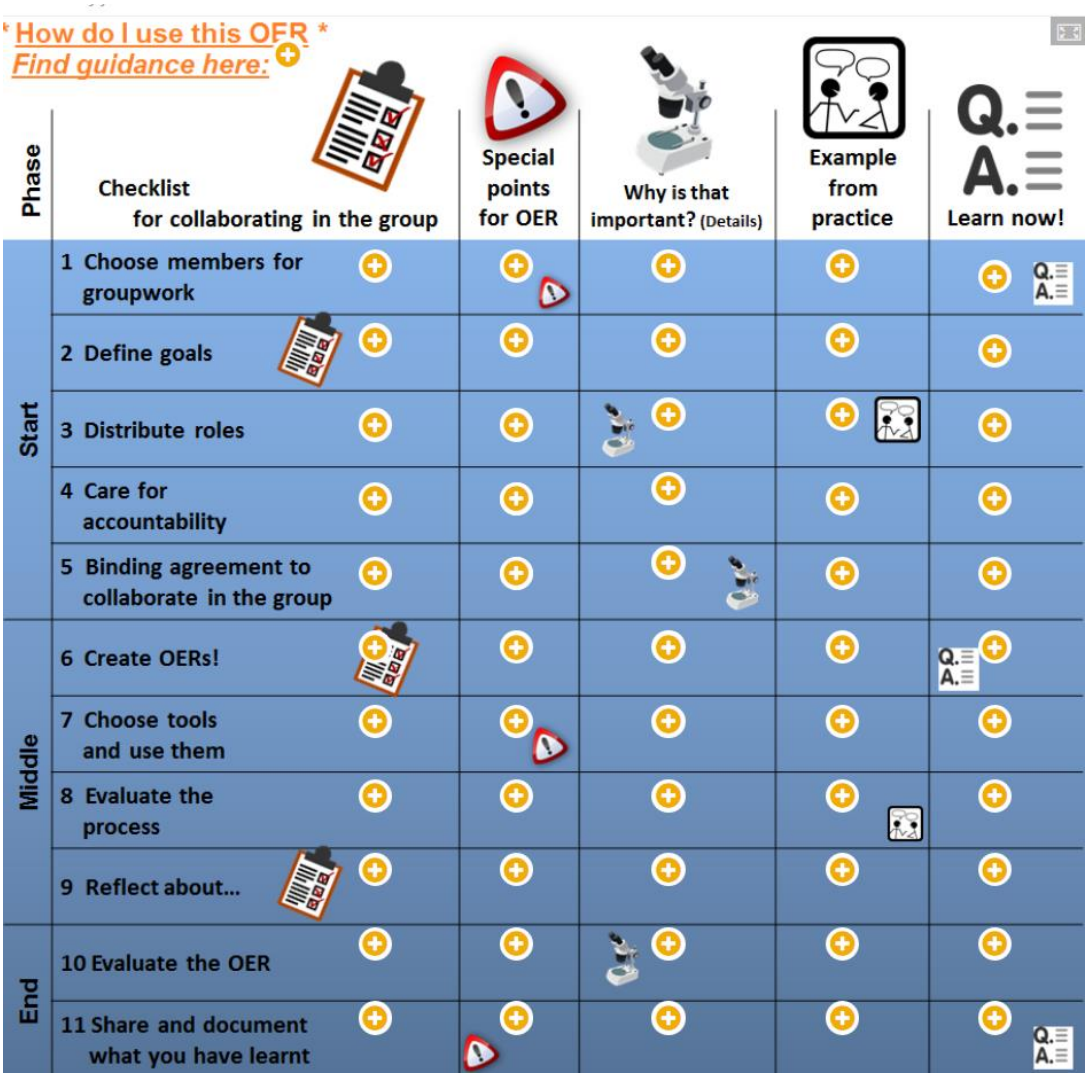


FIGURE 7: OER 2ND STAGE

Overall, three experts from the first evaluation and two further participants from Ireland and Montenegro evaluated the new guideline. The overall feedback was very positive and no concrete action points were mentioned for improvement. The feedback is summarized in the following according to the guiding questions.

[4] See https://h5p.org/node/23348 and https://h5p.org/node/29333

Expectations in advance.
Based on the first evaluation, participating experts stated to expect: “clear and complete guidelines” and “a series of steps outlining the actions at various phases of the OER process”. They expected a guideline with “more specific points dedicated to OER issues”.

Overall opinion of the guideline
Experts often outlined: “I like them very much” and it is “a good comprehensive guide”. Further experts commended that the guideline is “easy to follow”, “user friendly” and that the “content is excellent”. In the first place, the “systematicity and simplicity” has caught their attention. Another expert outlined the mixture of colour and good use of icons as a positive aspect.

Working with the navigation
Experts were content with the navigation. One person outlined: “The navigation is completely useful for a public employee with average competences.” Another person stated: “I found it easy to navigate from the outset with good information provided on the information spots”. Also critics from the previous evaluation step said: the structure is much better and clearer than before. The difference between important points and details is immediately noticed.”
Accordingly to this, experts evaluated the structure of the guideline positively: “I like the way it breaks the process into phases and carefully identifies and describes the actions that make up each phase”. One expert said: “It misses nothing”.

Highlights and pitfalls.
To the delight of authors, experts highlighted “the completeness of guidelines”, the “mixture of the Video/Tutorial/Multimedia” as well as the “example from practice showing the action a practical setting” the most. Interestingly, feedback to the question “what do you dislike the most” was moderate: “no complains”, “nothing” and “printability of guidelines”.

Ranking of clarity, preciseness and completeness.
The ranking of the guideline reflects the very positive feedback. Guidelines are perceived as very clear (4/4 person totally agree). The instructions are formulated concise (4/4 totally agree) and they are complete (4/4). Also experts agreed with our selection criteria of presented guidelines (that they come from practice and they innovate work practices.

4.4 Summarizing Results of the evaluation

Summarizing all points, we check how our ToDos from the Stage 2 have evolved:

ToDo’s resulting from the evaluation:

- Enumerate guidelines and create a clear sequence in terms of collaboration phases, different aspects of collaboration, specific OER points
  - **Experts like the sequence and structure now**
- Include different resources according to different target groups (pro users vs newcomers)
  - **All involved experts considered the multi-media appearance positive; level of importance and details is visible**
- Integrate more specific points for OER-use or creation in guidelines
  - **Content was rated complete now**
- Reduce the text and bring in more vivid content
  - **Experts liked the mix of media formats**
- However, keep the bullet-point style

- **Expert liked the appearance and structure of information**

ToDo's resulting from the evaluation:

- Use a neutral background illustration that is gender neutral
  - Experts did not criticize a gender-relevant issue
  - Experts like the icon and colour design

Altogether, it appears that problems from the previous evaluation stages have been overcome and improved. Hence, we note the subsequent, finalizing action points:

- Check the programming of information appearance again
- Improve the design (placement of hot spots)
- Add further multimedia information where possible
- Integrate into the EAGLE platform

The guidelines / OERs will be published in the EAGLE platform from beginning of November. If, given the short time frame, the OERs will be integrated in the validation of the platform, we will submit another report about the experiences.

5 Full Set of Final Guidelines

The following chapter shows the final set of guidelines that resulted from the iterative feedback to the initial version of guidelines (see Appendix). Each guideline provides a section:

- **Checklist**: the checklist provides input how to organize collaboration in general
- **Special points for OER**: the checklist provides input what to consider when collaborating in OER development specifically
- **Details**: provides explanation to the overall step of the collaboration phase or elaborates on a particular checkpoint on the list
- **Example from practice**: provides a brief illustration how EAGLE personas use the guidelines in practice
- **Learn now**! Provides questions to reflect or elaborate on the guidelines to see what knowledge has been gained

References to the original guideline context is provided in the section “learn now!”.

The sections are dedicated to different user groups. While the checklist speaks to public administrators who are not experienced in collaboration as such. They turn to the next step “special points for OER” once they have captured the general collaboration step. Experienced collaborators, in contrast, may start with the second step “special points for OER” right away. The may also check out the example from practice to see how others realize the guidelines in practice.

Hence, sections address both experienced and unexperienced collaborators in OER creation.

5.1 Phase: Start collaboration

Guidelines concerning the start phase of OER collaboration address the steps: choosing team members, goals, distribute roles, care for accountability and defining a binding agreement to collaboration.

The guidelines are provided in text below but are also visible in the latest OER-guideline version: **https://h5p.org/node/23348** and **https://h5p.org/node/29333.**

5.1.1 Choose members for group work

Checklist

- Start with a group size of 3-4 people
- Consider that members should be “heterogeneous” members with different backgrounds, interests and experiences in collaboration
- Contact people in your general working environment; colleagues who you would like to work with or who are familiar with the topic
- Ask who, in general, would be interested to take part

Special points for OER

- Look for collaborators in platforms like EAGLE
  - by searching for personal interests and domains that suit your OER topic
  - according to the experience in creating OERs

- by searching for qualifications in domains that suit your OER topic
- Search for OERs by members who:
  - have elaborated on topics that are relevant for your latest OER-based idea
  - have created OERs that you like a lot
  - have created OERs that you would like to use or modify

Details

Selecting group members is the first step in a successful collaboration. This guideline was generated from collaboration in school contexts, hence, in situations where each team member has own responsibilities to work out (parts) of the group work. The recommendation is formulated quite general so it will be useful for a range of situations.

Example from practice

Biljana aims at translating a water-waste management document that she had written in Montenegrin. Biljana does not have much time to look for people so she asks one colleague in her office and four persons she knows from EAGLE; that means, she has seen they are interested in water waste management as well. These EAGLE peers are two women and two men. One women has the same position as Biljana; the other is not working in the same field as Biljana as well. Biljana needs diverse perspective wherefore she decides to invite the other peers. Thus, three peers Biljana is contacting come from three countries. Her colleague Tom works in legislation, Sonia in Germany works at pipeline controls and Marijan from Luxembourg is working for project management and speaks several languages. Biljana has prepared a brief introduction about her aim. Now, she simply sends a mail and asks who is interested to hear more about the topic.

Learn now

1. How many group members should be involved in your work from the beginning?
2. What is meant when talking about "heterogeneity" of the group?
3. How do I look for members who are knowledgeable in OER-contexts?

References

Felder, R.M., and Brent, R.. "Cooperative learning." Active learning: Models from the analytical sciences, ACS Symposium Series. Vol. 970. 2007.

5.1.2 Define goals

Checklist

Clarify with others:

- What is the purpose of the group work?
- Which results shall the available at the end?
- What are the learning goals in the group (persona, team- or results-oriented goals?)

- Which rules do apply for each group member?
- How to proceed if a member does not contribute?
- What are shared expectations about responding to posts?

Make a decision:

- Select a team member to list 3-5 ideas or problems.
- Each team member takes a moment to prioritize them on his or her own paper.
- The member does this by ranking each item 1-5, with 5 being the most important.
- Each team member tells the recorder his or her ranking for each problem
- The recorder adds the rankings across members.
- The highest score is the weighted opinion of the team.

Special points for OER

- Clarify which **licenses** shall be used
  - **The choice of the license is essential.** The choice bears consequences for the use of materials and other OER in the development of your OER. Read more about in in the section "**Details**"
- Elaborate on the cornerstones of the OER creation. For example:
  - Target group: Who is going to use your OER?
  - Learning goals: What shall your learning group know / be able to do in the end?
  - Format: How can you present the learning goals / the content easily?
  - Didactical design: What kind of learning questions do you pose? (Objective- easy to answer questions vs. reflective- constructive questions)?

Details

The step ‘agreeing on goals’ happens in the first phase of collaboration. Often it goes along with agreeing on goals that members will reach. In particular it is about defining goals how to reach goals. The guideline is oriented on Kennedy and Nilson (2008) who developed strategies for teams in organizations. The guideline is developed from a managerial perspective and formulated in a generic way.

Deciding about licenses is essential for the quality of your OER as well as the whole collaboration. Check out the following guidelines about the use of licenses (watch the video!).

https://youtu.be/Hkz4q2yuQU8

Example from practice

Check how Mr Brown follows the guideline.

Mr Brown is consultant in Human Resource Management. He has already identified some peers who want to elaborate a concept how to use OER for human resource development. He has a clear idea about the tasks but his collaborators had further suggestions. Consequentially, they have to narrow down the focus of work.

He opens his notes in EAGLE and prepares the discussion: he notes down the purpose of the group work (develop an OER-HRM concept), the intended output (checklist), learning goals (what is OER, what interests and experiences do others have). He also notes how he would like others to contribute (roles and duties). He notes that he expects others to respond to mails within a week. Otherwise the tasks will be so much delayed.

Once his colleagues have joined, they are sitting in the bureau and discuss about their ideas. It is difficult to agree so the each take a piece of paper, note down the ideas and rank them from the most to least favorable one. Mr Brown summarizes the ranking and is happy to move on.

Learn now

1. Which points should you clarify in the group?
2. Which points are specific for the creation of OER?
3. How is the definition of licenses important for the group work?
4. Which cornerstones are relevant for the OER creation?

Reference

Kennedy & Nilson 2008. Successful Strategies for Teams. Team Member Handbook. Office of Teaching Effectiveness and Innovation Clemson University. 1-85.

5.1.3 Distribute roles

Checklist

- Assign different roles (coordinator, recorder, checker, process monitor)
- Check who is:
  - the contributor (focuses on immediate task)
  - the collaborator (emphasizes the overall purpose of the team)
  - the communicator (encourages positive, interpersonal relations and group processes)
  - the challenger (who questions and pushes to take reasonable risks)
- Define the distribution of specialized expertise within each team
- Define whether and how to rotate roles (which would make it collaborative again)

Special points for OER

- Depending on the distribution of roles, you have to distribute the editing rights among members:
  - Who may: write, delete, comment, etc.?
  - Who may: decide about the publishing process of the OER?
  - Who may: distribute rights within the group and abroad?

Details

Group members are found, goals and activities are distributed and it is clear who cares about important points. Now all lasting points shall be distributed. This shall lead to create a positive interdependence. Apart from the task and process structures the distribution of role-types can take on an important role.

Example from practice

Once Mrs Streicher has noted down responsibilities for action, Mr Brown notes that he hasn't discussed his view on the distribution of roles. Apart from the focus on tasks, the group has to perform some tasks that need regular checks. He asks his peers who would like to record meetings in the future. Who checks whether deadlines are meet and who evaluates the contents.

From his experience he knows that Mrs Streicher is the challenger and asks difficult questions. He hasn't worked with others and asks about their preferences to focus on tasks, interaction and communication within the team and functioning of the team for the purpose. As peers are unclear about the preferences, they decide to rotate roles after the half of the OER creation.

Learn now

1. Which roles shall be distributed?
2. How the selection of group-members does is reflected in this step / phase of collaboration?
3. What are "editing rights" and how should they be distributed?
4. Who should gain which editing rights given his / her role?

References

Felder, R.M., and Brent, R.. „Cooperative learning." Active learning: Models from the analytical sciences, ACS Symposium Series. Vol. 970. 2007

Kennedy & Nilson 2008. Successful Strategies for Teams. Team Member Handbook. Office of Teaching Effectiveness and Innovation Clemson University. 1-85.

5.1.4 Care for accountability

Checklist

Check whether following points should be incorporated:

- Distribute tasks: Give tasks that cover all of the material of the team assignment and projects
- Make someone responsible for following up mutual understanding
- Make team members responsible for seeing that non-contributors don't get credit
- Use peer ratings to make individual adjustments
- Provide last resort options for firing and quitting

Special points for OER

Make sure that everyone:

- Shares the steps to create the OER within the group
- Evaluates the quality within the group for each step

Details

The approach forming teams was developed in a school context for classroom cooperation. Hence, for activities where each group member gets his own work-share and responsibilities.

Example from practice

Mrs Streicher appreciates that Mr Brown has asked for the handling and distribution of roles. Yet, she fears that the other colleagues won't share their insights immediately within the group. Therefore, she asks whether it was senseful to create leading-teams. One who leads and another who helps in creating contents or doing activities of the task. As one colleague mentioned he will be in holidays for a long time, this discussion also enabled to find him non-contributing for couple of months. They decide that the leading-team also discusses if time or work problems occur that prevent completing their tasks.

Learn now

1. How can you create accountable collaboration in a group?
2. How can you distribute single steps?
3. Why can it be important to let more than one people work out one single task together?

References

Felder, R.M., and Brent, R.. „Cooperative learning.“ Active learning: Models from the analytical sci-

ences, ACS Symposium Series. Vol. 970. 2007

5.1.5 Binding agreement to collaborate in the group

Checklist

Have you discussed / decided about:

- The name you choose under which to function
- The time schedule for collaboration (start, end, milestones)
- Use the 1:2:1 method to facilitate text generation
- How the group communicates regularly (online, offline, meetings etc.)
- Availability over time (vacations, unavailability-times)
- Who has what interest in the topic? Is everyone every topic or separated?
- Ask in particular who is willing to participate

Special points for OER

- Watch the video that shows how to turn a resource into an OER.

  https://youtu.be/CUVW5fhQP2k

Details

Often we share ideas with colleagues and would like to dedicate some time to a particular topic. However, colleagues may feel that shared interest bears no agreement for ongoing collaboration. Asking whether they would actually work with you on this certain topic can avoid miscommunication.

Example from practice

Biljana has sent a link to her colleagues to start collaboration. During lunchtime they have discussed about a name that everyone likes. For the work “water organization” they now have to decide upon the time frame and how they communicate meanwhile. She knows that her German colleague is on vacation starting next week. But he wanted to focus his contribution on the spell-check of the output so his input is not delaying work. She schedules collaboration according to the method: 1:2:1; one share for the analysis, double share for the documentation and another share for the quality check. As they aim at finishing work by July 15th and it is first of May, they have about 12 weeks for realization. Hence, the first 3 weeks for analysis, 6 weeks for translation and 3 weeks for intensive quality check. She notes down when peers are on vacation and where she has to gather missing information. She suggests that her colleague and she herself begin to analyze what needs to be known and provided for translation. She also attaches each person to a phase - analysis, writing / realization

of translation and evaluation.

Subsequently she writes a mail to ask for missing information and whether they should keep the exchange over mail. She asks for a clear response whether or not every peer is in the project then, bound to contribute.

Learn now

1. Can you and group members list the activities which you are going to work out?
2. Does anybody have an overview, who is working out which task?
3. Can you clearly state in which frame and mode (place, time, frequency) you meet and exchange the state of progress?
4. Who is available at what time?

References

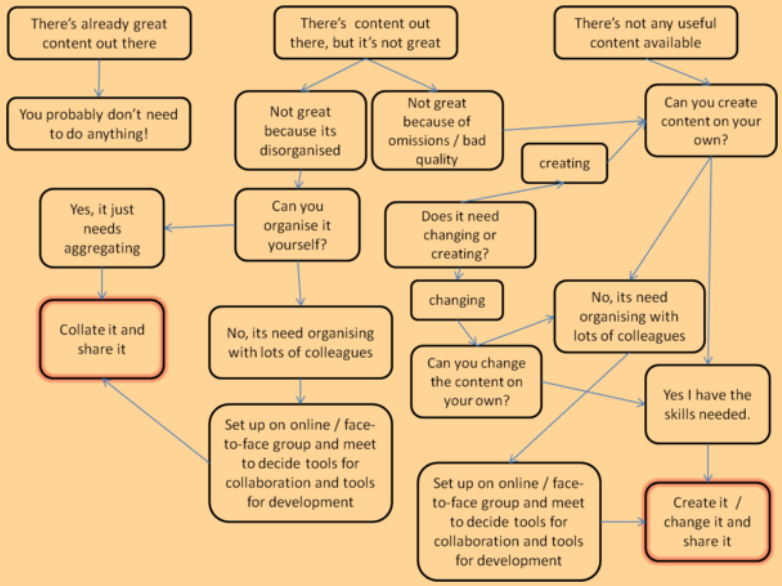
Palloff, R. M.; Pratt, K. (2010). Collaborating online: Learning together in community: John Wiley & Sons (32).

5.2 Phase: Middle of Collaboration

Guidelines concerning the middle of OER collaboration address the steps: Create OERs!; Choose tools and use them; Evaluate the process and reflect about. The guidelines are provided in text below but are also visible in the latest OER-guideline version: https://h5p.org/node/23348 and https://h5p.org/node/29333.

5.2.1 Create OERs!

Checklist



OERUp!Module4
(http://www.oerup.eu/de/modul-4/checklist-for-planning-an-oer/aufgabe-3/)

Special points for OER

Check out this video:

https://youtu.be/OF4a2kh1giQ

Details

Check out this video:

https://youtu.be/CUVW5fhQP2k

Example from practice

Check out the EAGLE platform for good practice examples.

Learn now

1. What steps are to discuss within a group?
2. What kind of license should a resource have to be used in your OER?

References

See link to video and figure above.

5.2.2 Choose tools and use them

Checklist

- Which format should your OER have?
  - Text, audio, video, any other? A mix of diverse formats?
- How do you want to present the content?
  - By case studies or checklists, reflecting experiences or theories?
- How are contents used?
  - By a single person or a group?
  - By other administrations, domains or in other countries?
  - In how many languages is your OER used?
- How do you create contents?
  - Are open discussions welcome in your administration?
  - Is enough space to try out new things?

The following picture gives some ideas which tools you may use.

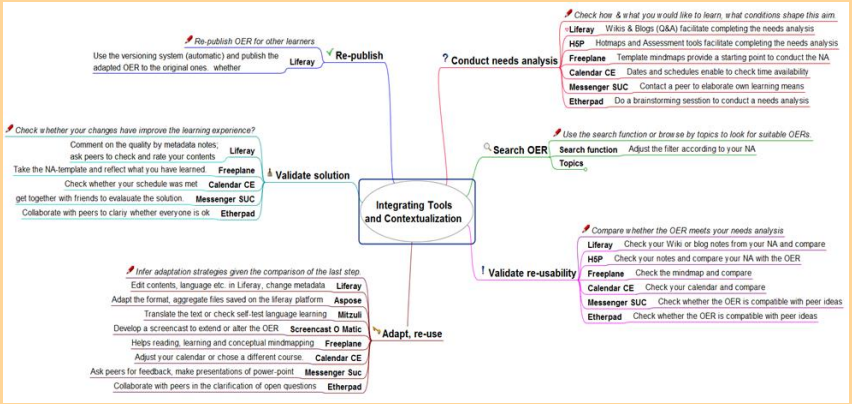


Figure 3 from D7.2.

Special points for OER

- Culture and context factors
  - Which organisational resources you may use? (IT- broadband etc.)
  - Is there any rule concerning the design or the creation that you have to consider?
  - Is your OER creation evaluated within the administration?

- Are you supported by your superior?
- Define licences
  - Check that licenses are visible or at least defined in the metadata of your OER.
- Attribution
  - Check that original authors and references to authors of integrated resources are well cited.
- Publishing
  - Consider the reach of the publishing process - depending on the tool you have used- is it locally store or even pushed to YouTube by default?

Details

Each administration and every public employee has its own ideas and even rules how to convey contents to colleagues. The questions hint to several context and culture factors that shape the use and acceptance of OERs within the public sector.

Example from practice

Biljana wants to consider the choice of tools for the OER creation. She checks out the Wiki-entry in EAGLE that helps her to create a culture and context-profile for her group. Depending on the profile she checks which decisions have been made and whether any misconceptions can be perceived.

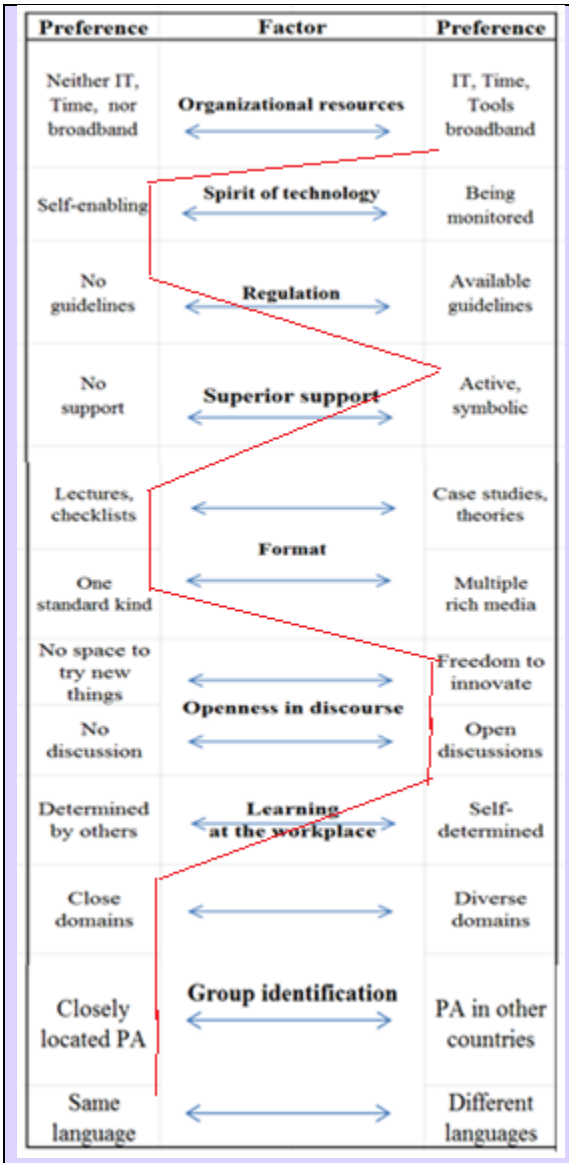


Figure 2 from D7.2.

Learn now

1. Which questions may guide you in the choice of a tool?
2. Why is it important to consider culture and context factors during the choice?

References

Stoffregen et al. (D7.2.) as well as discussions from expert interviews.

5.2.3 Evaluate the process

Checklist

- **Collect a list of all your tasks**. Pull together everything you could possibly consider getting done in a day. Don't worry about the order, or the number of items up-front. The following steps help you to generate a well-defined order.
- **Identify urgent vs. important**. The next step is to see if you have any tasks that need immediate attention. We're talking about work that, if not completed by the end of the day or in the next several hours, will have serious negative consequences (missed client deadline; missed publication or release deadlines, etc.). Check to see if there are any high-priority dependencies that rely on you finishing up a piece of work now.
- **Assess value**. Next, look at your important work and identify what carries the highest value to your business and organization. As a general practice, you want to recognize exactly which types of tasks have top priority over the others. For example, focus on: client projects before internal work; setting up the new CEO's computer before re-configuring the database; answering support tickets before writing training materials, and so on. Another way to assess value is to look at how many people are impacted by your work. In general, the more people involved or impacted, the higher the stakes.
- **Order tasks by estimated effort**. If you have tasks that seem to tie for priority standing, check their estimates, and start on whichever one you think will take the most effort to complete. Productivity experts suggest the tactic of starting the lengthier task first. But, if you feel like you can't focus on your meatier projects before you finish up the shorter task, then go with your gut and do that. It can be motivating to check a small task off the list before diving into deeper waters.
- **Be flexible and adaptable**. Uncertainty and change is a given. Know that your priorities will change, and often when you least expect them to. But—and here's the trick—you also want to stay focused on the tasks you're committed to completing.
- **Know when to cut**. You probably can't get to everything on your list. After you prioritize your tasks and look at your estimates, cut the remaining tasks from your list, and focus on the priorities that you know you must and can complete for the day. Then take a deep breath, dive in and be ready for anything.

Special points for OER

- Check whether you have agreed about a license.
- Check whether editing rights are kept.
- Check, whether, by now, OERs are published about your topic.

Details

Prioritizing is a step which is re-occurs again and again in the active phase of collaboration. It can be helpful to define consequences that meet people who cannot meet agreements. The guidelines come from project management in the general work context (Sussex 2014). The guidelines are defined in general and may be used in a range of situations.

Example from practice

Ms Green has managed to complete her tasks in time. Also she has been talking to Mrs Streicher about the problems completing her work. Mrs Streicher gave her some advice that she wants to test now. First, she collects a list of all her tasks and aggregates them to tasks she can perform per day. She prioritizes them as urgent vs. important. The next step is to see if you have any tasks that need immediate attention and how the tasks depend on each other. She assesses the values what tasks brings most to her current and the group's work. As she has some idea about the priorities now, she calculates and orders the tasks by estimated effort. She knows she performs best when she sees things are completed. That is why she decides to start with the shorter tasks. But today, she needs to be flexible since she is expecting her peers to pass by after holiday for a chat. She wonders where to cut the list for today and simply puts two possible, intelligible ends.

Learn now

1. What are you evaluating in this step?
2. When should you start the first evaluation and why?
3. When should you pose questions to yourself and when within the group?

References

Sussex, T., 2014, April, How to prioritize when everything is #1. https://www.liquidplanner.com/blog/how-to-prioritize-work-when-everythings-1/

5.2.4 Reflect about

Checklist

Consider to divide your collaboration time including a phase for reflection / learning:

Elaborate for your own or with peers:

- Is you working process running fine?
- What have you learned?
- What objectives are already reached, which not?
- Where to improve for the rest of project time?

Special points for OER

- Why don't you write down your experiences / ideas in form of a:
  - prospective OER-learning blog?
  - contribution to a forum in the EAGLE platform?

Details

Reflecting is a step that starts in the active phase of collaboration. It is about to check how things are going, what is about to do and similar points. Reflecting also belongs to the learning process. The following questions will provide some ideas how to proceed.

Example from practice

Mr Brown has heard from Ms Green that she performed some reflection and was happy to apply her insights in future collaboration work. He wonders how he could learn as well, but rather structure his knowledge about the topic OER in the project work. Similar to Ms Green he uses EAGLE to support his learning phase. Since he doesn't like to write, he uses the video function albeit only for recording his voice. He orients on the questions (see above) to think about what is new to him and how he can deploy this insight in the future.

Learn now

1. When should you reflect?
2. What kind of questions you may pose yourself?
3. Why could it be helpful to reflect together with colleagues?
4. Which specific points are to consider with regard to the use of OERs?

References

Palloff, R. M.; Pratt, K. (2010). Collaborating online: Learning together in community: John Wiley & Sons (32).

5.3 Phase: End of collaboration

Guidelines concerning the end phase of OER collaboration address the steps: evaluate the OER and share and document what you have achieved. The guidelines are provided in text below but are also visible in the latest OER-guideline version: https://h5p.org/node/23348 and https://h5p.org/node/29333.

5.3.1 Evaluate the OER

Checklist

You may do one of the following to discuss OER:

- Post papers or text that are in progress
- Invite peers to comment on the paper
- List the names of people who contributed (in the end)
- Comments either below, by download or special webpages and applications such as AnnotateIt

If you are about to do one of the activities above, you may orient on the following steps (Kennedy & Nilson 2008)

- Focus on the behavior or problem, not on the person. People become defensive when criticized personally. Keep the discussion focused on the task and the issues.
- Make sure what you say and what you do are the giving the same message. In other words, keep your verbal and nonverbal language on the same page. This limits confusion.
- Validate others' contributions. Compliment team members on good ideas and suggestions. This makes them feel a part of the team and encourages future participation.
- Make sure everyone has a chance to speak. Encourage team members to express opinions and share ideas. Don't let specific team members dominate the conversation. Ideas are lost this way.

If the discussion is not running, you may find help by posing questions (Palloff & Pratt 2010:70f.)

- Questions to ask for evidence: how do you know, what data supports the claim, what do others say about it, where did you find this view expressed?
- Questions to ask for clarification: can you put that in another way? What is a good example of your statement? What do you mean by that? Can you explain the term; could you give a different illustration?
- Questions that link peers or topics: how does your comment with those of your peers earlier comments, how does your observation relate to what the group decided last week; does your idea challenge or support what we seem to be saying, how does that contribution add to what has been said?
- Hypothetical, provoking questions: what if …
- Cause-effect thinking: can you elaborate; what is likely to be the effect of changing from …
- Summary and synthesis questions; what are the one or two most important ideas that emerged from this discussion? What remains unresolved or contentious about this topic? What remains unresolved or contentious about this topic? What do you understand better as a result of today's discussion? Based on our discussion today, what do we need to talk about next time if we are to understand this issue better?

Special points for OER

- Did you use any help in this guideline? Did you stick to your considerations so far?
- What kind of feedback did group members / learners provide? Are learning goals easy to reach?

- Is the process - how to use the OER - clear to all?

Details

Discussions happen permanently during collaboration. Apart from the distribution of tasks you can also discuss progress in middle of the group work. The exchange can follow between individual group members, online, or within the whole group. In particular, this guideline helps you to elaborate the current state, clarify which open questions exist and which experiences were made. The following examples provide suggestions how to move on.

Example from practice

Mrs Brown is quite happy again. Initially, he was unsure how to formulate the concept. It felt that things were missing and he didn't hit the spot. He simply decided at one point of time that he needed concurrent feedback from his group. Now, he has seen that Ms Green changes the structure of the document; Mrs Streicher has improved the formulation and Mr Velosa posed questions about missing parts. He can continue now but noticed an important point to discuss: Mr Ahman has not contributed in the last weeks and some comments addressed the irritation about it.

For the next face to face meeting he makes some preparation. He collects some examples to illustrate where Mr Ahman has not contributed. He also compares whether everyone else has actually contributed much more or whether he has a perception bias. He plans to give Mr Ahman the first chance to respond to the question how his work contributed to plans of the group. Subsequently he wants to shift the discussion to finding solutions. As he knows, not at least from the comments in his document, that Mrs Streicher is not particularly willing to discuss constructively, he prepares some guiding questions: what if we take over your task now; do you take over ours in the next phase? What are the most important points that emerged from this discussion? He also decides to write a short report about this discussion and make it transparent to everyone.

Learn now

1. When and for what goals do you provide learners with your OER during evaluation?
2. How can you foster discussions?
3. What do you ask yourself to evaluate OER regarding your initial goals (define with the group)?

References

Kennedy & Nilson 2008. Successful Strategies for Teams. Team Member Handbook. Office of Teaching Effectiveness and Innovation Clemson University. 1-85.
Palloff, R. M.; Pratt, K. (2010). Collaborating online: Learning together in community: John Wiley & Sons (32).
Hudak, R., Pirkkalainen, H. Pawlowski, J.Bick, M., AbuJarour,S., Vidalis, A. Vassilis, P., Pappa,D., Makropoulos, C. Volungeviciene, A., Trepule, E., Bagucanskyte, M., Frankenberg, A., Ehlers, U., Scheubrein, R., Tannhaeuser, A. 2015. Good practice Report. Open Educational ideas, D2.3 – Good practices and recommendations

5.3.2 Share and document what you have learnt

Checklist

Rate the following statements for yourself from 1-5 (strongly agree - strongly disagree)

- We have established common goals
- We communicated well as a team
- We chose a leader without difficulty
- Everyone contributed to the process
- Everyone contributed equally to the final product
- We had adequate time and resources to complete our task
- I was satisfied with the way we worked together
- I was satisfied with the final outcome
- I have the impression that I learned from this activity

If your score is equal or below neutral / disagreement, consider steps how to improve future group work in this respect.

Special points for OER

Continue elaborating:

- It was easy for use to define goals for our group work (creating the OER)
- Every group member has contributed to the OER creation as discussed in the beginning
- Every group member would like to present the OER to peers, friends and colleagues
- The choice of licenses has worked out very well
- Everybody has learnt how to work with OERs

Details

Your groupwork is almost done. A last step is to reflect and separate in a good mood from another. The group may reflect on the work, finally, to get prepared for future work. Both for organizers and group members this step is essential. The questions above give hints how to proceed. They are derived from Palloff & Pratt (2010:52) who elaborated on experiences with online communities in a higher education context. Identifying is a key step in their approach to collaboration. Despite the educational background, check out the criteria to see that they are generic enough and helpful.

Example from practice

Mr Brown has heard from Ms Green that she performed some reflection and was happy to apply her insights in future collaboration work. He wonders how he could learn as well. Similar to Ms Green he uses EAGLE to support his learning phase. Unlike Ms Green, however, he wants to spread his experiences in a Wiki; this will allow him to show future collaborating peers what experiences he made and how he would like to work in the future. To learn about the process, he asks himself the questions noted above. In this moment, he notices that he requires his peer to validate his view on the process and then create a Wiki entry.

Learn now

1. What questions you may pose yourself to share what you have learnt?
2. Which questions from those posted earlier are the most important for you?
3. What could you ask to learn from other's experiences?

References

Palloff, R. M.; Pratt, K. (2010). Collaborating online: Learning together in community: John Wiley & Sons (32).

6 Conclusion

The deliverable has documented the systematic development of guidelines beginning with a literature review, definition of selection criteria of guidelines, the subsequent selection of guidelines, the design of guidelines and its iterative evaluation and improvement.

It has been shown how strong but constructive criticism has been taken up in the first evaluations and how corresponding actions points were poured in a form of guidelines that experts like very much and consider as clear, concise, complete and appealing.

The guideline is provided for use and improvement in the platform.

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Annex A

Welche Anleitungen erwarten Sie bei dem Thema, „best practice guidelines for OER-collaboration?“
Andere Themen- welche Rolle spielen OER; Lehr/Lernressourcen; Projektarbeit; um das kollaborative, eher Anleitung zur Gruppenarbeit in beruflichen Arbeit, reflektieren.
Wie haben Ihnen die Anleitungen insgesamt gefallen?
Positiver, erster Eindruck. *Sehr ansprechend* *Durchgeklickt.* *Sehr fallbasiert, wann geht’s denn um die OERs?*
Was ist Ihnen als erstes ins Auge gesprungen?
Bild, durchlesen, bisschen viel Fließtext, Methodensammlung, mehr Material für methodisches Setting- Kommunikationsstränge unterstützen; Brainstorming; weiter das grafische durchführen.
Haben Sie intuitiv gewusst oder einen Hinweis gefunden, wie man bei dem Aufrufen der Anleitungen vorgehen soll?
Übersicht Zusammenarbeit- als letztes. *Wo fange ich nur an …*
Wie gefällt Ihnen der Aufbau der Anleitungen?
Recht ausführlich- stichpunkte gut, rest nicht zu lang- erschreckend – will ich nicht sagen- am Anfang *Kurz und bündig- gut*
Wie lange haben Sie sich mit einer Anleitung beschäftigt?
Eine Anleitung- 10-15 Minuten insgesamt- 3-5 min oberflächlich,
Was gefällt Ihnen besonders gut oder schlecht?
Überhaupt nicht gefallen- was könnte mich interessieren- methoden, zusammensetzungen- abgesucht nach Prioritäten, Vorstellung.
Was fehlt und muss unbedingt ergänzt werden?
Je nach Erwartungen nicht so bombastisch. Gefehlt- wie das Produkt an den Mann bringen? Piecharts bei Zeiten- priorisieren
OER-einschleichen- bewusst in den workflow einbeziehen Nicht schaden- offene Formate- als txtdat oder pdf weiterverarbeiten Link weiterschicken

7 Initial guidelines for first review in German

7.1.1 For the step "Define"

7.1.1.1 Identify People

Prerequisite	*none*
Phase in collaboration process	Identifying People is a step in the first phase of collaboration. Identifying people is the first requirement to get started. The guideline is oriented on recommendations to "forming teams" according to (Felder & Brent 2007).
Role of reader	You may use the guideline if you are the owner of the tasks, the idea, the coordinating person or a tutor.
Context of application	Does this guideline suit to your specific needs? The approach "forming teams" was developed in a school context for classroom cooperation. Hence, for activities where each group member gets his own share of work including responsibilities. Yet, the criteria are generic so they will definitely provide guidance for the first steps in your collaboration process.
Hard requirements	Consider the following: • Create groups no bigger than 3-4 people • Make sure your group is heterogeneous, hence, peers have different skills, interests, background, experiences, ideas etc.
Description / showcase	**Trace how Biljana identifies people.** Biljana aims at translating a water-waste management document that she had written in Montenegrin. Biljana does not have much time to look for people so she asks one colleague in her office and four persons she knows from EAGLE; that means, she has seen they are interested in water waste management as well. These EAGLE peers are two women and two men. One women has the same position as Biljana; the other is not working in the same field as Biljana as well. Biljana needs diverse perspective wherefore she decides to invite the other peers. Thus, Biljana is contacting three peers come from three countries. Her colleague Tom works in legislation, Sonia in Germany works at pipeline controls and Marijan from Luxembourg is working for project management and speaks several languages. Biljana has prepared a brief introduction about her aim. Now she simply sends a mail and asks whether are interested to hear more about the topic.
Comments, tips, tricks	You may use the tool "groups" in the EAGLE platform to create a group environment online.
Any further information	

7.1.1.2 Define common objectives

Prerequisite	*Identifying people*
Phase in collabora-	This step is set in the beginning and refers to the phase: define collabora-

tion process	tion. The requirement follows the identification of people and runs, mostly, in parallel to defining general agreement to participate. You want to agree on objectives such as: what learning goals or what topics you elaborate in the group work.
Role of reader	You may use the guideline in any group position; as an organizer and tutor,
Context of application	(Palloff & Pratt 2010: 27-29) elaborate on their experiences with online communities in a higher education context. However, the criteria are well generalized so you will find guidance in defining common objectives.
Hard requirements	Consider the following points to defined objectives (Palloff & Pratt 2010). Discuss about: • The purpose of the group work • The output of the working process • The learning goals (personal, group work, output, other) • The rules or duties of persons • How to handle if a member does not participate • Expectations about responding to posts Make a decision according to Kennedy & Nielson 2008. • Select a team member to list 3-5 ideas or problems. • Each team member takes a moment to prioritize them on his or her own paper. • The member does this by ranking each item 1-5, with 5 being the most important. • Each team member tells the recorder his or her ranking for each problem • The recorder adds the rankings across members • The highest score is the weighted opinion of the team.
Description / showcase	**Check out the example** Mr Brown is consultant in Human Resource Management. He has already identified some peers who want to elaborate a concept how to use OER for human resource development. He has a clear idea about the tasks but his collaborators had further suggestions. Consequentially, they have to narrow down the focus of work. He opens his notes in EAGLE and prepares the discussion: he notes down the purpose of the group work (develop an OER-HRM concept), the intended output (checklist), learning goals (what is OER, what interests and experiences do others have). He also notes how he would like others to contribute (roles and duties). He notes that he expects others to respond to mails within a week. Otherwise the tasks will be so much delayed. Once his colleagues have joined, they are sitting in the bureau and discuss about their ideas. It is difficult to agree so the each take a piece of paper, note down the ideas and rank them from the most to least favorable one. Mr Brown summarizes the ranking and is happy to move on.
Comments, tips, tricks	Use EAGLE notes in your profile
Any further information	

7.1.1.3 Define Activities

Prerequisite	*Identifying people*
Phase in collaboration process	This step for collaboration is set in the beginning and refers to the phase: define collaboration. The requirement follows the identification of people and runs, mostly, in parallel to defining general agreement to participate. You want to agree on activities to reach your goals.
Role of reader	You may use the guideline in any group position; as an organiser and tutor,
Context of application	Kennedy & Nilson (2008) elaborate on successful strategies for teams in organisations. They follow a managerial perspective which makes the criteria generic and likely to suit your context.
Hard requirements	Care about to: • Define each key action step that is needed to fulfill your objectives • Note potential problems • Note down preventive actions • Assign actions including preventative actions to roles or collaborators
Description / showcase	**How would this look in practice?** Mrs Streicher is part of Mr Brown's team. He is pushing the idea to create an OER-concept for HRM but to her it seems that the team won't start working unless clear steps are defined. Therefore, she asks how to proceed in general. She notes down major steps to fulfill their objectives. This includes: Analyse status "quo"- what concepts they currently work with; Analyse status "should"- what OER concepts are existing; and Gap-Analysis- how to get there. She sees a potential problem and asks others about it. The HRM-Leader is not involved in their group yet; they note further problems down. To resolve the problems they discuss about alternatives: involve the leader, interview the leader, let him out of the project etc. Once they have decided, each action step and preventative action gains a responsible person. This secures that one person in their group has a dedicated eye to the progress of the step.
Comments, tips, tricks	
Any further information	

7.1.1.4 Define Roles

Prerequisite	*Identifying people*
Phase in collaboration process	This step is set in the beginning and refers to the phase: define collaboration. The requirement follows the identification of people and runs, mostly, in parallel to defining general agreement to participate. You want to define roles now and concurrently, the interdependence needed to secure collaboration (according to (Felder & Brent 2007), as well as Kennedy & Nilson (2008) who elaborate on successful strategies for teams in organisations. They follow a managerial perspective.

Role of reader	You may orient on the guideline as any group member, particularly as a coordinating person or as having the role to evaluate group interaction.
Context of application	The approach forming teams was developed in a school context for classroom cooperation. Hence, for activities where each group member gets own work and responsibilities. Promoting positive interdependence is especially important if assignments have to be delivered (Felder & Brent 2007).
Hard requirements	Check the following: • Assign different roles (coordinator, recorder, checker, process monitor) • Check who is the contributor (focuses on immediate task), the collaborator (emphasizes the overall purpose of the team), communicator (encourages positive, interpersonal relations and group processes), the challenger (who questions and pushes to take reasonable risks) • Define the distribution of specialized expertise within each team • Define whether and how to rotate roles (which would make it collaborative again)
Description / showcase	**Check how Mrs Streicher proceeds** Once Mrs Streicher has noted down responsibilities for action, Mr Brown notes that he hasn't discussed his view on the distribution of roles. Apart from the focus on tasks, the group has to perform some tasks that need regular checks. He asks his peers who would like to record meetings in the future. Who checks whether deadlines are meet and who evaluates the contents. From his experience he knows that Mrs Streicher is the challenger and asks difficult questions. He hasn't worked with others and asks about their preferences - to focus on tasks, interaction and communication within the team and functioning of the team for the purpose. As peers are unclear about the preferences, they decide to rotate roles after the half of the OER creation.
Comments, tips, tricks	You may orient on illustrations in EAGLE.
Any further information	

7.1.1.5 Define accountability mechanisms

Prerequisite	*Identifying people, agree to participate (general)*
Phase in collaboration process	This step is made in the beginning. The requirement follows the identification of people as now you want to agree with peers to be accountable, that is: "being in charge for doing one's own share of the work and for mastery of all of the material to be learned" (Felder & Brent 2007:2).
Role of reader	You may find the guideline particularly useful when you're the coordinating person of the group.
Context of application	The approach forming teams was developed in a school context for classroom cooperation. Hence, for activities where each group member gets his own work-share and responsibilities. Providing accountability is especially important if assignments have to be delivered (Palloff & Pratt 2010)

Hard requirements	Do the following: • Distribute tasks: Give tasks that cover all of the material of the team assignment and projects, • Make someone responsible for mutual understanding • Make team members responsible for seeing that non-contributors don't get credit • Use peer ratings to make individual adjustments, • Provide last resort options for firing and quitting
Description / showcase	**Check out the example** Mrs Streicher appreciates that Mr Brown has asked for the handling and distribution of roles. Yet, she fears that the other colleagues won't share their insights immediately within the group. Therefore she asks whether it was senseful to create leading-teams. One who leads and another who helps in creating contents or doing activities of the task. As one colleague mentioned he will be in holidays for a long time, this discussion also enabled to find him non-contributing for couple of months. They decide that the leading-team also discusses if time or work problems occur that prevent completing their tasks.
Comments, tips, tricks	
Any further information	

7.1.1.6 Agree to participate

Prerequisite	*Identifying people*
Phase in collaboration process	This step is set in the beginning of collaboration and refers to the phase "define collaboration". The requirement follows the identification of people, allocation of roles and activities. Now everyone knows more or less how to proceed. But you want to agree with potential collaborators how to work together and thus, be sure that everyone delivers. The requirements and guidelines how to agree on participation is oriented on Palloff & Pratt (2010).
Role of reader	Are you an organizer, part of the collaborating team or tutor of a course? This guideline will help you.
Context of application	Palloff & Pratt (2010) elaborate on their experiences with online communities in a higher education context. Identifying is a key step in their approach to collaboration. Despite the educational background, check out the criteria to see that they are generic enough and helpful.
Hard requirements	Discuss and agree about (Palloff & Pratt 2010:27f.) • The name you choose under which to function • The time schedule for collaboration • How the group communicates • Availability over time • Who has what interest- is everyone every topic or separated?

Description / showcase	**How does collaboration work for Biljana by now?** Biljana has sent a link to her colleagues to start collaboration. During lunchtime they have discussed about a name that everyone likes. For the work "water organization" they now have to decide upon the time frame and how they communicate meanwhile. She knows that her German colleague is on vacation starting next week. But he wanted to focus his contribution on the spell-check of the output so his input is not delaying work. She schedules collaboration according to the method: 1:2:1; one share for the analysis, double share for the documentation and another share for the quality check. As they aim at finishing work by July 15th and it is first of May, they have about 12 weeks for realization. Hence, the first 3 weeks for analysis, 6 weeks for translation and 3 weeks for intensive quality check. She notes down when peers are on vacation and where she has to gather missing information. She suggests that her colleague and she herself begin to analyze what needs to be known and provided for translation. She also attaches each person to a phase - analysis, writing / realization of translation and evaluation. Subsequently she writes a mail to ask for missing information and whether they should keep the exchange over mail. She asks for a clear response whether or not every peer is in the project then, bound to contribute.
Comments, tips, tricks	You may note down your agreements in a group block, on your notes in EAGLE or in the chat.
Any further information	

7.1.2 For the step Doing

7.1.2.1 Monitor progress

Prerequisite	*Step define*
Phase in collaboration process	This step is set in the middle of collaborative work and follows first agreement phase: define collaboration. The requirement monitor progress can only apply if work activities of the group are clear and progress can be traced.
Role of reader	Everyone in the group can check the guidelines to get an idea of monitoring activities. If you are a tutor or coordinator, you may check the guideline to get an idea of how to proceed.
Context of application	Kennedy & Nilson (2008) elaborate on successful strategies for teams in organisations. They follow a managerial perspective which is quite generic and can be transferred to public administrations.
Hard requirements	Do the following: • Note down what is the envisioned goal (you may focus on schedules, deadlines, parts of the product etc) • Note down what is the current status • Note down the gap between goal and status • Note down necessary actions

Description / showcase	**Check out the example** Ms Green is new in the group of Mr Brown and Mrs Streicher. She is interested in the topic and glad that the collaboration is well organized and transparent concerning the efforts and steps to take. Yet, she has problems with her own tasks as well as with the progress of her leading-team. Before she wants to talk to the co-leader, she notes down; what the goal of the tasks is and how it contributes to the overall objectives. She looks in her calendar and makes a reasonable planning how she can contribute in the next week. Also, Ms Green notes down what tasks are delayed and what actions need to be taken in this respect. She decides that, if she doesn't manage to complete the work by the end of next day, she contacts Mrs Streicher to ask for advice.
Comments, tips, tricks	
Any further information	

7.1.2.2 Discussing progress

Prerequisite	Step define; monitoring.
Phase in collaboration process	This step at the heart of collaboration activities and refers to the phase "doing collaboration". The requirement discussing progress can follow only after group activities have started. The discussion can be face-2-face or online, linked to the quality review, for example, or Social Peer reviewing of (academic) papers
Role of reader	Discussing progress is relevant to every group member. However, group leaders will have to consider the recommendations how to behave or structure activities.
Context of application	The guidelines was developed and applied in a higher educational context (Felder & Brent 2007). Social Peer reviewing is about academic papers that shall be appraised and improved by colleagues in the field; from (Hudak & Pirkkalainen et al. 2015)
Hard requirements	**You may do one of the following to discuss OER** • Post papers or text that are in progress • Invite peers to comment on the paper • List (in the end) who contributed. • Comments either below, by download or special webpages and applications such as AnnotateIt. **If you are about to do one of the activities above, you may orient on the following steps** (Kennedy & Nilson 2008) • Focus on the behavior or problem, not on the person. People become defensive when criticized personally. Keep the discussion focused on the task and the issues. • Make sure what you say and what you do are the giving the same message. In other words, keep your verbal and nonverbal language on the same page. This limits confusion.

	• Validate others' contributions. Compliment team members on good ideas and suggestions. This makes them feel a part of the team and encourages future participation. • Make sure everyone has a chance to speak. Encourage team members to express opinions and share ideas. Don't let specific team members dominate the conversation. Ideas are lost this way **If the discussion is not running, you may find help by posing questions** (Palloff & Pratt 2010:70f.) • Questions to ask for evidence: how do you know, what data supports the claim, what do others say about it, where did you find this view expressed • Questions to ask for clarification: can you put that in another way? What is a good example of your statement? What do you mean by that? Can you explain the term; could you give a different illustration? • Questions that link peers or topics: how does your comment with those of your peers earlier comments, how does your observation relate to what the group decided last week; does your idea challenge or support what we seem to be saying, how does that contribution add to what has been said? • Hypothetical, provoking questions: what if … • Cause-effect thinking: can you elaborate; what is the likely to be the effect of changing from … • Summary and synthesis questions; what are the one or two most important ideas that emerged from this discussion? What remains unresolved or contentious about this topic? What remains unresolved or contentious about this topic? What do you understand better as a result of today's discussion? Based on our discussion today, what do we need to talk about next time if we are to understand this issue better
Description / showcase	**How does this look in practice?** Mrs Brown is quite happy again. Initially, he was unsure how to formulate the concept. It felt that things were missing and he didn't hit the spot. He simply decided at one point of time that he needed concurrent feedback from his group. Now he has seen that Ms Green changes the structure of the document; Mrs Streicher has improved the formulation and Mr Velosa posed questions about missing parts. He can continue now but noticed an important point to discuss: Mr Ahman has not contributed in the last weeks and some comments addressed the irritation about it. For the next face to face meeting he makes some preparation. He collects some examples to illustrate where Mr Ahman has not contributed. He also compares whether everyone else has actually contributed much more or whether he has a perception bias. He plans to give Mr Ahman the first chance to respond to the question how his work contributed to plans of the group. Subsequently he wants to shift the discussion to finding solutions. As he knows, not at least from the comments in his document, that Mrs Streicher is not particularly willing to discuss constructively, he prepares some guiding questions: what if we take over your task now; do you take over ours in the next phase? What are the most important points that emerged from this discussion? He also decides to write a short report about this discussion and make it transparent to everyone.
Comments, tips, tricks	

Any further information	

7.1.2.3 Implement progress

Prerequisite	*Step define*
Phase in collaboration process	This step for collaboration is set in the middle and follows the phase: define collaboration. The requirement implementing can also follow only after progress of group activities is elaborated and consequences are defined. Implementation refers to adjustments in the work flow and order or activities.
Role of reader	Are you organising your tasks or the tasks of your peers in the group. These criteria will help you to implement progress.
Context of application	The list of requirements is taken from project management and productivity guideline (Sussex 2014) and is formulated in generic terms.
Hard requirements	**You may orient on the following criteria:** • Collect a list of all your tasks. Pull together everything you could possibly consider getting done in a day. Don't worry about the order, or the number of items up front. • Identify urgent vs. important. The next step is to see if you have any tasks that need immediate attention. We're talking about work that, if not completed by the end of the day or in the next several hours, will have serious negative consequences (missed client deadline; missed publication or release deadlines, etc.). Check to see if there are any high-priority dependencies that rely on you finishing up a piece of work now. • Assess value. Next, look at your important work and identify what carries the highest value to your business and organization. As a general practice, you want to recognize exactly which types of tasks have top priority over the others. For example, focus on: client projects before internal work; setting up the new CEO's computer before re-configuring the database; answering support tickets before writing training materials, and so on. Another way to assess value is to look at how many people are impacted by your work. In general, the more people involved or impacted, the higher the stakes. • Order tasks by estimated effort. If you have tasks that seem to tie for priority standing, check their estimates, and start on whichever one you think will take the most effort to complete. Productivity experts suggest the tactic of starting the lengthier task first. But, if you feel like you can't focus on your meatier projects before you finish up the shorter task, then go with your gut and do that. It can be motivating to check a small task off the list before diving into deeper waters. • Be flexible and adaptable. Uncertainty and change is a given. Know that your priorities will change, and often when you least expect them to. But—and here's the trick—you also want to stay focused on the tasks you're committed to completing. • Know when to cut. You probably can't get to everything on your list. After you prioritize your tasks and look at your estimates, cut the remaining tasks from your list, and focus on the priorities that you know you must and can complete for the day. Then take a deep breath, dive in and be ready for anything.

Description / showcase	**Check out the example** Ms Green has managed to complete her tasks in time. Also she has been talking to Mrs Streicher about the problems completing her work. Mrs Streicher gave her some advice that she wants to test now. First, she collects a list of all her tasks and aggregates them to tasks she can perform per day. The she prioritizes them as urgent vs. important. The next step is to see if you have any tasks that need immediate attention and how the tasks depend on each other. She assess value what tasks brings most to her current and the group's work. As she has some idea about the priorities now, she calculates and orders the tasks by estimated effort. She knows she performs best when she sees things are completed. That is why she decides to start with the shorter tasks. But today, she needs to be flexible since she is expecting her peers to pass by after holiday for a chat. She wonders where to cut the list for today and simply puts two possible, intelligible ends.
Comments, tips, tricks	
Any further information	

7.1.2.4 Do reflection

Prerequisite	*Step define, step implementing, step monitoring.*
Phase in collaboration process	The step doing reflection is set in the middle and follows the implementing of activities. The requirement should be part of regular group activities and goes in parallel to the monitoring of results.
Role of reader	The criterion is essential for group members in general.
Context of application	Guidelines are taken from a set of criteria that evolved from experiences with online communities in a higher education context (Palloff & Pratt 2010:89ff). They are quite generic and suitable for use in public administrations.
Hard requirements	Consider the following: • Divide your collaboration time including a phase for reflection / learning Elaborate for your own or with peers: • Is you working process running fine? • What have you learned? • What objectives are already reached, which not • Where to improve for the rest of project time?
Description / showcase	**How does this look in practice?** Ms Green feels that she has learned a lot in the collaboration. But she knows from training, that she will lose this feeling in a few weeks. Now, she wants to avoid this loss and has taken half an hour in the morning to reflect on what she has learned. She uses the questions to guide her reflection and notes down answers. She uses the text-tool in EAGLE to note down her thoughts; she uses this tool as a learning blog since she doesn't post the content visible for all.

Comments, tips, tricks	
Any further information	

7.1.3 For step Learning

7.1.3.1 Reflect on the output

Prerequisite	*Step define, step doing.*
Phase / step of collaboration process	This step is set at the end of collaboration and follows the phase of doing collaborative activities. The requirement to reflect on the content is tied to the "doing reflection" and is nurtured from this regular part of group activities. However, this criterion is rather about the question "what did I learn" instead of "how collaboration succeeded".
Role of reader	This requirement is for all learners and group members.
Context of application	The guidelines help through general learning processes, for example, experiences in the community. Despite that they were provided by a service learning center for University students, the structure is clear and easy to transfer (UMN CCEL 2015)
Hard requirements	Ask the questions: **What?** • What happened? • What did you experience **So What?** • Did you learn a new skill or clarify an interest? • Did you hear, smell, or feel anything that surprised you? • How is your experience different from what you expected? • What impacts the way you view the situation/experience? (What lens are you viewing from?) • What did you like/dislike about the experience? • What did you learn about the objectives? **Now What?** • What learning occurred for you in this experience? • How can you apply this learning? • What would you like to learn more about, related to this project or issue? • What follow-up is needed to address any challenges or difficulties? • What information can you share with your peers or the community? • If you could do the project again, what would you do differently?

Description / showcase	**Check out the example** Mr Brown has heard from Ms Green that she performed some reflection and was happy to apply her insights in future collaboration work. He wonders how he could learn as well, but rather structure his knowledge about the topic OER & HRW in the project work. Similar to Ms Green he uses EAGLE to support his learning phase. Since he doesn't like to write, he uses the video function albeit only for recording his voice. He orients on the questions What- so what and now what- (see above) to think about what is new to him and how he can deploy this insight in the future.
Comments, tips, tricks	
Any further information	

7.1.3.2 Reflect on process

Prerequisite:	*Step define, step doing.*
Phase in collaboration process	This step is set at the end of collaboration and follows the phase of doing collaborative activities. The requirement to reflect on the content is tied to the "doing reflection" and is nurtured from this regular part of group activities. However, this criterion is rather about the question "how collaboration succeeded", instead of "what did I learn".
Role of reader	Are you part of the collaborating team? Are you a coordinating person? This is all for you!
Context of application	The requirements are derived from (Palloff & Pratt 2010:52). They elaborate on experiences with online communities in a higher education context. Identifying is a key step in their approach to collaboration. Despite the educational background, check out the criteria to see that they are generic enough and helpful.
Hard requirements	Rate the following statements for yourself from 1-5 (Strongly agree- strongly disagree) • We established common goals • We communicated well as a team • We chose a leader without difficulty • Everyone contributed to the process • Everyone contributed equally to the final product • We had adequate time and resources to complete our task • I was satisfied with the way we worked together • I was satisfied with the final outcome • I feel that I learned from this activity. If your score is equal or below neutral / disagreement, consider steps how to improve future group work in this respect.
Description / showcase	**How would this look in practice** Mr Brown has heard from Ms Green that she performed some reflection and

	was happy to apply her insights in future collaboration work. He wonders how he could learn as well. Similar to Ms Green he uses EAGLE to support his learning phase. Unlike Ms Green, however, he wants to spread his experiences in a Wiki; this will allow him to show future collaborating peers what experiences he made and how he would like to work in the future. To learn about the process, he asks himself the questions noted above. In this moment, he notices that he requires his peer to validate his view on the process and then create a wiki entry.
Comments, tips, tricks	
Any further information	