LIFE e-Natura2000.edu

LIFE e-Natura2000.edu

Building capacities for Natura 2000:

Lessons from the project and guidelines for replicability

Over three years, six European partners have worked together to design and test new approaches to build and develop the capacities of Natura 2000 professionals. From this experience, the main conclusions and recommendations for future competence-based learning initiatives are shared here.

NATURA 2000

LIFE17PREDE003

A LIFE Preparatory Project

"LIFE e-Natura2000.edu: Supporting e-learning and capacity building for Natura 2000 managers"

TECHNICAL REPORT

Guidelines for replicability and recommendations for future capacity building

July 2021

Content

1. About the project

The LIFE e-Natura2000.edu project "Supporting e-learning and capacity building for Natura 2000 Managers" (https://www.europarc.org/tools-and-training/life-e-natura2000-edu/) is financed under the LIFE Programme of the European Union. Called LIFEedu for short, the project ran for 40 months, from April 2018 to July 2021. Six project partners from across Europe have explored the potential of developing new approaches and integrating innovative learning methods to improve knowledge and capacity amongst Natura 2000 managers in both public and private land. The main aim of the project was to produce and test a flexible mix of blended learning tools and methods, designed to build and develop capacity required for effective Natura 2000 management practices.

By taking a competence-based approach, the project enabled peers to connect and learn about what managers need to know and be able to do to improve their practical management effectiveness. This approach has established a lasting legacy: the evaluated results will be used to develop replicable and up-scalable capacity building actions well into the future.

PROJECT IN A NUTSHELL *A LIFE Preparatory Project made possible with the support of the LIFE financial instrument of the European Community*

- **SHORT NAME:** LIFE e-Natura2000.edu
- **TOTAL BUDGET**: €845k
- **DATES:** start 1.4.2018 / end 31.07.2021
- 7 partners from 7 countries
- Participants from across the EU
- 6 implementation actions, 5 communication actions & 5 project management actions
- 34 deliverable inputs

2. Problem addressed, purpose and objectives

Recent studies have highlighted important gaps in terms of practical knowledge and capacity to implement Natura 2000 and the two underpinning legislation, the Birds and Habitats Directives. Several problems and knowledge gaps are common among all types of protected areas worldwide, while other capacity weaknesses are specific to the characteristics of Natura 2000. In particular, in relation to Natura 2000 management, the 2016 Fitness Check reported that there is limited expertise, insufficient staff resources and inconsistent standards in relation to the specific environmental procedures and quality of impact assessments required under the Directives[1]. There are continuing and long-term efforts required to develop and apply practical approaches, methods and tools to address these inadequacies and build the necessary capacities.

At the same time, there are common capacity development needs that require to be improved for management effectiveness in all European protected areas – these include improved competencies in communication, biodiversity monitoring schemes, appropriately informing local stakeholders, successful preparation and implementation of projects, and policy development on non-native invasive species management and the setting of adaptation actions to climate change (Eben 2006; Kati et al. 2015; Mattsson & Vacik 2018)[2]. Given the goals and ambitious targets set-out in the EU 2030 Biodiversity Strategy to expand the network of protected areas across the EU, there is an urgent need now to provide increased and tailor-made capacity building programmes that respond to these needs.

The approach developed and applied in LIFEedu focuses on building capacity for the specific competencies required to improve technical nature management practices: the project's competence-based approach is tailor-made to enhance technical practices by ensuring the nature managers acquire and develop the critical mix of skills, knowledge and attitudes required for effective management of Natura 2000 sites and protected areas, as depicted here:

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[1]https://ec.europa.eu/environment/nature/legislation/fitness_check/docs/study_evaluation_support_fitness_check_nature_directives.pdf).

[2] M. Eben, 2006, Public Participation during Site Selections for Natura 2000 in Germany: The Bavarian Case, in S. Stoll-Kleemann & M. *Stakeholder Dialogues in Natural Resources Management* (Berlin: Springer), pp. 261-278.

V. Kati et al., 2015, The challenge of implementing the European network of protected areas Natura 2000, *Conservation Biology* 29: 260-270.

B.J. Mattsson & H. Vacik, 2018, Prospects for stakeholder coordination by protected-area managers in Europe, *Conservation Biology* 32: 98-108.

3. What the project delivered

Across the full range of implementation, communication and management actions, the project has achieved significant results – these include:

✓ Identifying specific core functions and capacity development needs for all Natura 2000 managers;

✓ Developing a new Natura 2000 online Training Needs Analysis tool to identify individual competencies and capacity building professional development needs for Natura 2000 managers;

✓ Delivery of three core courses in three different languages designed specifically to provide competence-based learning in areas identified as being specifically required by Natura 2000 managers;

✓ Design and delivery of a virtual summer school;

✓ Development of an App for Natura 2000 managers and stakeholders of Natura 2000 management.

✓ Participation in a wide range of networking events to present the project and share capacity building experiences with diverse actors at national, (biogeographical) regional and international levels.

✓ Comprehensive progress monitoring, administration and management reporting systems developed and applied by the project partners.

4. Results

The following diagram presents a synthesis of the general and main flow of conceptual steps as effectively followed in the project. It encompasses the successive stages of training needs analysis and design, implementation and delivery of the courses (training modules), App and summer school, as well as the main networking outcomes achieved. These are explained in detail in the following pages (the structure and numbering in the diagram corresponds to the sections in chapter 4 and the following chapters: this structure follows the general rationale of the project).

4.1

Understanding the needs

- What functions are required to be performed by site managers for the efficient implementation of Natura 2000?
- What key competencies are particularly relevant for Natura 2000 site managers across Europe?
- How can we know what are the training needs of Natura 2000 managers?

4.2

Delivering the courses

- A competence based approach
- Training methods

4.3

Broadening the circle

- App
- Summer school
- Networking
- Project deliverables

4 & 5

Evaluating our work

- Impacts and changes as a result of LIFE EDU
- Improvement opportunities

6.1 & 6.2 Recommendations and learning gains from the project

6.3 Scaling up towards a Pan-European Natura 2000 capacity building programme

The project produced a consistent set of reporting deliverables, which guarantee that detailed and coherent information about all actions and results is available for future reference. In addition, a number of networking actions, both formal and informal, were performed in local, national and international forums.

Also, as a LIFE Preparatory project, it is worth highlighting that the general rationale and structure of LIFEedu was expressly designed to enable future developments to follow and build upon the current results. The planned legacy of LIFEedu was always to capitalise on the experience gains and the replicable results – for more on this point, see the conclusions and recommendations of these Guidelines for Replicability.

4.1. Understanding the needs

Capacity building is about building or developing the professional capacity of individuals and organisations by encouraging their engagement in lifelong learning processes by using diverse learning modes.

In order to be truly effective, capacity building and professional development programmes for any individual, team or organisation should start from an assessment of competencies which enable identification of their priority capacity development and learning needs. Basically, this involves a process of understanding those areas where learning can help to improve on-the-job effectiveness and increase efficiencies for individuals, teams and organisations.

4.2. How LIFEedu worked: what functions require to be performed by site managers for the efficient implementation of Natura 2000?

During the first technical meeting of the LIFE e-Natura2000.edu project, the specific functions required to be performed by site managers for the efficient implementation of Natura 2000 were identified. This was based on the results of the 2016 Fitness Check of the EU Nature (Birds and Habitats) Directives (https://ec.europa.eu/info/sites/default/files/swd-2016-472-final_en.pdf): this was taken further by the project partners and invited external experts to complete an analysis of the Nature Directives' legal requirements.

The findings of this project action are shown in Figure 1. The yellow boxes show areas of technical activities - i.e. what Natura 2000 site managers are typically expected to know and be able to do - as per the Nature Directives; the blue boxes show the typical functional areas of expertise that Natura 2000 site managers will require to have or reasonably be expected to develop to be able to do their work.

Summary of technical activities and functional areas of expertise required by Natura 2000 site managers (analysis of the Nature Directives)

Figure 1: Areas of technical activities & functions required for the effective management of Natura 2000

Analysis of functional levels for Natura 2000 site managers

As well as the type of site and its condition, geographical level, the scale and scope of operations are material factors which impact on the functions Natura 2000 site managers have to perform, as well as the skills and knowledge they need to have to do their job effectively. Therefore, expertise in technical activities required per the Directives is only half the picture: fundamentally, what Natura 2000 managers need to know and be able to do is 'context dependent'.

For Natura 2000 we can find two main functional and staff levels:

✓ Area based coordination function – i.e. Natura 2000 site managers having a strategic and coordination function at the regional / local level (usually across several sites, but also across large, complex single sites). These are generally managerial positions and require management capacities – typically, in terms of job types, this may be an Area Manager with responsibilities for several Natura 2000 sites, Park Chief Ranger or private landowner with responsibilities for a large Natura 2000 site. This corresponds largely to the level of responsibility specific to executives and senior managers.

✓ Site based management function – i.e. Natura 2000 managers having a site focused function, some of whom are decision-makers/managers, some with responsibilities related mainly to operational management. In terms of job types, this corresponds most often to middle managers and technical specialists (Level 2 in the Competence Register), i.e. staff dealing with operational work and having coordination responsibilities (e.g. – Chief Guard / Chief Ranger), with some competences specific to Level 1 staff. In some countries, Croatia for example, site based Natura 2000 managers corresponds with a higher level of responsibility and can include senior managers.

In making this broad categorisation of types of Natura 2000 managers and functional areas of responsibility, it is stressed that the two functional levels often coexist to deliver the management of Natura 2000 sites: some competencies are interchangeable or overlapping and are normally found in mixed teams of individuals, each with their own competence skills-sets. This also recognises that not all Natura 2000 site managers will necessarily come from the same organisation: in some cases, especially in large complex Natura 2000 sites, management tasks and functions may be implemented **by a combination of individuals from different types of organisation** (e.g. governmental, public, NGO, community-

based), as well as other stakeholders, especially private landowners, charitable trusts or foundations. Therefore, from the onset, the project approach recognised the fundamental diversity of types of Natura 2000 site managers: specifically, we purposefully included Natura 2000 site managers that do not necessarily belong to or work for organisations with Natura 2000 management responsibilities, namely private landowners of Natura 2000 sites. This rationale further serves, not only to underpin the high value results obtained from LIFE e-Natura2000.edu, but more importantly in terms of future potential, serve to replicate the current project tools, methods and courses to a bigger and more ambitious future capacity building programme.

4.3.   What key competencies are particularly relevant for Natura 2000 site managers across Europe?

Essentially, Natura 2000 has to be a cooperative process, where management responsibilities are learnt, consulted upon and shared on the basis of mutual respect and trust. In broad terms, effective Natura 2000 management requires specific knowledge, skills and competencies in the following areas:

- ✓ Technical nature conservation knowledge, where an individual Natura 2000 site manager should be able to demonstrate skills in setting appropriate conservation measures, management planning and implementation of required actions and monitoring based on strong ecological knowledge.

- ✓ Management of people and place, skills and knowledge in governance arrangements and applied management, such as planning, management and administration of projects, financial, human and technical resources, organisations, as well as policy making, leadership, communication and partnership development.

- ✓ Communication and outreach, where Natura 2000 site managers interact with and involve a range of stakeholders – including local communities in particular - by raising awareness, providing information and creating inclusive relationships for Natura 2000 is one of the most important areas.

- ✓ General personal competencies, the fundamental personal skills and attitudes, such as ethics, communication, a positive attitude towards work, the capacity to address problems and make decisions, have an equal importance in nature conservation.

The project completed a comprehensive analysis (see box below) to identify core competence areas relevant for various types of Natura 2000 site managers based on specific functions they are required to fulfil. The analysis results are shown in Figure 2[3].

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[3] A full report entitled "Identification and assessment of competencies for management of Natura 2000" can be found here:https://www.europarc.org/wp-content/uploads/2019/05/A1-

Although beyond the scope of the project, it is clear that there could be significant value in future of developing a general 'Natura 2000 Competence Register' that would encompass the full range of Natura 2000 management contexts.

Project methodology - How required competencies were identified

As part of Action A1, "Identification and assessment of competencies for management of Natura 2000" the project team and invited experts analysed the IUCN Global Register of Competencies for Protected Area Practitioners. The main objective was to identify a set of priority competencies specifically required by Natura 2000 site managers and for which the project will develop a set of innovative learning tools.

During a facilitated session, partners in groups discussed the complete list of competencies presented in the IUCN Competence Register to filter and identify those which are specifically relevant for each of the two functional areas identified previously (= 'Area-based coordinator' and 'site based/ managerial/ technical'). To select a specific competence that an FA1 and FA2 level Natura 2000 site manager would be expected to have or be expected to develop, a simple scoring system was used to filter competencies assessed by each group to be either: 'essential' (core); 'desirable/ context dependent'; or, 'non-core'. Following the workshop, the results were further analysed to **refine competence areas identified as being essential and/ or desirable**.

Combining the average scores that resulted from the group work in the first technical workshop with subsequent analysis enabled competence areas to be categorised and scored as follows:

- ✓ **core competencies** - which are directly linked to management requirements deriving from the Nature Directives, receive a score allocation of '5'
- ✓ **context dependent competencies** – which may be desirable but depend on specific job requirements or are site specific, receive a score allocation of '3'
- ✓ **non-core** – which are not strictly essential or required in a broad sense for the management of Natura 2000 sites, receive a score allocation of '1'

This numerical scoring system allowed each competence category to be more clearly identified in terms of their importance and relevance for Natura 2000 site managers.

Technical-Report-Identification-and-assessment-of-competencies-for-management-of-Natura-2000-.pdf

Competence Category Title	General description	Competencies relevant for Natura 2000 managers		
		Score for Area based coordination function	Score for Site based management function	Overall score
Foundation personal Competencies	Demonstrate fundamental personal skills and behaviours required for day-to-day PA work.	5	5	10
Advanced Personal Competencies	Demonstrate personal skills and behaviours required for effective performance and leadership.	5	5	10
Communication and collaboration	Building and using the skills required to communicate and collaborate effectively	5	5	10
Biodiversity conservation	Ensuring the maintenance of the ecological values of the PA through management and monitoring of species, their habitats, ecosystems and natural resource use.	5	5	10
Local communities and cultures	Establishing systems of PA governance and management that address the needs and rights of local communities.	5	5	10
Awareness and education	Ensuring that local stakeholders, visitors, decision makers and the wider public are aware of protected areas their purpose and values and how they are governed and managed.	5	5	10
Protected area policy, planning and projects	Providing a strategic and rationally planned framework for PA governance and management.	5	3	8
Administrative documentation and reporting	Establishing and implementing procedures for information management, documentation and reporting	3	3	6
Upholding laws and regulations	Ensuring that laws, regulations, and rights affecting the PA are upheld.	3	3	6
Tourism, recreation and public use	Providing environmentally and economically sustainable tourism and recreation in and around PAs.	3	3	6
Technology	Using of technology to support protected area management	3	3	6
Organisational leadership and development	Establishing and sustaining well governed, managed and led organizations for PA management.	3	1	4
Human resource management	Establishing an adequate, competent, well managed and supported work force for PAs.	3	1	4
Financial and operational resource management	Ensuring that the PAs are adequately financed and resourced and that resources are effectively and efficiently deployed and used.	3	1	4
Field/water craft and site Maintenance	Conducting field work and site maintenance tasks correctly, safely and securely.	1	3	4

Figure 2. Summary table of competence categories & scores.

4.4.   How can we know what the training needs of Natura 2000 managers are?

The overall objective of this project is to contribute to bridging the gaps between the 'what' and 'how' of Natura 2000 management. The project focused on exploring ways to improve the process of building practical capacities and nature management practice across a set of core competence areas identified as being fundamental to the work of Natura 2000 site managers from diverse backgrounds and operational contexts.

The project also explored how regular and routine assessments of training and capacity needs at all levels of Natura 2000 management could be used to provide evidence-based building blocks which, in turn, could be developed to address the real needs of capacity development across the Natura 2000 network. The work undertaken to produce the project's online Natura 2000 Training Needs Analysis tool is described in the following section

4.4.1.   The Training Needs Assessment tool

The Training Needs Assessment (TNA) tool developed by the project is designed to help individual Natura 2000 managers and other staff members of various entities that have Natura 2000 management responsibilities to assess their competencies and learn about their priority capacity development needs.

There is a wide variety of approaches to Natura 2000 management across the EU. Therefore, this tool is designed for use by all individuals with responsibilities for Natura 2000 management – specialist ecologists, areas managers, people working in Protected Areas, Rangers and private landowners of Natura 2000 sites. The online TNA requires a set of information from the user. Based on their inputs, a short report is generated listing the competencies that the user may wish to develop or improve in future, as well as the competencies which are already well developed by him/her as a Natura 2000 manager.

Project Methodology - How the online Natura 2000 TNA tool was developed

The online tool is based on a predefined list of competencies from the Global Register of Competencies for Protected Area Practitioners (Appleton, 2016), adapted to the complexity and reality of the Natura 2000 network across the EU: this includes the overall context, diverse types of management settings and governance arrangements, site management objectives and specific implementation activities. These were some of the multiple factors where specific competencies were identified as being required by individual Natura 2000 site managers: also, these areas are essential to designing tailor-made approaches to capacity building for improved management effectiveness.

The tool continues to be available and used. In the project test phase though, it was used by 60 people from 15 countries to evaluate their personal capacity building needs. Respondents in the test phase were asked to:

1. Use the tool and fill in the questionnaire based on the tasks and responsibilities associated to the position they are at present in the management of the Natura 2000 sites;

2. Provide feedback on the competencies recommended for Natura 2000 managers through the tool and on the functionality of the platform.

The online tool for Training Needs Assessment (TNA) dedicated to Natura 2000 professionals is available via the following link: https://propark.ro/individualtna/

By using the tool, all individuals that have Natura 2000 management responsibilities can self-assess their training needs and use the results to plan better their future professional development actions.
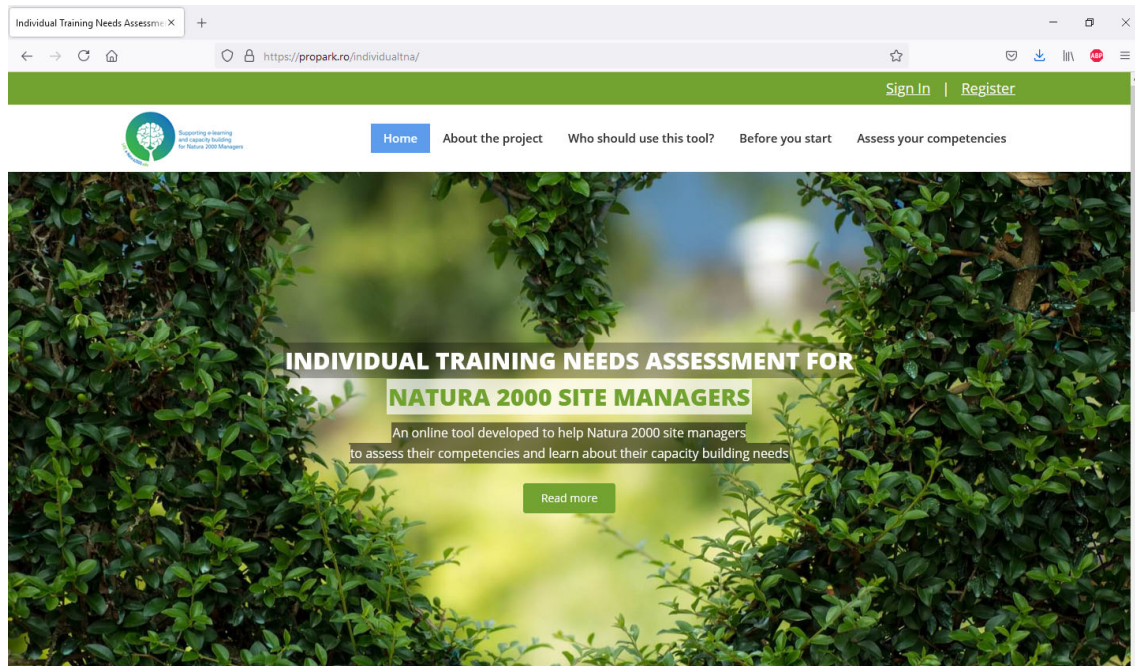
4.4.2. Improving the online TNA tool in future

This new online TNA tool for Natura 2000 managers was created and tested in LIFEedu with an eye to future replicability. As a key part of this test, the project has confirmed not only that the tool works, but also what improvements should be made in future and what these would cover – for example:

A. The tool's supporting function for users (i.e. Natura 2000 professionals) can be improved by:

-   Providing the possibility for users to compare results of successive self-assessments carried out at a minimum interval of time, so that they can observe the progress made through learning and development;

-   Improving overall access to training opportunities relevant for Natura 2000 management by identifying existing training and linking them into this online tool (providing links by key topics to the EUROPARC platform, CBD, other etc.);

- Exploring possibilities to link respondents to mentors / experienced people for those competencies that are at a good level, but need some further capacity building and development.

B. The online TNA tool should be further developed to provide possibilities for analysing the information collected through the individual TNAs with the aim to support capacity development planning at the site / regional / national / EU level. This would entail:

- Developing the online group analysis function and transforming the tool in an open-source instrument for team-based TNAs;

- Providing guidelines, recommendations for human resource managers at entity level on how to use the results of the group analysis for improving staff capacity in a planned, efficient way;

- Providing translated questionnaires and reports to all EU countries;

- Support the design of a Natura 2000 Capacity Development Platform at the EU level, with online training modules or modules with training materials for trainers across the EU, tailored using a competence based approach.

C. The online TNA tool should include some additional questionnaires to help planning tailored capacity building events - for example, it could have a section with questions related to:

- Previous trainings related to the competencies defined in the tool;

- Competencies for which the users have personal preferences and would particularly like to improve their skills;

- Preferred learning modes;

- Time availability for capacity building and other training.

D. It is important to provide the appropriate security level for the information collected through the online tool, so that users will have confidence that their identity is well protected - both for GDPR reasons and to improve opportunities for objective self-evaluations. TNAs are usually conducted using anonymous questionnaires to increase (honest) responses. Also, this is a key point if results are to be used by directors or other decision makers for group TNA analysis.

4.4.3. Recommendations and possible future uses of the online TNA tool

Based on the results from testing, the project partners believe that the LIFEedu online TNA tool, can be further developed to become useful to European and national institutions to develop capacity building plans and coherent programmes for Natura 2000 managers operating at all levels. The online tool holds significant potential to contribute to promoting a competence-based approach to capacity building in Natura 2000 management. It can also be used to improve

capacity building plans at any desired level (site, regional, national, EU) and for any desired group of professionals.

In particular, as part of the steps to ensure the replicability of the LIFEedu results and tools produced, the following recommendations relate to how the online Natura 2000 TNA tool can be further developed in future and applied to improve capacity development plans at the EU level and in individual Member States.

> The online TNA tool is a useful instrument for **competence-based self-assessment**, using a standardized list of competencies considered to be relevant for Natura 2000 managers who have middle-manager or senior manager responsibilities related to Natura 2000 site management or network coordination. The structured list of competencies identified as being relevant for various staff levels, can help individuals who are less experienced or new to their jobs to identify in the early stages of their careers what might be possible requirements in terms of competencies.

- The tool should be developed to allow greater uses in future – for example, the online Natura 2000 TNA can be extended for the use of field staff and also executive level staff; in addition, it can be used beyond individual assessments to support **group level capacity needs assessments at organizational or network level** and thus allow for the development of comprehensive capacity building plans and applied curricula. Groups of any size can be considered, from small site management teams, to staff from several sites, or from teams that have network level coordination roles, or mixed management and coordination roles: furthermore, groups can be defined at local, regional, national or EU levels.

- The online TNA tool for Natura 2000 professionals should be further developed to incorporate a TNA tool for any entities or group of entities: this can include EU level defined groups that wish to know more about the overall competence levels of their teams and to have information for meaningful capacity building plans.

Subject to further development, the tool has significant potential to be adopted at the EU level and recommended to Natura 2000 professionals across Member States. During the testing phase, for example, discussions are currently being held between Kullaberg Nature Reserve and representatives of the 21 County Administrations to explore how the tool could be adapted and used in Sweden.

It is clear that institutional arrangements and a plan to promote the tool will need to be put in place for an effective use of the tool at the EU level. Institutional arrangements would need to look into establishing what entity will do the maintenance of the database, manage the online tool, provide assistance to users and further develop it as needed. This represents an opportunity to build upon TNA processes conducted in various countries over the last 10 years but is undoubtedly a longer-term potential replicable result from LIFEedu.

4.5. Delivering the courses

4.5.1. A competence-based approach

In LIFEedu, as described above, a competence-based approach capacity building was used in the overall design of the project. Here, competence-based refers to providing learning opportunities that enable Natura 2000 site managers to develop or acquire the skills, knowledge and attitude needed to effectively perform tasks required of them by the Nature Directives.

The competence-based approach means that the work (described above) to identify and assess those competencies that are specifically required for the effective management of Natura 2000 sites and projects should be used to inform the development of specific courses and their content. This was critical to the project's objectives and its implementation. Therefore, the results of the collaborative work on competences was used to:

- ✓ Identify three clusters of competences of special value for Natura 2000 managers and professionals' training needs;

- ✓ Define three courses around each of those competence clusters to be developed by each of the three partners involved in this part of the project (Propark, FUNGOBE, and EUROPARC); and,

- ✓ Design the detailed contents of each of the three courses with reference to the specific competences involved in each case.

These project actions lay at the heart of LIFEedu. In terms of replicability, we are here emphasizing not so much the detailed procedure that was followed in the project but the general rationale that was applied in the methodological linking of the steps that went from competencies to course design and implementation (see the diagram at the start of Chapter 4).

The LIFEedu approach resulted in the following three courses, which constitute a core component of the whole project.

- ✓ Course I, Applied Conservation Biology, led by Propark and addressed mainly to Romanian Natura 2000 managers (in Romanian).

- ✓ Course II, Building Alliances for Natura 2000 Management, led by FUNGOBE and addressed mainly to Spanish Natura 2000 managers (in Spanish).

- ✓ Course III, Competent Inclusive Communication, led by EUROPARC and pan European in its scope (in English).
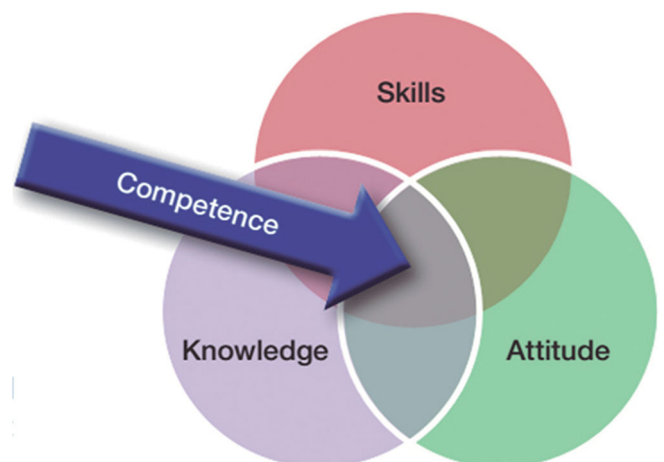
Figure 3. Competencies

4.5.2. Training methods and results

Capacity building is about building the professional capacity of people by encouraging them to engage themselves in a lifelong learning process by using diverse learning modes.

Capacity building is not only about face-to-face training or about face-to-face and on-line training!

This section of the Guidelines for Replicability focuses on those aspects of the project that hold most potential value for other innovative training programmes for Natura 2000 both now and in the future. The evaluation of the courses and other actions was an integral part of the project. To this end, a methodological approach was designed, including quantitative and qualitative tools for assessing the expectations, motivations, and opinions of the participants. Extracts from the external evaluator's independent, evidence-based report are used in the following sections (ETIFOR - www.etifor.com).

Online or face-to-face?

As a LIFE Preparatory project, a central feature of LIFEedu is its experimental and exploratory nature. In the design of the LIFEedu courses, online, face-to-face, and blended options were considered and the results show that these options should be regarded as complementary and optional rather than exclusive or incompatible. The final recommendation, as will be discussed in the last section, is that both online and face-to-face methodologies should be considered when planning for Natura 2000 training and capacity building programmes in future, and that their respective advantages and shortcomings should be evaluated in terms of budgetary and logistic limitations, target groups, number of people to be reached, and specific aspects of the contents to be delivered.

Moreover, the impact of COVID-19 restrictions (the courses were planned for 2020) made clear that flexible and mixed strategies are required to overcome unexpected factors that can occur when planning and delivering capacity building courses in a variety of settings.

Practical management and field activities absolutely benefit from face-to-face training experiences. That is why Course I (Applied Conservation Biology), which had a stronger link to field activities, was initially designed as a face-to-face course. On the other hand, Course II (Building Alliances for Natura 2000) and Course III (Competent Inclusive Communication) offered a good opportunity to try blended learning formats.

Due to COVID-19 restrictions all three courses had to be redesigned and various modifications in scheduling, organisation and teaching methods were implemented. Most of the activities that had been initially planned as face-to-face events were redesigned and transformed into online formats. Finally, it was possible to include a face-to-face seminar in Course I, whereas Courses II and III had to rely almost completely on online learning alternatives. Asynchronous interaction was complemented with synchronous sessions (see below) that afforded a more direct and "warm" contact among all participants, trainers and trainees, while respecting travel restrictions that have been imposed in many EU countries.

All three courses relied on e-learning platforms (Moodle) for asynchronous activities and general purposes such as sharing information and making (core group) announcements. In addition, video-conference and online meeting services, such as Zoom, were used for synchronous activities.

An important question when considering these different modes of learning is the degree of familiarity with (or resistance to) online learning tools and environments in our target groups. In the following sections, we will comment on the feed-back gained from all course participants as a whole. Only occasionally do we go into the more detailed analysis of differences among courses and countries.

According to the surveys conducted among the project's core participants, a reasonable degree of familiarity with online tools can be assumed, even if such familiarity is lower when learning experiences are specifically considered:

Benchmarking analysis of participants: online tools

More than half of participants (58%) had already attended an online/distance learning course.

Most of participants relied on smartphone apps and social media in both personal and professional life.

But they rarely had used webinars, e-learning platforms and demonstration videos in their professional life. In fact, there was a small yet non-negligible group of participants (12%) for whom this was their first time involved in any capacity building experience, regardless of the modality.
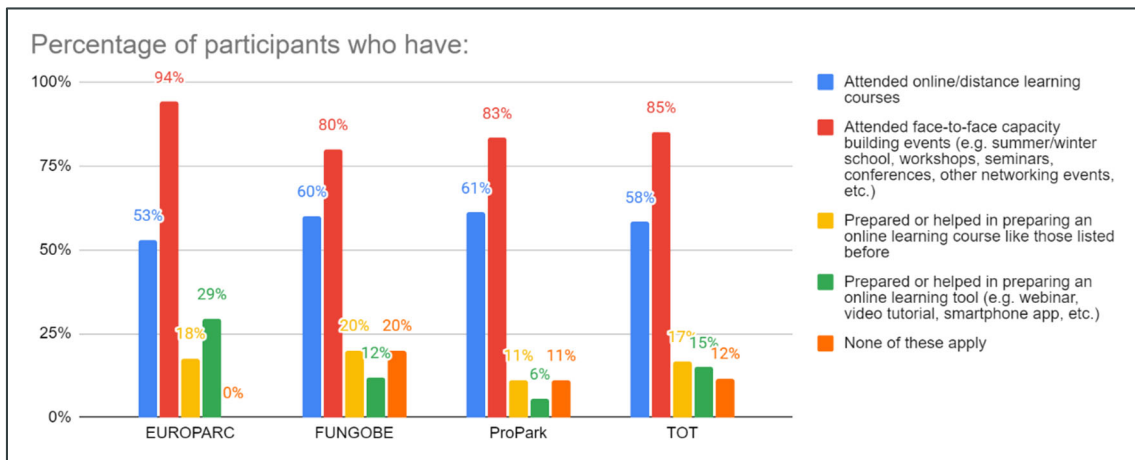
Figure 4. External evaluation results: previous training experience of the participants.

The level of familiarity with social media and online tools was further investigated. The results show that more than 50% of participants to the EUROPARC course reported being "very familiar with" the proposed categories of online tools. The same goes for FUNGOBE (Spain), with the exception of webinars (48%). Participants to the ProPark course (Romania) were generally less familiar with the tools. In addition, ProPark and FUNGOBE have a higher percentage of learners who never used webinars (17% and 24% respectively). Smartphone applications were certainly the most familiar tool among the project participants. Familiarity with social media tools gradually decreased from Facebook to LinkedIn with Twitter at the lowest level.

An intriguing aspect that would merit further consideration is that many of the participants declared that their participation in this training initiative was not being supported by their employers or their organisations, at least not entirely. Only 12% participated during working hours, while 35% followed their course in their own time: the rest did a mix of both.

Apart from occasional difficulties with Internet connections, no significant obstacles (related to online learning) were detected during the delivery of the courses.

Figure 5. External evaluation results: Previous familiarity of the participants with online tools.

Of course, as was reasonable to expect, an element of general disruption occurred during the project due to the COVID pandemic, especially given that the main delivery phase occurred co-synchronously in 2020. This situation was naturally an obstacle for the normal development of the project, and it was perceived as such by the core participants of all three courses.

Nevertheless, as already explained, adaptation to COVID limitations was fortunately possible and, at the end of the day, the perception among participants was markedly positive:

Synchronous or asynchronous?

Again, both options have obvious advantages and disadvantages and may be selected or combined according to the characteristics and goals of each particular training activity.

Face-to-face learning formats are inherently synchronous in that they require that participants meet in a common physical space. But they can be fruitfully complemented with asynchronous online activities and resources. This complementarity is, generally speaking, the main methodological choice in blended courses. Both blended and online courses may combine synchronous and asynchronous activities. Even courses geared to large audiences, such as MOOC courses, may include synchronous activities in the form of webinars that can be attended simultaneously by hundreds of participants.

The LIFEedu project made use of webinar-like formats to explore various options that could enrich the range of learning methodologies that were being tested. On the one hand, webinar meetings were organized for the core participants in each course. These online sessions could be used as a substitute for face-to-face lectures and also as practical workshops which allowed participants to present case studies, personal experiences, work together 'live' in groups etc. Together with asynchronous participation in forums and e-mail discussions, these synchronous meetings were especially useful for the participants' networking, which was an important goal throughout the project.

Networking was also a main interest for the participants themselves, on equal foot with more "traditional" learning expectations, as can be seen in the results obtained in the surveys conducted among the project's core participants:

On the other hand, open (public) webinars were also organised as an integral part of the courses. In these webinars, the project extended its reach from "core participants" to other "casual users". The organisation and implementation of these webinars benefited from EUROPARC's previous experience in its public webinar series. The Summer School was also finally organised as a programme of 'Virtual' synchronous online sessions: this further demonstrates the possibilities afforded by these formats and the unexpected role of COVID restrictions as a stimulus for improving the use of this type of educational experiences.

4.5.3. Preparing and organizing course resources and activities

As part of its implementation, LIFEedu resulted in a variety of practical advice and experience gains related to the planning and organisation of course resources and activities. As part of the legacy of the project and to ensure the project's replicability, these have been harvested and are shared in Annex 1 to this report.

Special attention was placed on the use of short videos throughout the project. Short video tutorials and lectures were identified as a valuable resource for online learning in asynchronous modalities (according to the ETIFOR Evaluation Report, demonstration videos and tutorials rank first in "ease of use" and are used frequently, at least once a month, by a consistent part of the project's core participants in their personal life, while, on the contrary, professional use of webinars, e-learning platforms and demonstration videos happens "rarely"). Technical aspects involved in the design and production of these videos were therefore relevant for achieving a positive result.
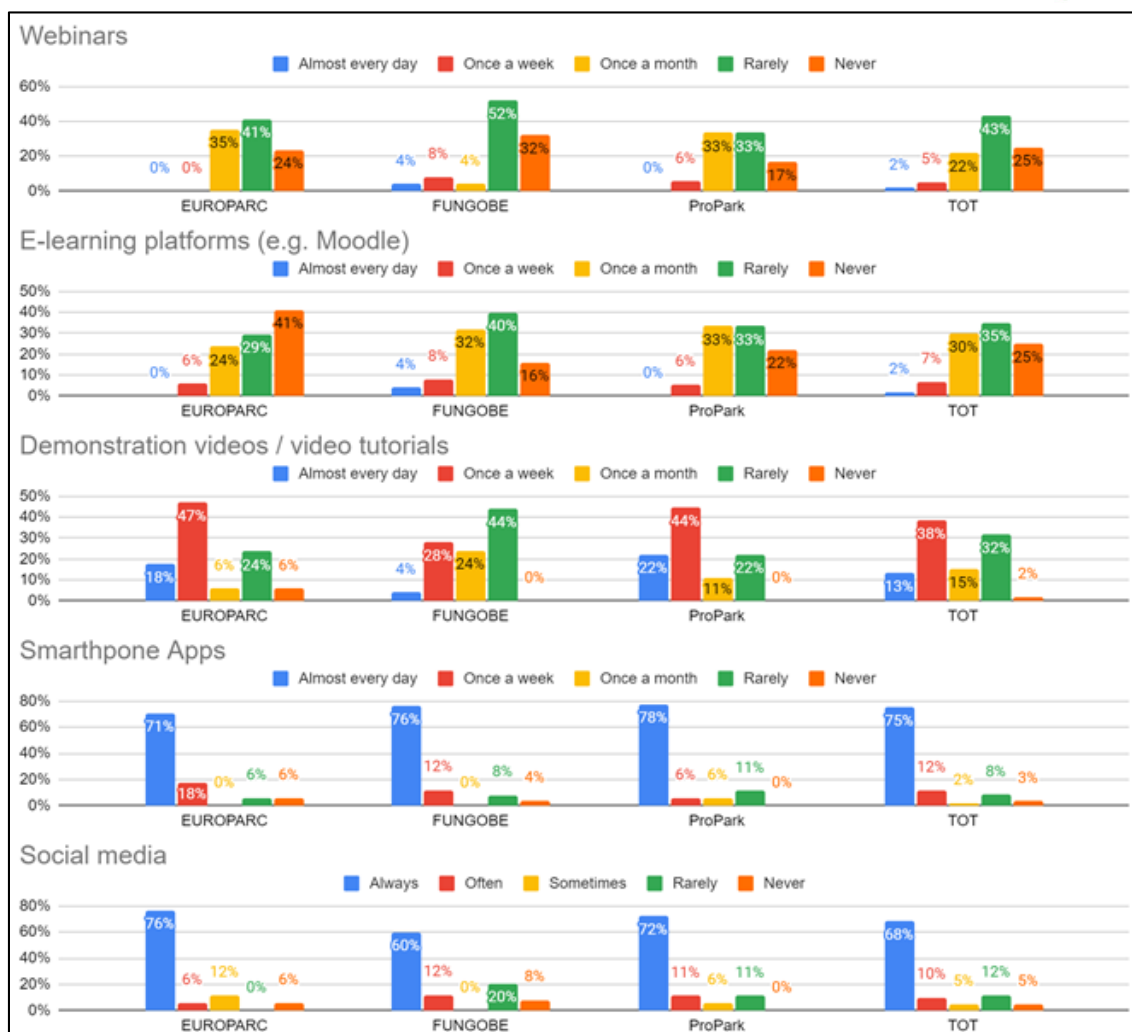
Figure 6. External evaluation results: Previous frequency of use of the online tools in participants' personal life.

As a general recommendation, the use of this resource should always be complemented with other types of resources and activities, such as discussion forums, reading materials, links to external resources, etc. Another general recommendation is to keep these educational videos short, no longer than 10 or 15 minutes. If a longer duration is needed for a particular subject the video can be split in two or more consecutive parts which can also be viewed as 'independent' videos.

The technical requirements for the production of these audio-visual resources are not forbiddingly complex, yet a certain amount of technical preparation prior to the shooting of the video is highly advisable. In this regard, the use of chroma or "green-screen" sets for recording the videos may prove very helpful. Specific advice on this aspect, based upon the project's experience, is provided in Annex 2.

Of course, involvement in the project's courses meant that core participants used more frequently and efficiently various online resources and tools. The evaluation methodology included a second survey carried out six months after completion of the courses, and the results confirmed the impact of the project on this regard. The online courses (together with the different learning modalities and tools proposed within the project), increased the frequency of use of many online tools: webinars and e-learning platforms are now used at least once a month for about three quarters of participants, while demonstration videos and tutorials are the category with the highest increase (20% of participants use them almost every day, 50% at least once a week).
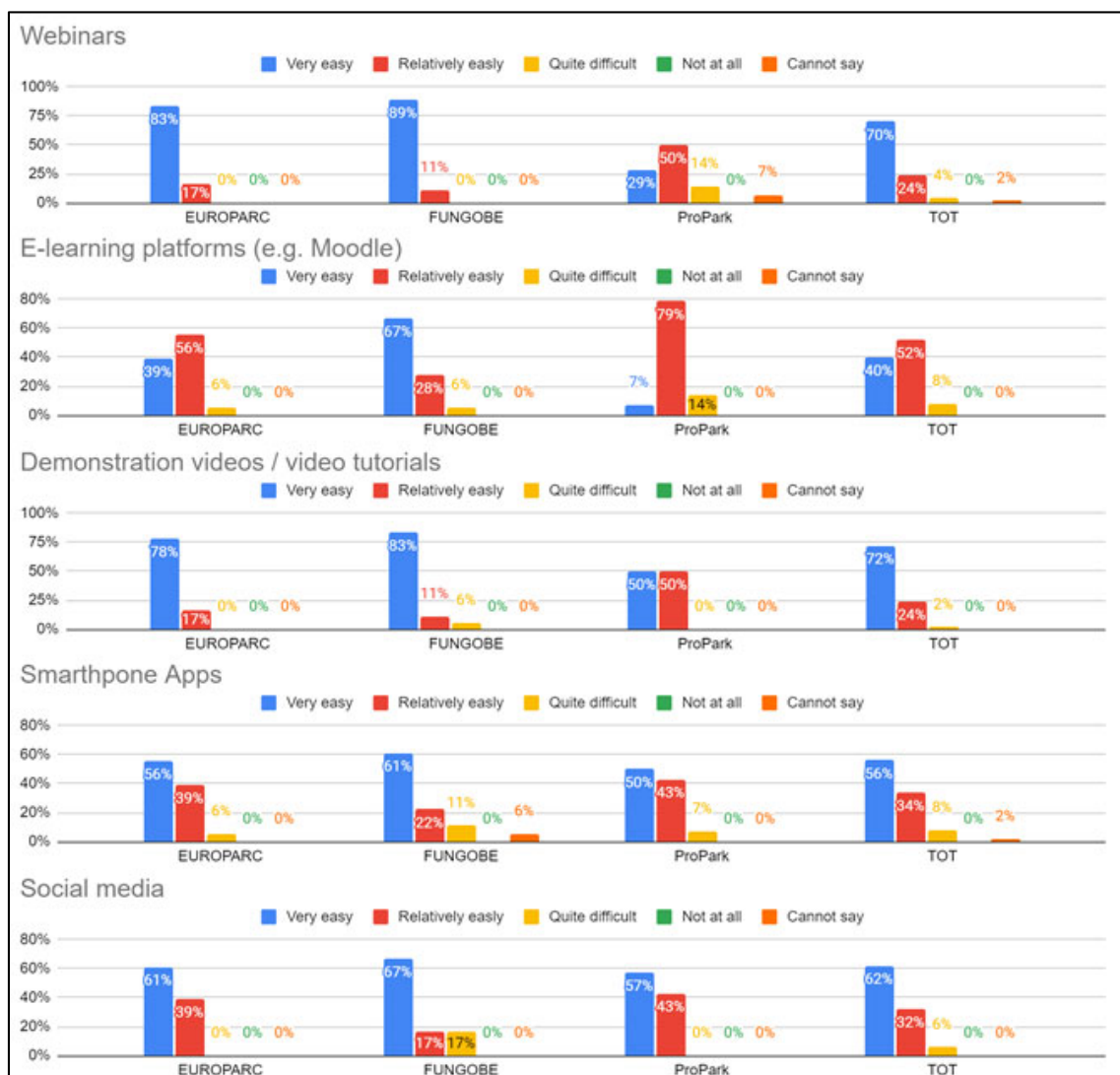
Figure 7. External evaluation results: Ease of use of the online tools after the courses.

As shown in the previous charts (that show detailed data on the participants' self-assessment of "ease of use of the online tools"), the ease of use with the different categories of online tools also grew after 6 months from the end of the courses. Participants considering webinars as a "very easy" learning method jumped from 38% to 70%, and the combination of the selected "easy" options accounts for 94%. The same goes for e-learning platforms: 40% of respondents selected the "very easy" option, against 28% at the start of the courses.

4.6. Broadening the circle

Within LIFEedu, the implementation and delivery of the courses followed the rationale to pilot actions with a limited number of participants: this was designed so that participants could be closely followed and evaluated, with other complementary actions delivered to address broader audiences. From the beginning of the project, one of the main goals was to make its methods and results available to all interested in Natura 2000 effective management.

To this end, a large number of networking actions, both formal and informal, have been completed throughout the project in local, national and international forums – for example, LIFEedu has been presented and represented at four Natura 2000 Biogeographical Seminars and also, at the invitation of the event organisers, the global Capacity Building for Conservation practitioners conference in London, UK in August 2019. This latter event triggered an invitation to produce a scientific paper for a special edition of Oryx.

Throughout the project, special attention was also given to the production of a consistent set of reporting deliverables, which guarantee that detailed and coherent information on all actions and results is available for future reference.

In addition, two specific actions were implemented to explore various means of broadening the circle of officers, managers, professionals, stakeholders, and landowners potentially involved in the project: by means of the new eNatura2000 Smartphone App and the Summer School hosted by the University of Padova.

4.6.1. Smartphone App

The project's new 'eNatura2000' App was conceived as one of the high potential learning and networking tools to be designed and delivered during the project. The App was launched in September 2020 and promoted across Europe.

Combining data from Apple's App Store and Google Play (Android), there are currently in the App (June 2021) **1.023 active users**, in addition to the **62 beta testers** who tried the App. Considering both services (Apple and Google Play), most users are located in Spain, Italy, Belgium, UK, Romania and Germany.

The App was also used to conduct a mini-evaluation of this new tool. The results generated reveal that half of respondents were young (18-35 years old), as expected for this type of tool.

Even if the App is in its initial phase, the synergy among the diverse project's components has been demonstrated, as most of the respondents about the App come from Romania and Spain (this means that the use of the App has spread mainly in the pilot project areas, linked to the ProPark and FUNGOBE courses, in Romania and Spain respectively).

4.6.2. Summer school

The summer school 'Natura 2000 management in practice' lead by the University of Padova's project partner TESAF was conceived as an opportunity to enlarge the project audience. The school was designed to address several technical management issues in more depth. For reasons that could not be anticipated when the project was designed, the summer school was finally also an opportunity to test and expand some of the learning methodologies that have been developed in earlier phases of the project.

Due to the pandemic, the LIFEedu 'Virtual Summer School' programme used new materials, such as virtual field trips (demonstration videos) about the application of specific management approaches (e.g. for setting conservation objectives or reference values) and case studies. This created the opportunity to test how typically face-to-face taught topics can be presented online in a digital setting, again by means of a dedicated Moodle.

5. Partners' knowledge gains

As part of the project's reflection and evaluation processes, in May 2021, a summative impact assessment was undertaken by the partners by using an adapted version of the Impact+ methodology, developed by the ERASMUS+ programme[4]. (This tool was also used during the 2nd Technical Meeting in Castelfranco in November 2018 to produce the LIFEedu Key Project Indicators (KPIs)). Partner organisations with coordination roles within the project (EUROPARC / FUNGOBE / ELO / TESAF/ PROPARK) were asked to answer the following questions by using the Impact+ tool:

- ✓ Step 1 – What impact did you hope to achieve through participation in LIFEedu?

- ✓ Step 2 – What has changed as a result of LIFEedu? To what extent have the expected impacts been achieved for *partner organisations, learners and systemic actors (i.e. the sector, subject area of the project, peer or beneficiary networks, policy or legislative change)*

- ✓ Step 3 – What work well? What could have been improved? Which changes do you think can be replicated?

The consolidated (project) results of this exercise are presented in following sections. Individual organisation's results can be found in Annex 3.

5.1.   What impact did you hope to achieve through participation in LIFEedu?

All partners identified the **main impacts** of the project as being:

- To have identified the competencies needed for the management of Natura 2000 sites and to provide a very practical training needs assessment tool for Natura 2000 managers.

- To have demonstrated the need for and value of competence-based learning opportunities for Natura 2000 professionals through innovative learning methods and formats

- To have developed and tested new tools for online learning that would improve and increase capacity building opportunities

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[4] A full description of the Impact+ methodology could be found in:
https://www.erasmusplus.org.uk/impact-and-evaluation

Other important impacts cited by the partners are:

- To have created momentum for and demonstrated the value of a larger scale follow-up project.

- The link between academy and professionals has been strengthened

- Partners networks have been extended (within partners and with participants in the different activities)

- Increased knowledge regarding Natura 2000 and its challenges among all stakeholders (partners, participants, landowners, etc.)

5.2.   What has changed as a result of LIFEedu?

5.2.1.   As a project partner:

As a project partner:	High impact	Medium-high impact	Medium-Low impact
The partners consider that the project has	- Provided operational new insights and knowledge of online platforms, innovative digital tools and learning methods – e.g. Moodle, Chroma videos, smartphone app etc. - Highlighted that competence-based approaches are critical for designing better (tailor-made) and effective capacity building training that meet measurable needs (TNAs) - Provided in-depth knowledge of and practical experience with managing a LIFE project. - Expanded networking and professional development. Partners	- Identified the competencies needed for the management of Natura 2000 sites and to provide a practical training needs assessment tool for Natura 2000 managers. - With further development and investment, LIFEedu's capacity building courses and tools can be adapted and replicated – for example, for organisations, area teams and groups of managers working in specific specialisms. - Demonstrated that future capacity building projects can be catalysts for networking and collaboration between other organisations,	- Prioritised working with landowners but that the training needs and capacity building expectations of private landowners remain poorly defined – as such, they remain difficult to meet. - Within the period of the project, the assessment process enables us to measure how learning (e.g. practical skills and knowledge) have been applied by participants but not what the impacts of their learning will be in the long-term. Ways to consolidate and formally accredit practical competence-based learning merit further investigation – this is a complex area and one that requires long-term thinking and more extensive consultations.

As a project partner:	High impact	Medium-high impact	Medium-Low impact
	benefited from the knowledge and experiences of the colleagues from the other countries and EUROPARC.	projects and partners with common goals.	
Particular changes /impacts/outcomes experienced by the partners include that:	- Ability to adapt to changing conditions is critical - Organisation of events - They are more up-to-date about Natura 2000 management issues in the context of EU policy priorities	- Online tools are not only aimed at millennials – they could and should be used with senior managers/ those with many years of experience. - New opportunities for involvement of private landowners are required – however, private landowners must be open to that involvement. - LIFEedu's first digital app has been used to communicate information about Natura 2000, Biodiversity, and events to people all across Europe - A short video about Natura 2000 was made by biologists to encourage young Romanian people to think about nature related occupations; the video is also (currently) being translated so that it can be made available to young people across Europe.	- There have been increased knowledge gains regarding Natura 2000 and its challenges among all stakeholders (partners, participants, landowners, etc.) - Enrolment of new participants in FUNGOBE activities

5.2.2. For learners

For learners	High impact	Medium-high impact	Medium-Low impact
Most partners report that the project has	- Increased awareness and practical experience of working with innovative tools and online learning methods. - Provided participants with deeper appreciation of the relevance of competencies and how they are applied within their work. - Expanded networking and professional development interests. New contacts established among participants will extend long beyond LIFEedu. - Increased motivation and interest to participate in new (continuous) capacity building activities and projects. - Increased new and improved skills and competencies related to different aspects of Natura 2000 management.	- Produced a working list of competencies specifically required for the management of Natura 2000 managers – this is applicable across the EU - Developed an online individual TNA tool for Natura 2000 managers across Europe - Increased awareness of the importance and direct relevance of individual (competence-based) training needs - Provided multiple opportunities to apply learning in their own organisation or Natura 2000 site, although limiting factors included time, available resources, degree of commitment from line mangers etc.	- Engaged private land owners in the project's actions.
Particular changes /impacts/outcomes cited by the partners:			- Uptake and use of the new smartphone app.

5.2.3. For external organisations / project observers

According to the partners' experience, a main conclusion of the whole project, as noted in the final chapter of this document, is that it has evidenced the opportunity to and merits of developing dedicated capacity building programmes tailored for Natura 2000 managers and designed to support the achievement of EU priorities for nature – as a direct outcome of LIFEedu, the value of creating continuous professional development programmes directly linked to EU priorities for nature can evidenced. More specific aspects of this general conclusion are as follows:

For external organisations / project observers	High impact	Medium-high impact	Medium-Low impact
Most partners consider that the project has	- Demonstrated the value of online learning as a means to reach greater numbers of participants than through (solely) face-to-face capacity building events – the potential and possibilities of blended learning as a complementary and alternative approach to capacity building are now visible. Online learning is easily replicable and 'up-scalable' – once created, online tools (e.g. learning platforms and app) hold significant potential to enlarge the audience of Natura 2000 managers and related projects. - Expanded networking at European and global levels (e.g. LIFEedu + LIFE INTEMARES + LIFE GOPROFOR + MedPAN etc., as well as the project being invited to be presented in 2 EC Biogeographical Seminars (3rd Atlantic June 2019 & 3rd Mediterranean May 2021) and also the 2019	- Produced a list of competencies for the management of Natura 2000 managers, applicable across the EU - Developed an online individual TNA tool, available in English for Natura 2000 managers across Europe - Contributed increased recognition of the importance of competence-based training that is tailored for Natura 2000 managers' specific needs – e.g. scientific paper developed by TESAF. - Demonstrated an economic case for capacity building training can increasingly be made – for relatively small investments of time and money, new and improved skills can be developed which improve 'on-the-job' effectiveness and efficiency.	

For external organisations / project observers	High impact	Medium-high impact	Medium-Low impact
	global capacity building conference in London.		
Particular changes /impacts/outcomes cited by the partners include that:	- There is increased Institutional recognition of the importance of improving Natura 2000 training - Policymakers, involved in some of the stages and actions of the project, have been able to learn more about Natura2000 and eNatura2000 - in the long term, the project has contributed to the general and shared goal of implementing an effective Pan European dimension and scope for Natura 2000 professionals beyond national borders	- The new eNatura2000 App is a far-reaching tool to enlarge the audience of Natura 2000 projects. - Through networking, partners on other projects (H2020, Interreg, Marie Curie, Erasmus+ etc.) have had the opportunity to learn more about Natura2000 and eNatura2000 - Natura 2000 experts have been identified and mobilised through the project – for example, for the (Virtual Summer School), the individual courses and the (Action A1) identification of competencies.	

5.3.   What work well?   What could have been improved? Which changes do you think can be replicated?

5.3.1. What work well?

✓ Project's coordination and partner's cooperation.

✓ The adaptability, flexibility and problem-solving creativity of project partners in responding to COVID-19 situation.

✓ The inclusive approach to recruitment of project participants for the core groups, represented in terms of diversity of professional backgrounds and experience levels, national and regional locations, types of organisations (public and private, GO and NGO), gender and age.

✓ The participatory development of the list of Natura 2000 competences with the project partners.

✓ Flexible design and delivery of the courses to meet the needs of the three core groups (but see some cautionary remarks below).

✓ Participants' active involvement and personal commitment whilst dealing with COVID changes in their professional and personal lives.

✓ Development of the first App on Natura 2000 with all the planned parts and favourable reviews.

5.3.2. What could have been improved?

✓ Whilst supporting flexibility according to individual course parameters and objectives, greater consistency of approach across the three courses could have been realised. To explain:

  o Three different courses were developed to meet the needs and expectations of the respective core groups of participants.

  o Although each course was broadly consistent in terms of delivery time and period, dealing with the sudden realities of COVID meant that an element of coordination was (justifiably) lost.

  o Whilst the adaptability and flexibility achieved were necessary and positive elements of LIFEedu, at the same time the differences between the three courses demonstrate the challenges of meeting national and regional capacity building needs within a European framework.

  o This is not insurmountable but should be specifically addressed in future capacity building programmes – for example, cross-referencing between courses should be integral and would help to improve consistency; establishing a shared 'project ethos' at an early stage of a future project would ensure that a 'common language' can be applied throughout all project learning experiences.

✓ As LIFEedu has demonstrated, there are common needs and competence-based learning opportunities. However, it is essential to ensure that capacity building training programmes can be applied according to local circumstances and within prevailing cultures - LIFEedu achieved this but it will be pre-requisite in future capacity building projects. Also, testing how learning is applied to agreed standards whilst being adapted according to individual (site-level, organisational or personal needs) will be a core feature of the assessment processes in future projects.

✓ The importance of and need for better sequencing of project actions in phases – planning, development, delivery and evaluation – were recognised only after the project had started. Although this was quickly resolved and had no effect on meeting the overall project objectives, it did require re-planning and re-scheduling especially in terms of originally planned deliverables. That said, a stronger and more cohesive project has been implemented.

✓ Exchange and interactions among participants of different countries and courses were not foreseen in the original project proposal – had COVID allowed, that would have been a valuable and worthwhile activity within LIFEedu.

✓ Regarding the App:

- With more time, better integration of App and courses (temporal fitting of project's actions) could have been achieved – however, within the period of the project, the courses and the app developed in tandem.

- To keep within available resources, the app was not able to include ArcGIS or tablet support. While tablets are only 5 percent of users, the ArcGIS would have provided some interesting options

- COVID also caused some significant issues. For example, our beta testing and largest promotional 'pushes' for the app were not realised – for example, at Forum For Agriculture 2020 and in 2021, as well as dissemination events across Europe and Brussels. However, due to the virtual nature of events, it became much more difficult to disseminate and share the app.

✓ Regarding the TNA:

- The TNA should be translated into the languages of the EU states – this though would have been a significant cost and was clearly not possible within the resources available for LIFEedu

- In retrospect, it seems that it would have been useful to allocate more resources than initially anticipated for the online platform with the individual TNA – for example, continuous monitoring during the testing phase would have helped to improve the tool by providing more assistance to individuals testing it.

Other improvements pointed out by some of the partners include that:

✓ Moodle has been used as the learning platform in all three courses – whilst each partner leading a course has gained experience of working with Moodle, in terms of EUROPARC's experience, as a learning platform it does have limitations – for example, standard data reports, limits in terms of structure which make users' experience of working with content not particularly intuitive (e.g. cumbersome to navigate etc.)

✓ The online Moodle could contain more videos and less descriptive texts

✓ The timescales involved in producing a scientific paper for publication means it is impossible to predict the editorial outcome – it is still not know if the scientific paper produced for Oryx in late 2019 will be included in the final edition.

✓ Many experts in Natura 2000 do not speak English and are difficult to involve in this type of project.

5.3.3. Which changes do you think can be replicated?

Change	Term	Evidence
With minor adaptations, courses are fit to be replicated, expanded and scaled-up to meet larger numbers of participants.	Courses – replicable in the short-term Up-scaling – replicable in the medium-term subject to a new 'fit for purpose' platform being developed.	High level of satisfaction and involvement among course participants. High demand to be involved in LIFEedu – places available were over-subscribed 3:1
Competence based approach for design of learning projects	Competence-based approach replicable in short term for individuals. Competence-based approach for teams or organisations replicable in the medium term – this would benefit from some piloting the approach with several organisations and area-based teams.	Three courses designed and developed LIFEedu A1 technical report assessing the competencies required by Natura 2000 managers continues to be highly relevant (see also comment below)
Partners' collaboration in new European projects complemented by more new partners in diverse sectors, including the mobilisation of experts to become key actors in advising the further development of course contents.	Short /Medium	LIFE ENABLE
As part of the post-project LIFEedu legacy, continue to promote LIFEedu's achievements in winning greater recognition of the need for competence-based capacity building programmes and courses that cover core functions **specifically required** by nature managers – e.g. communication and collaboration, stakeholder engagement and inclusive governance, biodiversity	Short/ medium / long term – this is an area of continuous development need, demand and interest, particularly to support practical management effectiveness and ensure progress towards the EU 2030 Biodiversity Strategy and Restoration Plans	The A1 technical report form LIFEedu – the methodology and analysis applied is highly relevant for future capacity building programmes

Change	Term	Evidence
conservation and management planning including monitoring etc.		
Increasing the online component of learning programmes while maintaining face-to face activities when the main goal is gaining practical experience	Short/Medium	Acceptance of the change from face-to-face to online among summer school participants. The valued flexibilities that online learning provides for individuals – this includes, little or no cost and time for travel is avoided. Also, the need for bureaucratic internal approval processes for training is avoided (in most cases).
Involvement of external experts in capacity building programmes and learning from their experience and teaching	Short/Medium	Discussions with trainers and external consultants involved in the project
Developing list of competencies required in the management of Natura 2000 sites and other types of protected areas	Medium	The study "Management effectiveness in the EU's Natura 2000 network of protected areas" shows that there is "inadequate investment in the capacity of management authorities and in practical site management". For an efficient investment knowing the needed competencies and the training needs is crucial.
Short videos to raise awareness and promote Natura 2000 related professions	Medium	In Central - Eastern Europe professions / occupations related to nature conservation are new. It is very important to increase

Change	Term	Evidence
		awareness and to promote these new occupations.
Use courses to create a 'Train the Trainers' intake	Medium / longer term (2024)	LIFE ENABLE
Develop technical courses for managers of specific habitat types – this is a logical extension of LIFEedu where competence-based courses can be integrated and applied through technical management courses.	Medium / longer term (2024)	LIFE ENABLE
Promote the use of the online TNA tool across the Natura 2000 network	Long	The study "Management effectiveness in the EU's Natura 2000 network of protected areas" shows that there is "inadequate investment in the capacity of management authorities and in practical site management". For an efficient investment knowing the needed competencies and the training needs is crucial.

6. Conclusions and recommendations

The over-riding, main conclusion of the whole project is that it has evidenced the need to and opportunity and merits of developing dedicated capacity building programmes tailored for Natura 2000 managers. These programmes need to be designed to support the achievement of EU priorities for nature. As a direct outcome of LIFEedu, the value of creating continuous professional development programmes for nature managers, directly linked to EU priorities and which actually meet learning needs, is beyond question.

Here we present a more detailed account of the main learning gains achieved as a result of the project (6.1) and recommendations for future actions (6.2): specifically, we provide guidelines for the continuation of the project goals and more ambitious capacity building programmes through new initiatives that can be implemented in future on a Pan-European scale (6.3).

6.1. Learning gains from the project

The project's overall goal was to **improve capacity building programmes in the context of Natura 2000.** To achieve this, the following points are highlighted:

- LIFEedu started from the assumption that capacity building programmes of any organisation, in order to be really effective, should start from an assessment of competencies and learn about their **priorities** with regards to their capacity development needs.

- From the outset, the project recognised the fundamental diversity of types of Natura 2000 site managers: specifically, we purposefully included Natura 2000 site managers that do not necessarily belong to or work for organisations with Natura 2000 management responsibilities, namely private **landowners** of Natura 2000 sites. Including landowners in the scope of the project was a strategic option that should be assessed, with pros and cons, in similar projects.

- A key concept for the whole design of the project was that of competence. The **competence-based approach to capacity building** refers to providing learning opportunities that enable Natura 2000 site managers to develop or acquire the skills, knowledge and attitudes needed to effectively perform tasks required of them for effective (stronger and improved) practical implementation of the Nature Directives.

- The springboard for the project's actions involved undertaking a comprehensive analysis of the Nature Directives and an **assessment of the specific competencies required by Natura 2000 managers**. This yielded identification of a set of core or common functions expected of and professional competencies required by Natura 2000 managers. The results of this work will have relevance for all future capacity building projects designed for Natura 2000 managers and indeed managers of a wide range of protected areas.

- The development and testing of an online Natura 2000 **Training Needs Analysis tool** (the TNA) is an important product of the project. By using the TNA, all individuals that have Natura 2000 management responsibilities can self-assess their training needs and use the results to plan better their future professional development actions.

- The project designed and delivered three innovative **capacity building courses and training modules**. In doing so, a broad range of formats and methodological options are available, and singling out one particular formula or "recipe" would be a mistake, from both a conceptual and a methodological point of view. Capacity building is about building the professional capacity of people by encouraging them to engage themselves in a lifelong learning process by using **diverse learning modes**. Capacity building is not only about face-to-face training or about face-to-face and on-line training, though these are the more common options, and both of them have been tested in our project.

- **Both online and face-to-face methodologies** should be considered when planning for Natura 2000 training and capacity building programmes: their respective advantages and shortcomings should be evaluated in terms of budgetary and logistical limitations, target groups, numbers of people to be reached, and specific aspects of the contents to be delivered.

- An important question when considering all these different modes of learning is that of the previous **familiarity with (or resistance to)** online learning tools and environments in our target groups. While implementing the project, an increasing appreciation of the opportunities afforded by online learning has been achieved, especially among the younger participants. Therefore, as younger conservation professionals emerge, this trend can reasonably be expected to grow.

- With regard to **synchronous and asynchronous** online learning, both options again have advantages and disadvantages and may be selected or combined according to the characteristics and goals of each particular training action. In addition, mixed solutions can be envisaged, for example by recording synchronous learning events, such as webinars and Zoom meetings, which can be later consulted by those in need to maintain their studies in their own time,

- **Short video tutorials and lectures** were identified as a most valuable resource for online learning in asynchronous modalities. Technical aspects involved in the design and production of these videos are therefore relevant for achieving an overall satisfactory and quality result. Specific comments on this aspect are provided in the next section and in the annexes.

- According to the questionnaires distributed among participants, a generally positive perception of online learning was observed following the involvement of Natura 2000 professionals in the project. The opportunity to mobilise external experts is highly valuable and all LIFEedu partners are well-placed to secure their inputs and involvement.

- Under certain circumstances, online can be a valid alternative even to replace events initially designed as face-to-face. What is more, experience gained throughout LIFedu confirms that transforming face-to-face events into partially blended events helps in achieving a wider audience among Natura 2000 professionals.

6.2. Recommendations

The section provides general recommendations, whilst specific recommendations concerning the replication and amplification of the project in further Pan-European capacity building programmes are provided in the following section (6.3).

- A **'Natura 2000 Competence Register'** should be developed to function as a guiding document which can be tailored to the specific capacity building needs of all Natura 2000 site managers across a wide range of countries, natural regions, and Natura 2000 management contexts.

- Based on the LIFEedu experience and participants' feedback, conducting regular and routine **assessments of training and capacity** needs at all levels are strongly recommended: this will provide sound, evidence-based building blocks to address real needs of capacity development across the Natura 2000 network.

- The **online Natura 2000 TNA tool** is a potentially useful resource for all involved in Natura 2000. Users can self-assess their training needs and use the results to plan better their future professional development actions. A detailed description of the TNA is provided in section 4.1 of this document, together with specific advice for its replication and some suggestions for further improvement.

- As noted in the previous section, **short video tutorials and lectures** were identified as a most valuable resource for online learning in asynchronous modalities. A general recommendation is to keep educational videos short, no longer than 10 or 15 minutes. If a longer duration is needed for a particular subject the video can be split in two or more consecutive parts that should be treated as independent videos.

- The use of videos should be always complemented with other types of resources and activities, such as discussion forums, reading materials, links to external resources, etc. Of course, there is no need to use all possible kinds of resources in any particular course, but **a variety of complementary resources** is generally advisable.

7. Scaling up towards a Pan-European Natura 2000 capacity building programme

As a LIFE Preparatory project, LIFE e-Natura2000.edu was designed as an exploration of diverse innovative approaches to improve capacity building: this included through developing and applying various learning methods and strategies tailored for Natura 2000 managers in both public and private land. As a pilot project, LIFEedu's main goal was to provide inspiration, together with practical information and advice, for broader capacity building initiatives in future: these include, new initiatives and more ambitious capacity building programmes that could be implemented on a Pan-European scale and on a continuous basis.

An important feature of the partners' efforts throughout the project has involved analysis and discussion of the conditions that would facilitate the development of this type of up-scaled and more ambitious project. From these reflections some recommendations are put forward in the following paragraphs, especially taking into new targets and recent developments in policy and regulatory frameworks.

7.1. Improving the policy and regulatory framework

A series of measures are recommended to enable the development of a wider, more coherent policy and regulatory framework for capacity building to underpin the effectiveness of Natura 2000 network:

- The integration of a competence-based approach to capacity building for application across the EU, by actors involved.

- Direct incentives to encourage competence-based approaches for capacity building across relevant project streams, with targeted and dedicated funding.

- Promote the integration of the competence-based approach and guidelines generated by LIFEedu for use within other project applications focusing on capacity building for nature conservation managers.

- Develop a 'Natura 2000 Competence Register' – a guiding document tailored to the specific capacity building needs of all Natura 2000 site managers across a wider range of Natura 2000 management contexts.

- Conduct regular and routine assessments of training and capacity needs at all levels to provide sound, evidence-based foundations to address genuine capacity development needs across the Natura 2000 network.

- Develop national level, comprehensive approaches and strategic plans for Natura 2000 management to promote greater efficiencies, increase consistency of management practices and enable effective use of resources allocated to capacity building.

- Based on the results of Action 1 of the project ("Identification and assessment of competencies for management of Natura 2000"), concrete steps should be taken at European and national levels so that professional capacity building can be tailored to the specific context of each country: this would help to contribute to increased recognition of the benefits and gains to be realised from cohesive, evidence-based approaches to capacity building; also, it would endorse the professionalisation of Natura 2000 management based on the development of capacity building programmes that respond to specific competence-based assessments of training needs.

- The approach taken and the results deriving from LIFEedu could be integrated into specific University modules and other academic programmes in future as a means to contribute to the training of future Natura 2000 managers in various academic and professional contexts.

7.2.   Moving towards a European capacity building initiative for Natura 2000

LIFEedu's results can be fruitfully put to work in future training projects and capacity building programmes conceived on a Pan-European scale: an ambitious European training system for Natura 2000 can be envisioned as a logical development and extension of LIFEedu's tested experiences.

A European capacity building initiative for Natura 2000 would:

- Develop, test and implement innovative and accessible training activities that will support the delivery of EU policy by improving the effective management of the Natura 2000 network.

- Establish a European training hub to deliver widely accessible and tailor-made learning experiences for Natura 2000 managers.

- Boost individual, organisational and national capacities for Natura 2000 management by providing learning opportunities for individuals to train as trainers, mentors or facilitators of the project's learning experiences: achieve this by utilising the best advice and recommendations provided by the project's collaborative platforms, which bridge academia and site management experience.

Working across individual, organisational and national levels, such an approach would also be able to provide the basis for the development of a network of European training sites, supported by a network of trained trainers.

To achieve these goals is important to develop a "critical mass" of trainers who can deliver and promote available courses and curricula to significant numbers of managers. With the courses fully evaluated, trainee trainers could be selected from a broad representation of Member States to continue to cascade and disseminate the training for other managers.

Subject to the necessary resources and high-level commitments, a combination of replicable standard courses and tailor-made learning activities (making use of the full range of face-to-face, blended, and online possibilities) is entirely possible. In combination with continuous evaluation and innovation of the various components of the training system, both at European and national levels, a future European capacity building initiative for Natura 2000 managers can be envisaged: this would aim to deliver a pragmatic balance between an ambitious large-scale training system and the quality and "freshness" of each course, workshop, or learning activity. To underpin the investments made, from sponsors, content creators and deliverers and students alike, there needs to be a commitment to revision and updating of content and learning approaches that can establish continuous professional development programmes purpose-built for Europe's nature and its managers.

Annexes

The LIFEedu project partners found it important that the Replicability Guidelines should serve a practical purpose. Therefore, on a practical note, the annexes provide several methodological tips and 'how-to-do' advice: these are based upon working documents and meeting results exchanged among the projects' partners.

Annex 1. How to build a short course?

Based on the experience of the project partners

1. Design

1.1.   General design

- ✓ Designate a director / coordinator
- ✓ Decide the basic programme structure
    - o Number of periods (months, weeks…)/themes
    - o Competences
    - o General contents
- ✓ Decide who is going to develop the programme (the coordinator, the teachers…)
- ✓ Identify and contact the teachers
- ✓ Identify a Moodle/online platform administrator (if needed)

1.2.   Delivery methods

Three options

- ✓ Face to face
    - o Identify the contents and teachers
    - o Select/rent a venue
    - o Length: 3 days – 1 week
- ✓ Online
    - o Choose a platform: Blackboard, Moodle…
    - o Hire a company / provider or install it in your server
    - o Length: 3-5 weeks
    - o Autonomous learning (as in MOOC courses) / or guided by teachers (dinamization, resolution of doubts, etc.)
- ✓ Blended
    - o 3-5 online weeks (theory + practical assignments)
    - o 3 F2F days (mainly practical workshops)
    - o 1 final assignment (online)

1.3. Delivery activities

Online phase

- ✓ Identify and develop the activities for each online period, the more variety, the best:

- ✓ Decide if they are going to be synchronic or not
- ✓ Presentation of the activities of the period (message in the forum, text, video…)
- ✓ Theory:
  - o Videos (Camtasia, chroma, films…)
  - o Reading material (1 or 2 max)
  - o Presentations
- ✓ Participation in: discussion forums/chats/videoconferences/webinars, etc.
- ✓ Collaboratory activities (ex. Wiki)
- ✓ Practical work. Ex. Elaboration of a press release
- ✓ Additional materials: links, videos, news, etc.
- ✓ Assessment methods (each period)
  - o Tasks, Tests, Wiki, etc.
  - o Decide if they are going to be evaluated by the teachers and the scale: pass/fail, grade, feedback, etc.
  - o Final assignment
  - o Ex. Design of a communication action with a proposed methodology. Evaluated by the teachers with feedback.

Face- to-face phase

- ✓ Practical workshops (related to the online contents)
- ✓ Group dynamics
- ✓ Plenary discussions
- ✓ Field trip

1.4. Evaluation (both learning and teaching)

Decide the criteria (one or several criteria), for example:

- ✓ Developing an evaluation system
- ✓ Identify main aspects that can be assessed
- ✓ Ante and post assessments should be included
- ✓ 75%-80% weekly tasks delivered and passed
- ✓ Participation in at least 1 discussion
- ✓ F2F attendance
- ✓ Final assignment

2. Registration

- ✓ Promotion: brochures, e-mails, adds in specialised magazines, social media, etc.
- ✓ Application form (google docs)
- ✓ Selection, confirmation and payment

3. Execution

3.1. Just before

- ✓ Upload users to the course: students / teachers
- ✓ Send a "welcome e-mail" to the students with user/password and general instructions
- ✓ Ask the participants for a general presentation in a forum

3.2. Each online period (week, month…)

- ✓ "Open" the resources
- ✓ Dynamize:
  - o Email at the beginning with general instructions for the period
  - o Forum: initial question / summary
  - o Resolution of doubts
- ✓ Evaluation of the assignments
- ✓ Make / send certificates

3.3. Face to face phase

- ✓ Coordination and delivery of contents

4. Evaluation

- ✓ Survey software (Survey Monkey, Google forms…)
- ✓ Post course: satisfaction with general organization, contents, teachers, F2F, general comments)

Annex 2. How to use the green screen?

Throughout the project, the use of short educational videos has been a relevant resource in different training activities. The practical difficulties (or easiness) in the conception, production and reception of these videos emerged thus as an important issue in achieving the project's goals.

Frequently we resorted to the use of chroma ("green screen") sets for the recording of these videos. This relatively simple technical resource proved very useful, but at the same time little practical aspects could be frustrating if not properly handled.

In this annex we are sharing practical advice and commentaries exchanged among project's participants in a workshop hosted by Fernando Pinillos and his colleagues of the EUROPARC team. The workshop took place on 17 June 2020, and is available at:
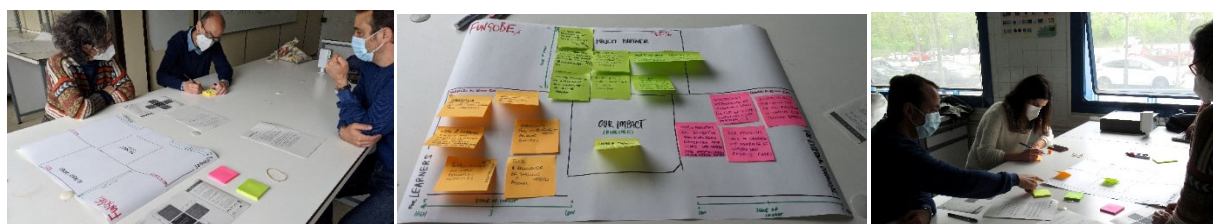
https://www.youtube.com/watch?v=wY3jLeq9aX0

Annex 3. Impact+ exercises

IMPACT exercise results - EUROPARC
May 26th 2021

Step 1 – What impact did you hope to achieve through participation in LIFEedu?

Our expected impacts:
- *To have demonstrated the need for and value of competence-based learning opportunities for Natura 2000 professionals through innovative learning methods and formats*
- *To have developed and tested new tools for online learning that would improve and increase capacity building opportunities*
- *To have created momentum for and demonstrated the value of a larger scale follow-up project.*

Step 2 – What has changed as a result of LIFEedu?

EUROPARC	High impact	Medium-high impact	Medium-Low impact
As a project partner	- Operational knowledge of online platforms, innovative digital tools and learning methods – e.g. Moodle, Chroma videos, smartphone app etc. - Competence based approaches are critical for designing better tailored and effective capacity building training that meet measurable needs (TNAs). - In depth knowledge of and practical experience with managing a LIFE project.	- With further development and investment, LIFEedu's capacity building courses and tools can be adapted and replicated – for example, for organisations, area teams and groups of managers working in specific specialisms. - LIFEedu and future capacity building projects can be catalysts for networking and collaboration between other organisations, projects and partners with common goals.	- The training needs and capacity building expectations of private landowners remain poorly defined – as such, they remain difficult to meet. - Within the period of the project, the assessment process enables us to measure how learning (e.g. practical skills and knowledge) have been applied by participants but not what the impacts of their learning will be in the long-term. - Ways to consolidate and formally accredit practical competence-based learning merit

EUROPARC	High impact	Medium-high impact	Medium-Low impact
			further investigation – this is a complex area and one that requires long-term thinking and more extensive consultations.
For learners	- Increased awareness and practical experience of working with innovative tools and online learning methods. - Deeper appreciation of the relevance of competencies and how they are applied within their work. - Dedicated opportunities to network with peers across Europe (19 countries) and share experiences. - New contacts established that will extend long beyond LIFEedu. - Increased motivation and interest to participate in new (continuous) capacity building activities and projects.	- TNA: Increased awareness of individual (competence-based) training needs - Variable opportunities to apply learning in their own organisation or Natura 2000 site – limiting factors included time, available resources, degree of commitment from line mangers etc.	- Engagement of private land owners. - Uptake and use of the new smartphone app.

EUROPARC	High impact	Medium-high impact	Medium-Low impact
For external organisations / project observers	- LIFEedu has demonstrated the value of online learning as a means to reach greater numbers of participants than through (solely) face-to-face capacity building events – the potential and possibilities of blended learning as a complementary and alternative approach to capacity building are now visible. - Online learning is easily replicable and 'up-scalable' – once created, online tools (e.g. learning platforms and app) hold significant potential to enlarge the audience of Natura 2000 managers and related projects. - Networking at European and global levels (e.g. LIFEedu + LIFE INTEMARES + LIFE GOPROFOR + MedPAN etc., as well as the project being invited to be presented in 2 EC Biogeographical Seminars (3rd Atlantic June 2019 & 3rd Mediterranean May 2021) and also the 2019 global capacity building conference in London.	- Growing recognition of the importance of competence-based training that is tailored for Natura 2000 managers' specific needs – e.g. scientific paper developed by TESAF. - An economic case for capacity building training can increasingly be made – for relatively small investments of time and money, new and improved skills can be developed which improve 'on-the-job' effectiveness and efficiency.	- The opportunity for and merits of developing dedicated capacity building programmes tailored for Natura 2000 managers and designed to support the achievement of EU priorities for nature – as a direct outcome of LIFEedu, the value of creating continuous professional development programmes directly linked to EU priorities for nature can be envisaged.

Step 3 – To what extent have the expected impacts been achieved?

What worked well?

- Project's coordination and partner's cooperation
- The inclusive approach to recruitment of project participants for the core groups, represented in terms of diversity of professional backgrounds and experience levels, national and regional locations, types of organisations (public and private, GO and NGO), gender and age.
- Design and delivery of the courses to meet the needs of the three core groups (but see below *)
- Participants' active involvement and personal commitment whilst dealing with COVID changes in their professional and personal lives.
- The adaptability, flexibility and problem-solving creativity of project partners in responding to COVID-19 situation

What could have been improved?

- Whilst supporting flexibility according to individual course parameters and objectives, greater consistency of approach across the three courses could have been realised (*) – to explain:
    - Three different courses were (rightly) developed to meet the needs and expectations of the respective core groups of participants.
    - Although each course was broadly consistent in terms of delivery time and period, dealing with the sudden realities of COVID meant that an element of coordination was (justifiably) lost.
    - Whilst the adaptability and flexibility achieved were necessary and positive elements of LIFEedu, at the same time the differences between the three courses demonstrate the challenges of meeting national and regional capacity building needs within a European framework.
    - This is not insurmountable but should be specifically addressed in future capacity building programmes – for example, cross-referencing between courses should be integral and would help to improve consistency; establishing a shared 'project ethos' at an early stage of a future project would ensure that a 'common language' can be applied throughout all project learning experiences.

- As LIFEedu has demonstrated, there are common needs and competence-based learning opportunities. However, it is essential to ensure that capacity building training programmes can be applied according to local circumstances and within prevailing cultures - LIFEedu achieved this but it will be pre-requisite in future capacity building projects. Also, testing how learning is applied to agreed standards whilst being adapted according to individual (site-level, organisational or personal needs) will be a core feature of the assessment processes in future projects.
- The importance of and need for better sequencing of project actions in phases – planning, development, delivery and evaluation – were recognised only after the project had started. Although this was quickly resolved and had no effect on meeting the overall project objectives, it did require re-planning and re-scheduling especially in terms of originally planned deliverables. That said, a stronger and more cohesive project has been implemented.

- Exchange and interactions among participants of different countries and courses were not foreseen in the original project proposal – had COVID allowed, that would have been a valuable and worthwhile activity within LIFEedu.
- Moodle has been used as the learning platform in all three courses – whilst each partner leading a course has gained experience of working with Moodle, in terms of EUROPARC's experience, as a learning platform it does though have limitations – for example, standard data reports, limits in terms of structure which make users' experience of working with content not particularly intuitive (e.g. cumbersome to navigate etc.)

Which changes do you think can be replicated? Over which term – short, medium, long? What evidence (based on kpis) do you have to support this?

EUROPARC agrees with FUNGOBE's feedback on this. In addition to the comments mentioned above in the 'improvement' section (part 3), we would add the following:

What has changed as a result of LIFEedu/ what has LIFEedu achieved?	Term	Evidence
With minor adaptations, courses are fit to be replicated, expanded and scaled-up to meet larger numbers of participants.	Courses – replicable in the short-term Up-scaling – replicable in the medium-term subject to a new 'fit for purpose' platform being developed.	High level of satisfaction and involvement among course participants. High demand to be involved in LIFEedu – places available were over-subscribed 3:1
Competence based approach for design of learning projects	Competence-based approach replicable in short term for individuals. Competence-based approach for teams or organisations replicable in the medium term – this would benefit from some piloting the approach with several organisations and area-based teams.	Three courses designed and developed LIFEedu A1 technical report assessing the competencies required by Natura 2000 managers continues to be highly relevant (see also comment below)
Partners' collaboration in new European projects complemented by more new partners in diverse sectors, including the mobilisation of experts to become key actors in advising the further development of course contents.	Short /Medium	LIFE ENABLE
Use courses to create a 'Train the Trainers' intake	Medium / longer term (2024)	LIFE ENABLE

What has changed as a result of LIFEedu/ what has LIFEedu achieved?	Term	Evidence
Develop technical courses for managers of specific habitat types – this is a logical extension of LIFEedu where competence-based courses can be integrated and applied through technical management courses.	Medium / longer term (2024)	LIFE ENABLE
As part of the post-project LIFEedu legacy, continue to promote LIFEedu's achievements in winning greater recognition of the need for competence-based capacity building programmes and courses that cover core functions **specifically required** by nature managers – e.g. communication and collaboration, stakeholder engagement and inclusive governance, biodiversity conservation and management planning including monitoring etc.	Short/ medium / long term – this is an area of continuous need, demand and interest particularly to support practical management effectiveness and ensure progress towards the EU 2030 Biodiversity Strategy and Restoration Plans	The A1 technical report form LIFEedu – the analysis applied is still relevant for future capacity building programmes.

IMPACT exercise results - FUNGOBE
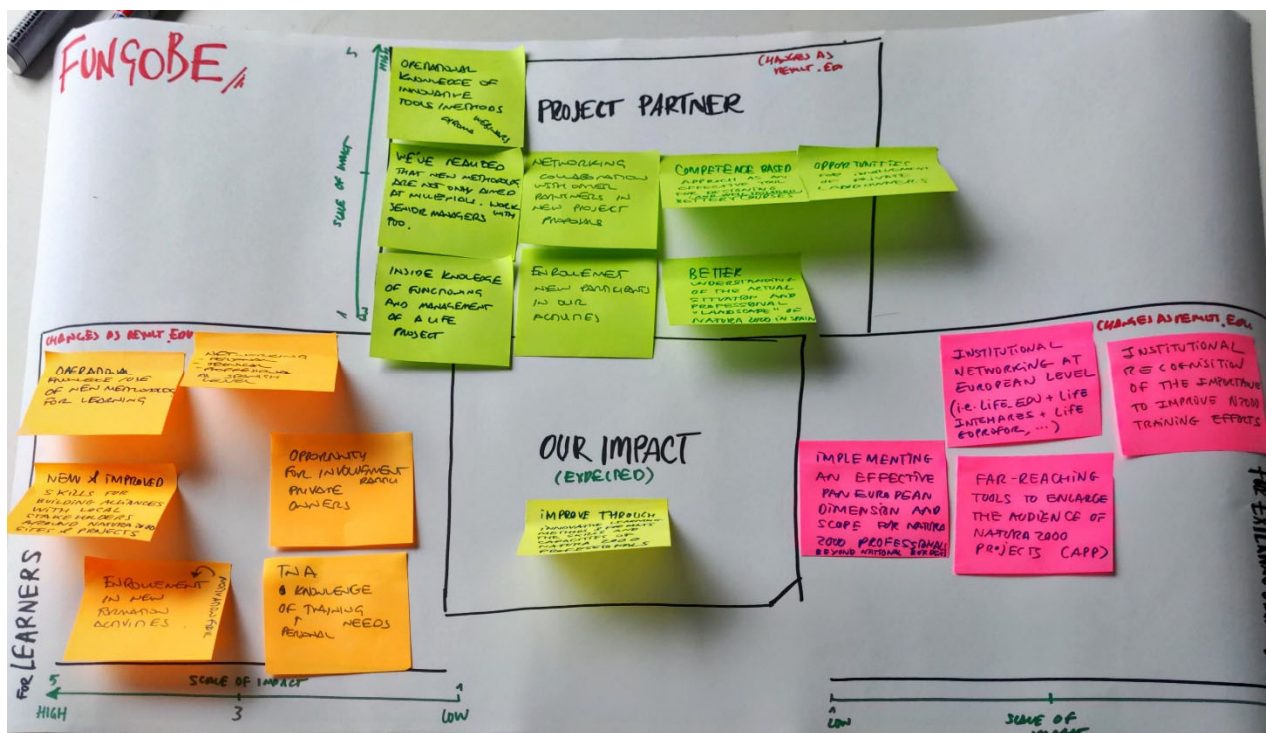## April 27th 2021
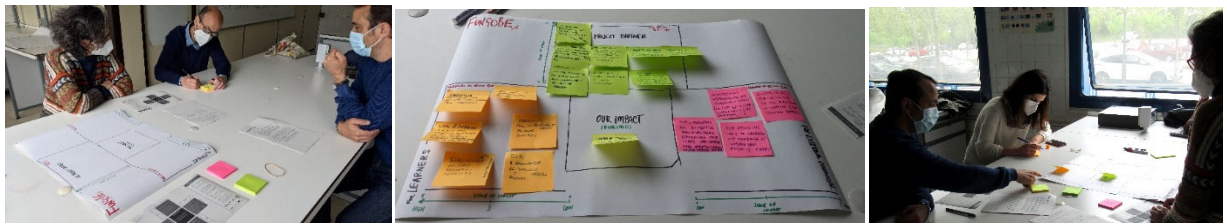
Step 1 – What impact did you hope to achieve through participation in LIFEedu?

Our expected impact:
Improve the skills and capacities of Natura 2000 professionals through innovative learning methods and formats

Step 2 – What has changed as a result of LIFEedu?

FUNGOBE	High impact	Medium-high impact	Medium-Low impact
As a project partner	- Operational knowledge of innovative tools and learning methods. I.e. Webinars, Chroma videos, etc.	- Competence based approach as an effective tool for designing better tailored and effective courses. - We've realized that online tools are not only aimed at millennials. Could work perfectly with senior managers. - Networking. Collaboration with partners in new project proposals. - Opportunities for involvement of private landowners	- Better understanding of the actual situation and professional "landscape of Natura 2000 in Spain. - Inside knowledge of functioning and management of a LIFE project - Enrolment of new participants in FUNGOBE's activities
For learners	- Operational knowledge of innovative tools and learning methods. - New and improved skills for building alliances with local stakeholders at Natura 2000 sites and projects - Motivation for enrolment in new formation activities	- Networking (national level) - TNA: Opportunity for personal knowledge of training needs	- Opportunity for involvement of private owners.
For external organisations / project observers	- Institutional recognition of the importance of improving N2000 training	- Far-reaching tool to enlarge the audience of Natura 2000 projects (App)	- Institutional networking at European level (i.e. LIFE .EDU + LIFE INTEMARES + LIFE GOPROFOR) - Implementing an effective Pan European dimension and scope for Natura 2000 professionals beyond national borders.

Step 3 – To what extent have the expected impacts been achieved?

What worked well?

- Project's coordination and partner's cooperation
- Recruitment of adequate participants for the core group: regional, professional, gender and age diversity
- Design and delivery of the courses
- Participants' involvement
- Response and adaptation to COVID-19 situation

What could have been improved?

- Exchange and interactions among participants of different countries and courses
- Better integration of App and courses (temporal fitting of project's actions)
- More face to face interactions (COVID-19 prevented)

Which changes do you think can be replicated? Over which term – short, medium, long?
What evidence (based on kpis) do you have to support this?

Change	Term	Evidence
Courses are fit to be replicated and expanded	Short	High level of satisfaction and involvement among course participants
Competence based approach for design of learning projects	Short	Three courses designed and developed
Partners' collaboration in new European projects	Short /Medium	LIFE ENABLE

AS A PROJECT PARTNER

We have now a model capacity building module on Applied Conservation Biology. It was tested successfully on 24 biologists / ecologists from Romanian Natura 2000 sites and is now ready to be used as a blended learning tool for others,
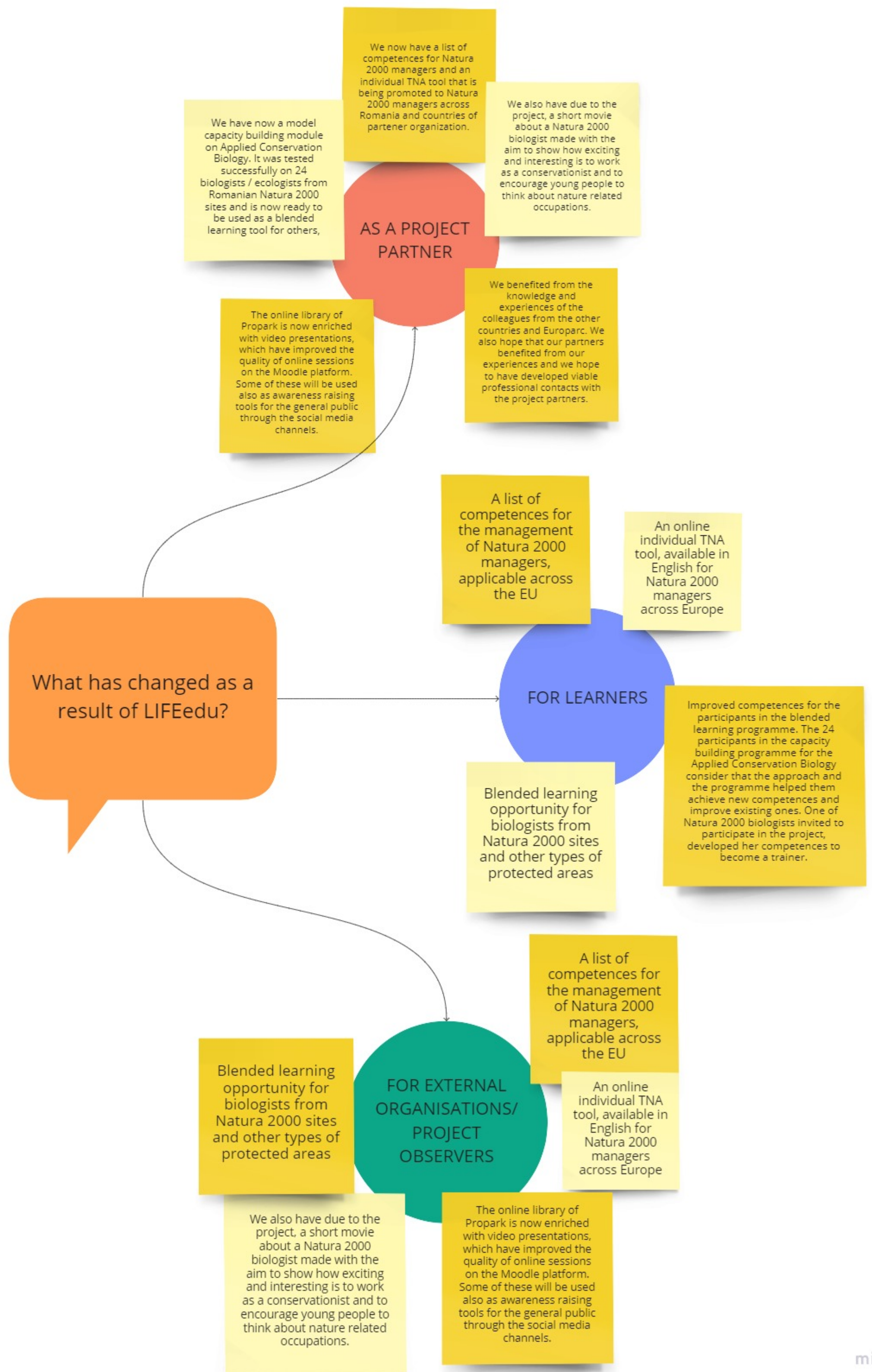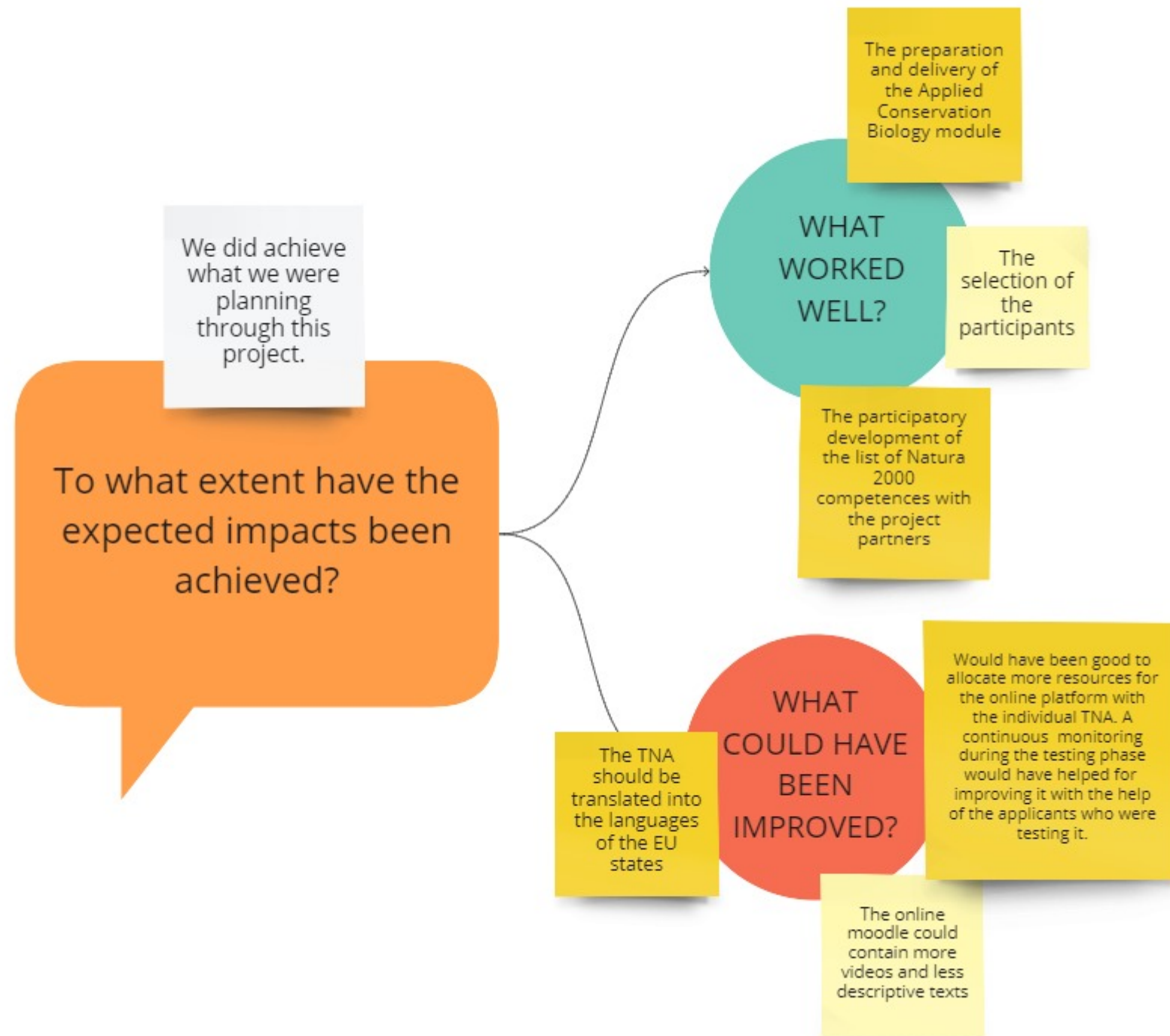
We now have a list of competences for Natura 2000 managers and an individual TNA tool that is being promoted to Natura 2000 managers across Romania and countries of partener organization.

We also have due to the project, a short movie about a Natura 2000 biologist made with the aim to show how exciting and interesting is to work as a conservationist and to encourage young people to think about nature related occupations.

We benefited from the knowledge and experiences of the colleagues from the other countries and Europarc. We also hope that our partners benefited from our experiences and we hope to have developed viable professional contacts with the project partners.

The online library of Propark is now enriched with video presentations, which have improved the quality of online sessions on the Moodle platform. Some of these will be used also as awareness raising tools for the general public through the social media channels.

What has changed as a result of LIFEedu?

FOR LEARNERS

A list of competences for the management of Natura 2000 managers, applicable across the EU

An online individual TNA tool, available in English for Natura 2000 managers across Europe

Improved competences for the participants in the blended learning programme. The 24 participants in the capacity building programme for the Applied Conservation Biology consider that the approach and the programme helped them achieve new competences and improve existing ones. One of Natura 2000 biologists invited to participate in the project, developed her competences to become a trainer.

Blended learning opportunity for biologists from Natura 2000 sites and other types of protected areas

FOR EXTERNAL ORGANISATIONS/ PROJECT OBSERVERS

Blended learning opportunity for biologists from Natura 2000 sites and other types of protected areas

A list of competences for the management of Natura 2000 managers, applicable across the EU

An online individual TNA tool, available in English for Natura 2000 managers across Europe

We also have due to the project, a short movie about a Natura 2000 biologist made with the aim to show how exciting and interesting is to work as a conservationist and to encourage young people to think about nature related occupations.

The online library of Propark is now enriched with video presentations, which have improved the quality of online sessions on the Moodle platform. Some of these will be used also as awareness raising tools for the general public through the social media channels.

miro

What changes to you think can be replicated?

| Promoting the use of the online TNA tools across the Natura 2000 network | Organizing applied conservation biology training | Developing list of competences needed in the management of Natura 2000 sites and other types of protected areas | Developing blended learning modules for Natura 2000 management | Short movies to raise awareness on and promote Natura 2000 related professions |

Over which term - short, medium, long?

L   L   M   M   M

Which ecidence do you have to support this?

The study "Management effectiveness in the EU's Natura 2000 network of protected areas" shows that there is "inadequate investment in the capacity of management authorities and in practical site management". For an efficient investment knowing the needed competences and the training needs is crucial.

The study "Management effectiveness in the EU's Natura 2000 network of protected areas" shows that there are "gaps in knowledge and monitoring of key conservation values (i.e. the habitats and species for which the site is designated) and threats/pressures" https://www.eea.europa.eu/publications/management-effectiveness-in-the-eus

The study "Management effectiveness in the EU's Natura 2000 network of protected areas" shows that there is "inadequate investment in the capacity of management authorities and in practical site management". For an efficient investment knowing the needed competences and the training needs is crucial.

The trend in capacity development is to move towards online platforms. However, practical approaches can be developed only on the field.

In Central - Eastern Europe professions / occupations related to nature conservation are new. It is very important to increase awareness and to promote these new occupations.

The good feedback.
The interest.

miro

IMPACT exercise results - TESAF

May 12th 2021;

Participants: Tommaso Sitzia, Thomas Campagnaro, Elisabetta Zanaga and Giovanni Trentanovi.

To have a confrontation with all participants from TESAF, different tools were used: face-to-face and online (zoom) meetings.
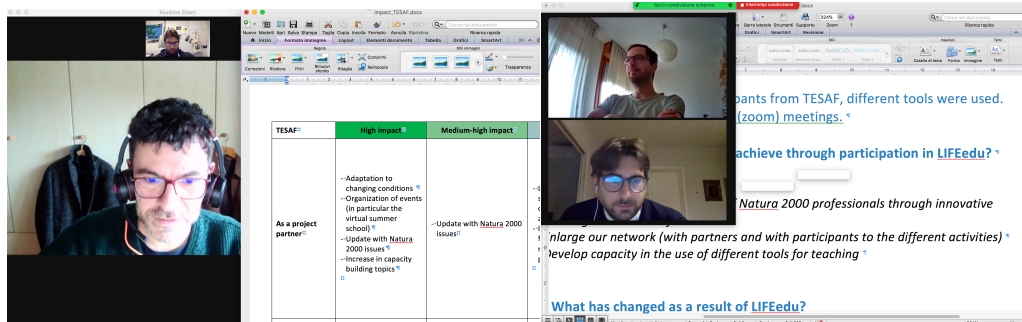
Step 1 – What impact did you hope to achieve through participation in LIFEedu?

Our expected impact:
- *Improve the skills and capacities of Natura 2000 professionals through innovative learning methods and formats*
- *Strength the link between academic and professional learning experiences*
- *Enlarge our network (with partners and with participants to the different activities)*
- *Develop capacity in the use of different tools for teaching*
- *Keeping updated on the new developments related to Natura 2000 (e.g. data from reporting, regulations, etc.)*
- *Increase general knowledge about Natura 2000 (from the administrative staff point of view)*

Step 2 – What has changed as a result of LIFEedu?

TESAF	High impact	Medium-high impact	Medium-Low impact
As a project partner	- Adaptation to changing conditions - Organization of events (in particular the virtual summer school) - Update with Natura 2000 issues - Increase in capacity building topics	- Update with Natura 2000 issues	- Little involvement of students and little effect on curricular learning activities - Inside knowledge of functioning and management of a LIFE project
For learners	- VIRTUAL SUMMERS SCHOOL STILL TO BE DONE	- VIRTUAL SUMMERS SCHOOL STILL TO BE DONE	- Little involvement of students and little effect on curricular learning activities
For external consultant	- Analysing data from a different range of Natura 2000 managers	- Identifying Natura 2000 experts for the (Virtual Summer School)	-

Step 3 – To what extent have the expected impacts been achieved?

What worked well?

- Coordination and cooperation between project partners.
- The focus on online tools has enabled an adaptation to the pandemic conditions.
- Discussion of specific topics with experts to organise the first face-to-face and then virtual summer school.
- Adapt content and approaches from a face-to-face event to an online event (virtual summer school).
- Good (and clear) communication from the Lead partner.
- First App on Natura 2000

What could have been improved?

- Difficulty to have published a scientific paper on the project experience due to the long timing required and impossible to predict.
- Many experts in Natura 2000 do not speak English and are difficult to involve in this type of projects (virtual Summer School is expected to be in English).
- Increasing involvement of students as Natura 2000 managers of the future (as learners but also as stakeholder with possible internships).
- Participation to the App through linking to official EC websites.

Which changes do you think can be replicated? Over which term – short, medium, long? What evidence (based on kpis) do you have to support this?

Change	Term	Evidence
Increasing the online parts of learning maintaining face-to-face events for practical experience	Short/Medium	Acceptance of the change from face-to-face to virtual summer school
Involvement of external experts and learning from their experience and teaching	Short/Medium	Discussion with involved trainers and external consultants
Partners' collaboration in new European projects	Short /Medium	LIFE ENABLE
Inclusion of specific material in curricular courses	Short /Medium	"Natura 2000 management" course

IMPACT exercise results - ELO

Step 1 – What impact did you hope to achieve through participation in LIFEedu?

Our expected impact:
Landowners (and other stakeholders) would gain a greater understanding of how to deal with the various Natura2000 challenges they face. ELO represents the largest association of private landowners while Natura2000 land is the largest group of land in Europe and there is a heavy overlap we hoped to work with.

Step 2 – What has changed as a result of LIFEedu?

ELO	High impact	Medium-high impact	Medium-Low impact
As a project partner	- We have helped our private landowners become more knowledgeable about Natura2000	- We have developed our first digital app which has been used to communicate information about Natura2000, Biodiversity, and events to people all across Europe	- Our staff has become more knowledgeable about Natura2000
For learners	- Our participants have gained greater knowledge on the intricacies of Natura2000 and have hopes to spread it.	- Networking (international)	- The opportunity to connect this project with other LIFE Projects
For external organisations / project observers	- Policymakers have been able to learn more about Natura2000 and eNatura2000	Partners on other projects (H2020, Interreg, Marie Curie, Erasmus+) have been able to learn more about Natura2000 and eNatura2000	-

Step 3 – To what extent have the expected impacts been achieved?

What worked well?

-The app had nearly all of the parts that we wanted it to include.
-Good participation form partners

-Despite COVID, the tasks remained on track
-The private landowners gave favourable responses to the program
-The reviews for the app were also highly favourable.

What could have been improved?

- I believe that connecting the app with the courses more closely and having the courses available on the app would have been stronger.

- COVID also caused some significant issues. For example, our beta testing and largest pushes for the app were intended at FFA2020 and 2021 as well as dissemination events across Europe and Brussels. However, due to the virtual nature of events, it became much more difficult to disseminate and share the app.

- The app was not able to include ARCgis or tablet support. While tablets are only 5 percent of users, the ARCgis would have provided some interesting options