DESIGNING BLENDED LEARNING COURSES FOR LANDSCAPE PROFESSIONALS

GROUNDWORK

INTRODUCTION TO GROUNDWORK FOR PROFESSIONAL LANDSCAPE LEARNING

4 PHASES

4 PHASES OF BLENDED COURSE DESIGN AND DELIVERY

Peatland forest in Katingan, Kalimantan. Photo: Nanang Sujana, CIFOR

Global Landscapes Forum

WAGENINGEN UNIVERSITY & RESEARCH

PREFACE

The global COVID pandemic has had tremendous impact on education and training. Colleges and Universities were closed, while students, teachers and trainers were dependent on the internet to pursue their programmes.

This required not only strong internet connections, but also adaptation of teaching pedagogy and training methods. Great it was to see how educators and trainers adapted to these new challenges, and quickly developed their online abilities, leading to the greatest innovation in learning the world has ever seen. However nice it is to return to face-to-face teaching and training, these newly acquired skills should pertain and be used to raise the resilience of teaching and training, and bring it to a new level of blended learning.

The Global Landscapes Forum, together with its partner Wageningen Centre for Development in the Netherlands, have set the first steps. Besides developing an inspiring online learning portal called the Landscape Academy, they have developed a set of manuals and toolkits for educators, trainers and otherwise capacity developers to blend online and offline teaching and training, and use the most innovative technologies and methodologies for this. This is extremely useful and well timed, at the beginning of the UN Decade for Ecosystem Restoration to which capacity development is key.

With this product, the GLF is further shaping its Digital Knowledge Commons on landscapes and sustainability, combining learning with an optimal use of digital space. And the Wageningen University has once again demonstrated its capacity to respond to the need for online education, and enable teachers and trainers worldwide to make a digital turn.

To all teachers, trainers and capacity developers, I congratulate you with your ability to leapfrog to blended learning. This manual will help you to design your own blended learning products, improve your online teaching and training skills, and continue raising the worldwide capacities for landscape management, governance, and restoration at scale.

Dr. Cora van Oosten
Global Landscapes Forum
Wageningen Centre for Development Innovation

DESIGNING BLENDED LEARNING COURSES FOR LANDSCAPE PROFESSIONALS

This manual will guide you through the design and delivery processes of high quality, engaging blended courses for landscape professionals.

This first part sets the scene: you will learn about the unique nature of landscape learning and the needs of landscape professionals. Plus, you will hear why a blended approach is an essential tool for meeting your audience's different needs.

The second part will accompany you through a step-by-step process, starting with the initial sketching of the course objectives, right up to implementation and learning evaluation. In addition to this, you will also have access to tried and tested content that will support you in the creation of an entertaining learning experience for your learners.

The content of this manual builds on the experiences of the Wageningen Centre for Development Innovation, which is part of Wageningen University & Research. Over the years, WCDI has been designing and developing engaging blended courses for landscape professionals, including in-person, online, and blended courses. In particular, this manual builds on the experiences of courses on Landscape Governance, Managing Risk in the Face of Climate Change and Climate Action for Food Systems Transformation as well as the Professional Certificate Programme on Sustainable and Inclusive Landscapes.

We have now decided to share our experience and insight, and boost professional landscape learning globally.

Read more about WCDI courses here:
www.wur.eu/wcdi

Indonesia, Photo by Nanang Sujana, CIFOR

INTRODUCTION TO GROUNDWORK FOR PROFESSIONAL LANDSCAPE LEARNING

LANDSCAPE LEARNING: WHAT'S NEW?

ADOPTING THE LEARNING PROFESSIONAL MINDSET

- Interacting with stakeholders
- Interacting with learners
- Interacting with media

ADOPTING A BLENDED LANDSCAPE LEARNING APPROACH

- Blending for diversity
- The blended learning Jukebox

PRINCIPLES OF DESIGNING BLENDED LEARNING FOR LANDSCAPE PROFESSIONALS

- Learner and learning needs points of departure

Water Towers project, Kenya. Photo: Patrick Shepherd, CIFOR

LANDSCAPE LEARNING: WHAT'S NEW?

Landscape approaches have gained ground in the global debate on conservation and development. In fact, multifunctional landscapes offer new opportunities to think about the complex relations between nature, land use, and stakeholder dynamics.

This helps professionals and practitioners better understand the ecological, socio-cultural, and economic dynamics interwoven in the landscapes where they work, and how these have evolved over time.

Landscapes are not only geographically defined places, but also networked spaces. This notion helps us understand why they are influenced by global drivers of production, consumption, and development, and how they are entangled with global challenges such as climate change, biodiversity loss and health threats. This understanding enables professionals and practitioners to operate within global commodity chains, policy processes and activist networks more strategically.

__Table 1:__ Sector vs integrated landscape approaches

SECTOR APPROACH	INTEGRATED LANDSCAPE APPROACH
Single issue	Multiple issues
Single actor	Multiple actors
Sector approach	Integrated approach
Disciplinary scientific approach resolving complexities	Interdisciplinary approach towards resolving complex situations
New knowledge generated by academic institutions only	New knowledge co-created by all stakeholders
Within jurisdictional boundaries	Beyond jurisdictional boundaries, up to the (transboundary) landscape level

The integrated landscape approach – also simply referred to as landscape approach – is considered to be a practical tool to reconcile opposing forces at play in the landscape. For instance, it tries to work on the increased competition for space through balancing competing demands on resources, and striving for smart integration of agricultural production, nature conservation, and livelihood options. It actively promotes combining private and public interests and enhances stakeholder collaboration within a specific spatial context.

It is exactly in this context that the landscape approach proves to be a valuable alternative to other methods. In fact, it represents an opportunity to tap into transboundary landscape dynamics and geographical areas from an integrated, multi-perspective and scalable standpoint, analysing resource use and users as an integral part of their geographical, social and institutional contexts.

In short, a landscape approach offers a novel framework for solving complex issues. It addressed multiple competing land and resource claims and their claimants, transcending the political-administrative boundaries in which they are trapped. The table on the left summarises the differences between a "conventional" sectoral approach and the integrated landscape approach.

Despite their popularity, landscape approaches are rarely represented in college and university curricula. For this reason, most landscape professionals have not had the opportunity to learn how to operate through this approach, having to learn by doing, and depend on their own insights. This stems from the fact that a landscape approach is multidisciplinary, while most educational institutions build their curricula around mono-thematic, disciplinary domains.

To be in line with a landscape approach, curricula would have to include elements from both the environmental and social sciences, as well as having a spatial and practical problem-oriented focus. One such programme would require an inter-, and transdisciplinary model to understand the complexity of resource depletion and the societal risks involved. Plus, it would focus on the societal response marked by stakeholders, their power dynamics, and their (in)ability to transform conflict into collaboration and change.

GLF Youth Media Training in Indonesia. Photo: Lynsey Grosfield, CIFOR

GROUNDWORK

4 PHASES

Achieving this expanded worldview, a shift in mind-set is equally required from landscape professionals and teachers, trainers, and curriculum designers, both in formal education and professional training.

In a formal educational setting, this would require: more room for integrated thinking; interdisciplinary collaborative curriculum development among colleges and universities; adopting a competence-based learning model that focuses on generating scientific knowledge, but also practical skills and the required mind sets to address real-life problems; experiential learning that highlights the importance of building on the learners' practical experience; direct stakeholders or market engagement in the design and development of curricula, to make these more relevant and practically applicable.

In a professional training setting, this would involve: practitioners, extensionists, advisors, and other landscape professionals would focus on more strategic short term training programmes; retooling for mid-career professionals to help them better cope with the ever-changing complexities in their fields; training that helps practitioners better design programmes targeting communities and other stakeholders, helping them apply a landscape approach concretely, in turn leading to stronger social impacts.

ADOPTING THE LEARNING PROFESSIONAL MINDSET

As you begin your journey towards the design and delivery of high-quality blended courses, you will need to adopt a new mindset: that of a *learning professional*. Your learners will trust you to guide them through their learning process. However, to become the dependable trainer they need, you will need to fulfil three main roles:

Interacting with stakeholders

As you develop your course, communicating with all the stakeholders interested in the course's outcome will be important. You will have to analyse what the course should achieve for different donors, colleagues, clients, and learners, and evaluate their needs, manage their expectations, and incorporate all of this into the course's architecture.

Interacting with learners

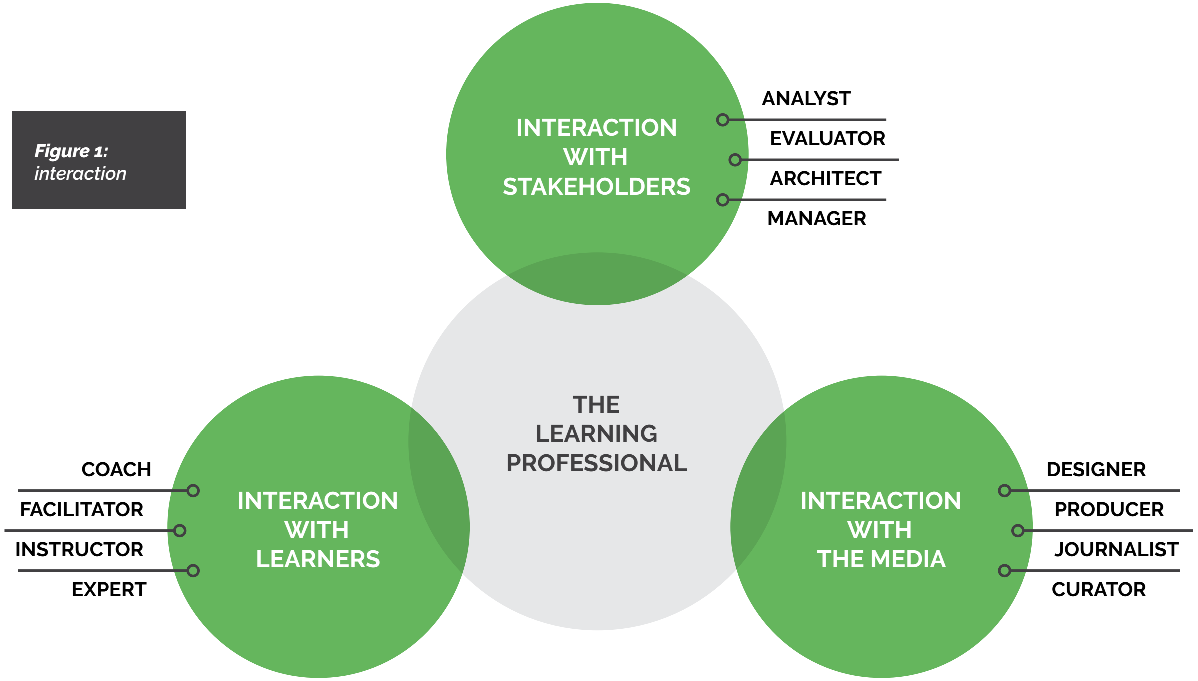
Professional learners are exceptionally diverse, and acquire knowledge in different ways. In your interactions with them, you will need to facilitate a constructive and dynamic educational experience, using your own expertise to offer insightful and nurturing coaching. This approach will have to be both technical as well as process-oriented to ensure your offer proper guidance to your learners, putting them on the path of a successful outcome.

Interacting with media

As more and more learning takes place digitally and online, you will need to adopt innovative methods and tools to facilitate blended learning. Reaching diverse audiences requires attentive course design, the production of engaging content, and the curation of trustworthy, existing resources that can benefit your learners.

The successful adoption of these three roles also requires open-mindedness and flexibility, as well as an awareness of the many interests and needs existing within and around your blended course.

Figure 1: *interaction*



ADOPTING A BLENDED LANDSCAPE LEARNING APPROACH

Blending for diversity

Landscapes are diverse, and are home to diverse public and private professionals working in a wide range of sectors. Since landscape approaches focus on coss-sector integration and collaboration, professional landscape learning must enable effective connections and sharing, so that your learners' capacity to "think landscape" is strengthened. Only then will they be able to really become "landscape professionals," and work collaboratively for the improvement of wellbeing in the landscape. Therefore, adopting a blended learning approach for course design and development is essential.

At WCDI, our approach around blended learning begins with exploring the multiple functions which learning professionals need to fulfil in the design and delivery of professional education and training. We use this framework by Clive Shephard of Skills Journey to structure our thinking

The blended learning approach offersopportunity to satisfy the disparate needs of an audience of diverse landscape professionals.

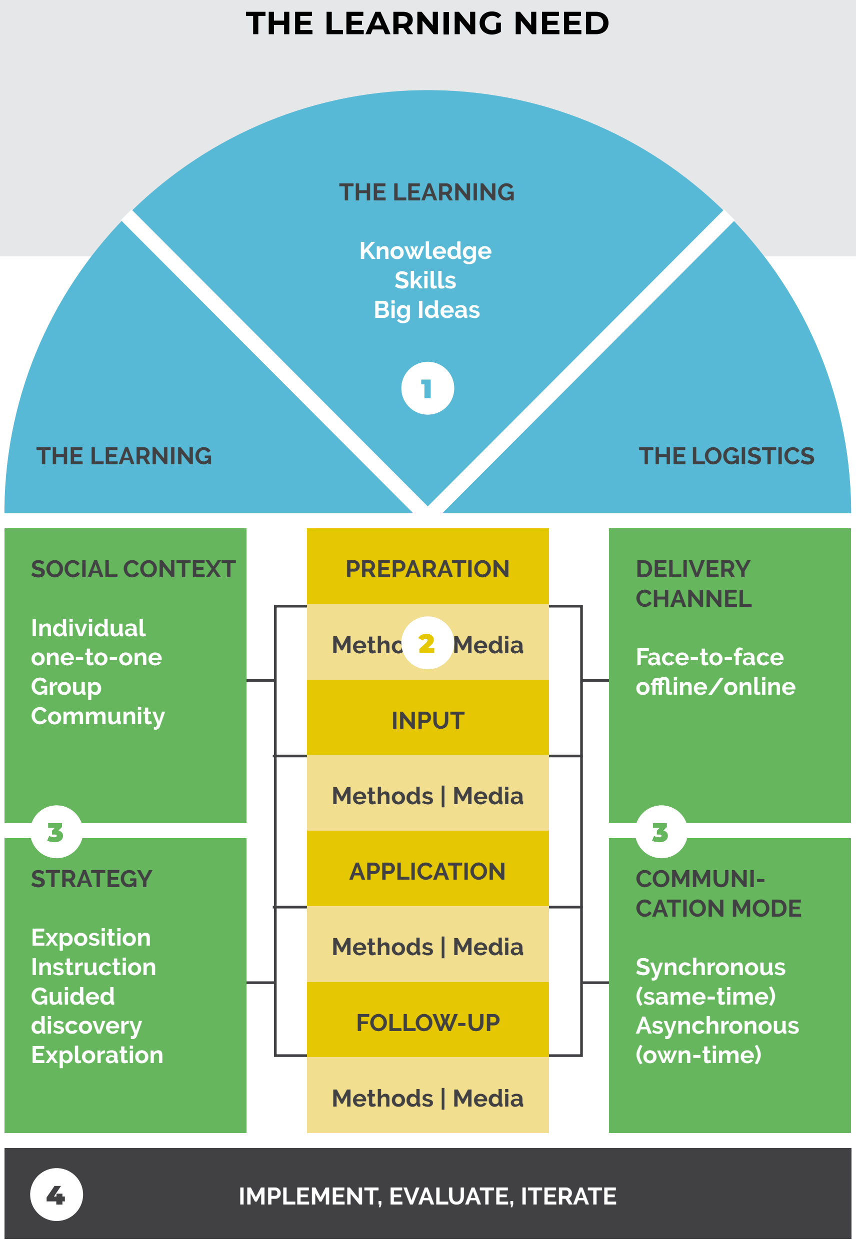
So keep in mind the following points:

- Learners may come from a variety of landscapes, regions, countries, or geographies;
- Learners may have radically different academic or professional backgrounds and starting points;
- Learners may come from a variety of organisations or companies engaged in different sectors or activities at different levels;
- Learners may have different, or specific personal needs and limitations that need to be accommodated;
- Learners acquire information and respond differently to the range of methods used to train professionals;
- Learners may have varying degrees of access to finances or fellowships to invest in learning or the tools needed to engage in the course;
- Learners may have different schedule availability to take part in group or community learning, due to their work or family commitments;
- Learners may have different technological access and limitations either through connectivity infrastructure or digital literacy.

Therefore, always keep in mind the considerable degree of diversity and variability among landscape professionals. Now, let's take a look at what blended learning actually entails, and how you can use it to guide the design of effective landscape learning.

Indonesia, Peatlands restoration Photo: Aris Sanjaya, CIFOR

Figure 2: The blended learning jukebox



The blended learning jukebox

Commonly, when talking about blended learning we mainly refer to the combination of online and face-to-face education. Yet, it means much more than this, and encompasses "mixed-method" education and training. In fact, people learn better in different ways.

At WCDI, as we embarked on our new blended learning path, we explored many frameworks and models. We found Skills Journey's[1|2] Jukebox model to be a very useful overview. The model presents a process overview supported by key design and content delivery considerations.

In the next section, you will see how these elements are reassembled into concrete design steps, but let's first quickly explore each one as a useful design consideration.

1

The 3 L's: the learning, the learners, and the logistics, and how these determine the scope of the pathway to addressing this need

2

PIAF: The process of designing, developing, and delivering the learning pathway

3

The four major elements which shape the blended design, social context, delivery channel, strategy, and communication mode

4

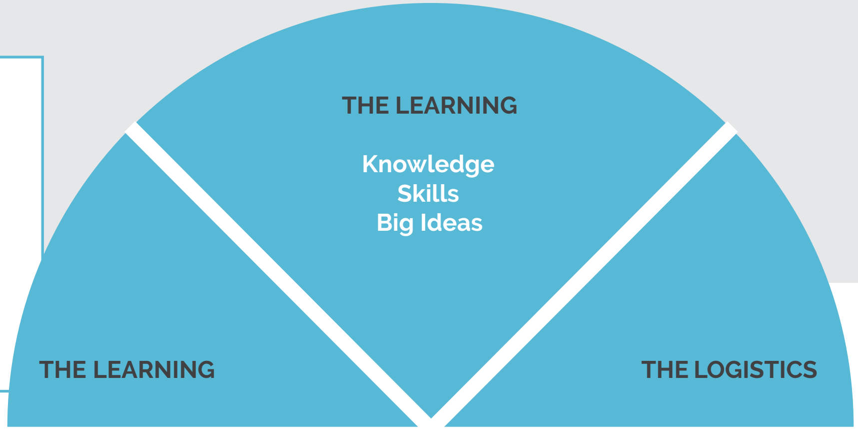
And finally, a **note to the importance** of continuous review and improvement across pathway iterations.

1: https://skillsjourney.com/wp-content/uploads/More-than-a-jukebox-1_5.pdf. 2: https://skillsjourney.com/

1

Don’t assume the learning need!

As an example that shows that learners’ priorities differ, WCDI learned that over 50% of learners from their Massive Open Online Courses (MOOCs) completed the course to further their career prospects. This contrasts with many learners from WCDI’s face-to-face courses, who are there to boost their efficacy in current positions or programmes.



3L’S: Learning, learners, and logistics

Let’s start with the learners. It is essential to know who they are, what they do, and what’s their motivation to learn with you. Beyond their professional roles, what personal and cultural realities determine their framing and understanding of the proposed learning experience?

When considering the learning that should take place, focus not only on what learners need to change to improve performance, but also what specific objectives they might have themselves. What big ideas do they want to explore and what knowledge and skills should they learn to reach their potential?

Only once you are aware of these things can you really assess the course logistics and make clear decisions on the course’s delivery. As for all learning scenarios, it is common that budget and timeline will play a large role in design. The learners’ geographic locations and time-zones, their connectivity and internet affordability, as well as digital literacy are all key factors to consider for all online/digital course elements. For face-to-face learning encounters, instead, you will need to consider facilities and materials, as well as accommodation and travel limitations.

2

PREPARATION
Methods | Media
INPUT
Methods | Media
APPLICATION
Methods | Media
FOLLOW-UP
Methods | Media

PIAF

The core of the Blended Learning Jukebox represents a direct start-to-finish course setup, with space to consider which methods and media will be used in each phase.

In the **preparation phase**, the learner is introduced to the course’s ambition and setup. Here, they will be connected to their peers, instructors, facilities, and learning materials.

The **input phase** is the main and most structured part of the blended design: this is where new content is prescribed and delivered to the learner.

In the **application phase**, instead, learners apply what they have learned to their own or other real-world cases. The input and application phases can have multiple iterations and do particularly well in longer-term pathways.

In the **follow-up phase**, instead, learners are monitored and encouraged to track the success and impact of applying what they have learned. Ideally, this phase feeds will show them the next steps in their learning journey.

3

Methods

Learning methods are what you will use to facilitate learning and include explicit decisions based on what you have learned from assessing the 3L's. Therefore, depending on what your learners will learn, you will decide on the best strategy to achieve results and in what social context it will take place.

SOCIAL CONTEXT

Individual
One-to-one
Group
Community

STRATEGY

Exposition
Instruction
Guided discovery
Exploration

Social Context

Depending on the learning and course setup, learners' exposure to peers may be widely different and have a significant impact on their learning:

Individual or self-study learning is learning on one's own. It can range from reading a book to completing an online course.

One-to-one learning means that the learner benefits from direct access to an expert. This might be an instructor for a course, a professional coach, or even a senior mentor.

Group learning sees beneficial interaction with peers and ideally a sharing of insights and experiences, and the group is fixed.

Community learning, instead, is a growing space and focuses on having a relatively open network of learners who share, reflect, and navigate topics together, but intermittently. Even prescribed individual online courses increasingly add in community elements.

Strategy

To satisfy different learning styles you will require a variety of different methods. This will enable you to cater to the different needs of your learners, as well as them with the different kinds of content you are delivering.

Exposition is the simple delivery and transfer of knowledge from one source to another. This is achieved, for example, by watching a video, reading a text, or listening to a presentation. Through exposition the learner is exposed to new knowledge.

Instruction is a more systematic process in which learners are given specific guidance, objectives, and expectations. At this point in the learning journey, it is normal to include assessment as a factor in the learning process.

Guided discovery is also a structured process. However, the emphasis here lies on facilitating learners to develop their own insights and realisations and encouraging them to draw their own conclusions.

Exploration, instead, encourages learners to take ownership of their learning and chart their own path through available resources. Here, research assignments are a common feature.

3

Media

You have to use learning media to deliver your learning methods and make them a reality. You need to decide how and when learners actually access your knowledge content. Unlike learning methods, options for learning media are expanding as new digital and online options proliferate. New media offers new opportunities, but it's essential to remember barriers for your target audience that might hinder media suitability and efficacy.

DELIVERY CHANNEL

Face-to-face offline/online

COMMUNI-CATION MODE

Synchronous (same-time) Asynchronous (own-time)

Delivery channel

This is how learners access content and interact with the trainer and each other. This element is commonly mistaken to be the core of blended learning, since here decisions are made for online or face-to-face interactions.

Face-to-face learning remains the most popular and effective choice learning scenario. Direct contact between learners and trainers allows far more effective relationship building, active engagement, and rapid follow-up.

Offline media are materials that can be explored on a learner's own time without a connection to a network or other learners. This ranges from books to CDs or other offline digital files.

Online media is the ever-growing domain of learning media ranging from online videos, 3D simulations, and maps, all the way to online interactive courses and webinar-type settings.

Communication mode

Each and every learning media item is designed to operate in one of two different modes. Synchronous (same time) learning requires learners to be available and together at specific moments. Asynchronous (own time) learning relies on participants engaging with delivered content according to their own availability.

Synchronous learning is the most common form for face-to-face courses, bringing everyone together into the learning session. It is also relatively common for online learning courses to have synchronous moments, both for efficiency and to motivate learners to connect to each other and experts. For professional learning, synchronous moments rely on people's availability.

Asynchronous learning allows busy professionals to commit to learning around their own schedules, as well as opening options for flipped classrooms in which asynchronous preparation feeds synchronous interac-tion. The rapidly increasing repertoire of online learning technologies sees many blended course designs adopt a growing element of asynchronous learning.

4

IMPLEMENT, EVALUATE, ITERATE

Implement, evaluate, iterate

Despite how much effort and time you might put into designing your landscape course, any disruption to your plans are possible. So, even in the design phase, if you have the opportunity to test course elements with a colleague or representative peer, take the chance!

Regardless of whether you have tested your course or not, you will implement it. During the course you can periodically monitor and evaluate uptake and reception, but it is most important to build this step into the course's conclusion. Your learners' experiences and learning outcomes are the best indicator for the efficacy of your blended design.

And, depending on the type of course you offer, you might end up running it multiple times. For this reason, it is important to continuously monitor and adapt it as needed with the new insight offered by learner's feedback and evaluation.

PRINCIPLES OF DESIGNING BLENDED LEARNING FOR LANDSCAPE PROFESSIONALS

Bonn, Germany, GLF workshop. Photo: Mokhamad Edliadi

Designing blended courses can be tough. Interacting with stakeholders, learners, media, and course content will call on a lot of your own professional resources. But, based on our experiences at WCDI, we know that if you stick to some core design principles, you will be able to create and deliver enjoyable, inspiring blended courses that have a real impact and benefit for your learners.

Use these principles as considerations for your design. You can see them as a sort of checklist, and you can refer to them at various points throughout your blended course journey, and when it comes time to implementing and facilitating your course.

These principles combine insights from both blended learning approaches and competence-based approaches which focus on enhancing the knowledge, skills, and attitude of professional learners.

Learner and learning needs points of departure

Keep your learner at the centre of your thinking. Above all else, the course must be relevant for them, and the learning environment must be safe and appreciative of their unique needs. Although every course will be largely constrained by the available budget, you should still start designing it based on what your learners need to learn and do after the course. Design choices relative to budget availability and time constraints can come in later but ensuring the course content is relevant and accessible for learners is paramount to success.

Account for professional diversity and capacity

Given that landscape professionals are rarely a heterogeneous group, it is likely that your learners will have different learning priorities aligning to their specific professional functions. It is also possible that they will come from different backgrounds, have different levels of education/training, and have professional backgrounds. They will learn at different paces and struggle with different things. It will therefore be your responsibility to take into account their capacity to retain information, and ensure the learning environment provides a space for reflection, and keeping up with the materials.

Set clear and measurable learning objectives

Help your learners focus on important course elements and help them shape their expectations and learning by explicitly setting clear course objectives. Learners will use these as waypoints and know the benefit of course participation. They will also know what to aim for and what they can do with their new knowledge after the course. While some learning objectives will be set personally, having a core set of goals allows learners to see themselves in relation to their peers.

Take into account diverse learning realities and limitations

It is critical to discover any potential barriers to learning faced by your target audience early in your design phase. Knowing how and where your target audience will learn–particularly for online learning scenarios–is a key consideration and will be a crucial determinant to the successful uptake of your learning pathway.

Build learners' competencies

Successful blended courses for landscape professionals go beyond providing the latest knowledge. Landscape professionals generally seek to be part of, or even lead, change in their landscapes. To do this, they will need to be equipped with facilitative and leadership skills, as well as guidance to adopt such a mindset. Only with this combination of competencies will they be able to effectively apply a landscape approach.

Bonn, Germany, GLF workshop. Photo: Mokhamad Edliadi

Learn by doing: exploring the learners' cases

Many professionals learn well when given the possibility to apply what they are learning to their own realities. In fact, it is common practice for learners to "build their case" as the pathway progresses. Giving participants the space to share their own case's development enriches the learning experience also for their cohort, as they will be exposed to scenarios they might not otherwise have access to. If it is not feasible to have learners apply content to their own cases, you can provide generic cases that allow learners to "learn by doing" and testing tools and approaches.

Harness the learners' own expertise

While your learners are in your course to learn, they each already possess unique skills, knowledge, and perspectives that can add real value to the learning experiences of their cohort. For this reason, your design should regularly give space for sharing and appreciation. Doing so is highly motivating for all learners. Peer-coaching is also highly beneficial, as learners benefit from listening to each other's situations, challenges, questions, and ideas. Peer-feedback, instead, calls on different learners' skills to compose answers and advice on content they are still in the process of learning.

Exposure to real world examples

Field trips have long been a core component of professional learning. They are a useful method to expose learners to the reality of the topic they are learning and give opportunity for deeper engagement and understanding, allowing new questions to come to the front. With online learning, this becomes more challenging. Good designs can explore video case studies, image-based stories, and the use of maps, interviews, and other resources to include real-life scenarios.

Motivate learners through energizers and interactivity

Your content and process may be of a very high-quality, but learners can still become tired, bored, and demotivated. Prepare a repertoire of engaging and energizing activities to inspire and activate your learners and have this ready to implement at a moment's notice when the time is right. Additionally, you can encourage learners to interact with each other as means to remain engaged and interested.

Participatory course evaluation

Give your learners multiple opportunities and methods to evaluate the course. It's important for you to know how the experience was perceived, but also for learners to explore why they decided to partake in the experience. Some evaluations may be individual, but valuable feedback can be picked out when evaluating collectively.

Design and develop content with sustainability and reusability in mind

Developing digital and online content can be time-consuming and expensive, which is why it's smart to design your course in a way that will avoid the need to re-invest precious funds in remaking content. By applying specific techniques, you can increase the chance of developing materials that can be reused by you or others in different learning scenarios. These include removing direct references to specific learning moments or people (i.e., session, titles, names, etc.), keeping logos out of digital content, and naming and storing files appropriately.

4 PHASES OF BLENDED COURSE DESIGN AND DELIVERY

1. BLUEPRINT

- Learning need & objectives
- Duration, commitment & rythm
- Outcomes and certification
- Course logistics

2. STORYBOARD

- Workshop format & process
- Storyboard exercise

3. DEVELOPMENT

- Session & activity planning
- Assignments & assessments
- Structure & consistency
- Using imagery

4. IMPLEMENTATION

- Facilitating learning
- Professional learning styles
- Motivation & energy
- Closing off the course

*Myanmar
Photo: Roger Reuver*

4 PHASES OF BLENDED COURSE DESIGN AND DELIVERY

BLUEPRINT: Setting the big picture

STORYBOARD: Weaving the learning journey

DEVELOPMENT: Creating a quality experience

IMPLEMENTATION: Facilitating a dynamic experience

This manual will guide you through the major phases and activities concerning the design, development, and implementation of a blended course for landscape professionals.

This is the second of a three-part series. The first part of the series gave the conceptual underpinning for landscape learning, landscape professionals, and blended learning approaches. The third part of the series, instead, will provide a library of tried and tested learning resources that you can consider including in your landscape learning blended course.

The content presented in this manual is derived from the experiences of the Wageningen Centre for Development Innovation (WCDI), which is part of Wageningen University & Research. WCDI has been delivering blended courses to landscape professionals for many years, and we are enthusiastic to share our experiences and recommendations. The process we present here incorporates models, concepts, and terminology from several external, pre-existing sources. These are referenced throughout, and we encourage you to continue learning by exploring them.

You can use this manual as a reference when designing and developing any blended course (even if fully on- or off-line).

In general, the process we present here is built around four distinct phases, each with specific activities:

1. The 'Blueprint' phase is the first step of the design process and sees an exploration of learning needs, learning objectives, major course topics, and major logistical decisions.

2. The 'Storyboard' phase concerns the detailed planning of learning activities aligned into a structured modular curriculum focused on the learners' experience.

3. The 'Content development' phase sees collaborative creation of engaging learning resources and materials.

4. The 'Implementation' phase sees you provide and facilitate a safe and dynamic learning environment that guides your learners towards a successful outcome.

Some might argue that a fifth phase dealing with the closing or evaluation of a blended course after completion is missing. However, in our experience, it is beneficial to include this section in your design and implementation phase. We propose that you "design with the end in mind." This implies that you should be explicit about course outcomes, completion or certification requirements, already in the early design process.

Using the manual

This manual does not present an exhaustive list of steps and considerations to use when designing a blended course. Rather, we have zoomed in on key issues that are commonly overlooked, not given sufficient priority, or only given attention too late into the process. Below you can find a summary of the topics that are covered in the four phases:

BLUEPRINT	STORYBOARD	DEVELOPMENT	IMPLEMENTATION
Learning needs & objectives	Workshop format & process	Session & activity planning	Facilitating learning
Outcomes & certification	Modular design	Assessments & assignments	Professional learning styles
User experience	Learning activity diversity	Flipped classroom thinking	Energy & motivation
Course logistics	Logical flows & structure	Using imagery	Closing off the course

PHASE 1: THE BLUEPRINT

The starting point for your blended course design is to have a clear blueprint.

A blueprint will outline to following things:

- major decisions on which your blended course will be based; your target audience of learners and what they need to learn;
- key learning outcomes or objectives, also in light of client/commissioner demands;
- the choice between building an online course, a face-to-face one, or a blend of both;
- the expected duration and rhythm of your course and what it means to finish and pass it.

It is not essential to have definitive answers to all these issues immediately, but it will help with your modular design afterwards.

This section is structured around clear actions to help you answer these critical questions:

Understand learning needs ▶	**Set clear learning objectives** ▶	**List major course topics derived from learning objectives** ▶
Set course duration, rhythm, and expected time commitment ▶	**Set clear course outcomes and certification requirements** ▶	**Confirm major logistic decisions** ▶

There are many ways to complete the blueprinting stage, and this varies from individual planning to single team meetings, to a set of specific encounters and activities. Of course, the size, budget, scope, and format of your course will dictate the nature of your blueprinting activities. However, we strongly encourage you to touch on each of the topics we discuss here.

Food Security in a Changing Climate Course 2019

1.1 UNDERSTANDING THE LEARNING NEED: PERSONAS & CAPACITY NEEDS ASSESSMENTS

Do you know your learners? In many cases, you will have access to a specific group of learners for which you will design a course, but it is also common to develop a course for people you will not meet or know, as for MOOCs (massive open online courses). If you have access to your learners before the start of the course, you can directly evaluate their capacities and needs and use these as a basis for design. We will touch on this more in the next section.Whatever the case, you will need to have at least a working awareness of who you think will take and benefit from this course and how.

Exploring what you can about their reality will help you design a course they can successfully participate in.

Example personas detailing useful information to help design relevant courses for potential learners

Learner personas

Creating personas is a key step in user experience focused design (UX design), and it is very common in the creation of digital/online services and technologies. A persona is essentially a description of a generic character that you think might use the product you are developing. As such, the exercise to develop a persona for your blended course is mostly relevant when you are developing online or blended courses in which you have online, or open/community learning elements.

There are many elements that can go into a persona, and the choice is yours as to how detailed they'll be. Here are some examples: as you can see both personas give a rough description of the individual and their professional background and capacity. However, the second description goes quite far in terms of assessing the traits and needs that will influence the learner's engagement in the process.

You can see that both personas use names and images for the hypothetical person, to help the designer envision who they consider will be the learner.

The template on the next page serves as a useful starting point and asks you, the designer, to really think about who you are developing your course for.

Table 2: Example of questions and topics to address when creating personas

GENERAL	MOTIVATION FOR ASKING
Name	Xxxx
Age	While not essential, it is useful to know what stage of their career your learner might be at.
Country	Keeping in mind your learner's cultural background can be beneficial for design, not to mention for thinking about the timing of synchronous events.
Urban/rural	Aside from patterns of connectivity, whether a person lives in an urban or rural setting can inform what their daily reality is, and the likelihood of them understanding the nuances of other learners' cases and course content.
Gender	Thinking about your learner's gender is essential to ensure that cases and content are gender-sensitive and relevant for diverse experiences.
Family status	Thinking about whether learners might have children, for example, can help you design around issues of time commitment and scheduling.
Hobbies	Thinking about potential hobbies may open novel ideas for informal elements in your blended course design.

EDUCATION	MOTIVATION FOR ASKING
Formal education level achieved	An almost essential consideration is to ensure a standard minimum education without which attending and completing your course would be difficult.
(Digital) Literacy level	This is not just the ability to read and/or write, but also to what extent people can use digital and online tools.
Professional training/capacity	It is useful to consider what additional training your learners may have had from other sources.

PROFESSION	MOTIVATION FOR ASKING
Occupation	It is essential to know what is expected of your learner; what functions do they have to complete to fulfil their professional role
Professional motivation	This can be different from their boss or your commissioner. What motivates them at work?
Working location	Are they an active field worker or entirely office-based? Do they have to travel to have access to the course and perform?
Problems encountered	What are the major challenges they encounter in their profession, and what are those that your course might be able to help with?

COURSE ATTENDANCE	MOTIVATION FOR ASKING
Motivation to take this course	Why are they attending your course?
How will it benefit them?	What is the change they hope to see, and what could this mean for them two years from now?
Will they need help and attention with something specific?	What will you have to watch out for, so they feel welcome, appreciated, and supported?
What barriers might they encounter?	What problems could they encounter during the course–either regarding content and flow, or in their own reality while taking the course?

Creating a persona for a potential course learner can be done individually by you as course designer. However, you might find a benefit in consulting others with knowledge on your potential learners. Some basic steps that can help you complete the persona exercise are:

- **Arranging a meeting time** with the course development team. Share an empty persona template in advance and ask to develop a persona based on their knowledge of the audience they want to build this course for.
- **During the meeting:**
  - Each attendee takes turns to quickly share a persona. They should introduce the persona as a person they know or are familiar with.
  - Colleagues write down what they easily connect with in the persona description that each one gives, pointing out what is correct and what might require some elaboration.
  - After each colleague has shared their persona, the meeting lead gives space to gather/share all the agreeable elements that people shared. If there are no questions or hesitation, then these elements are accepted.
  - Next, all the points that require elaboration are aligned together. The group should discuss each one of these potentially contested elements. In doing so, new learning about the audience should emerge. In this discussion, encourage colleagues to give examples from their own experiences. The group should agree on which elements should not be included.
  - The team should agree to further develop at least three final personas, giving attention to gender, global location, and sharp differences in education, profession, or connection to the course's topic.
  - The final personas should be shared with the entire team for confirmation.

Assessing capacity needs in a pre-course assignment

The personas exercise we just shared with you is particularly relevant when you have no contact with your audience before the course design and development takes place. Yet, there are many instances where you can interact with learners pre-course, particularly when designing and developing face-to-face courses.

Completing a capacity needs assessment is a common practice to identify learners' specific needs and objectives. There are many templates and processes for completing a capacity needs assessment, but in general, common elements include determining:

- What is the role/function of the learner?
- What are the most common activities they engage in in their role?
- What are they supposed to deliver/achieve in their role?
- What training/qualifications they already have relevant to their role?
- What challenges do they encounter in achieving strategic aims?
- What ambitions do they have for the future?
- What do they feel are particularly interesting topics/ tools/approaches to learn about?

In designing effective blended courses, you are strongly encouraged to take completing a capacity needs assessment as an early design step. The process can be very different depending on your awareness/access to the audience. Good capacity needs assessments are more than simple question-and-answer templates. Ideally, when you can assess their capacity needs, you also should encourage your learners to share their story.

When developing blended courses for landscape professionals, it is useful to ask about their landscape cases. To support this process, it is common to share introductory content. Doing so encourages learners to think about their work and ambitions before the course starts, aligning them to their upcoming learning experience. You, as the course designer, are learning about them and putting them in a learning mindset.

GLF Indonesia, Photo: Ulet Ifansasti, CIFOR

The results of the capacity needs assessment–whether completed in a case-based pre-course assignment or not–are extremely valuable to help with the blueprinting phase of design.

1.2
SETTING CLEAR LEARNING OBJECTIVES FOR YOUR BLENDED COURSE

Afrormosia growing scheme Kisangani, DRC. Photo: Axel Fassio, CIFOR

Now that you have a clear image of who might be your typical learner and their needs, it is time to agree on and specify what you wish to achieve with your course. If you are developing a blended course, it is likely that you've been commissioned by a client or colleague to do so. You will therefore already know something about what should be achieved, or at least what your client thinks should be achieved. However, it is vitally important for you to know that your learners will also have specific needs, objectives, or interests for attending the course and learning something new.

Specific learning objectives should be explored in the Blueprint phase and described as early as possible. They can range from improving knowledge on a topic or the skills to implement change around that topic, all the way to learning about other global cases, networking, or improving career prospects. These diverse goals all need to be understood to some level and considered for the design of your blended course, in order to deliver something the target audience will benefit from and be enthusiastic to participate in.

Are your team's aspirations aligned?

If you are creating your blueprint with a group or team, take a short time to complete this eye-opening step:

- Ask everyone present to write down their own aspiration for the course in one short sentence.
- Secondly, ask everyone present to write down in one sentence why they think learners should be enthusiastic to take the course.
- When everyone is ready, have them show their responses at the same time, and then explore each answer.
- Did any differences emerge? Discuss what this means and how to accommodate your teammate's different aspirations.

Bloom's Taxonomy

Later, during the Storyboard phase, your learning objectives will shape your learning activities. Bloom's taxonomy is a hierarchical structure of educational objectives that encourages course or curriculum developers to consider the instructive impact and value of what they are delivering to learners, and in what manner.

In doing so, it is useful to consult the taxonomy when considering what your learners might need to be able to do after the course. Whereas the full Taxonomy covers three distinct domains, the commonly used one is the "cognitive domain" knowledge one, which is presented in graphic.

In the Blueprint phase of blended course design, it is useful to consult the taxonomy and ensure that learning objectives or outcomes ideally go beyond remembering or understanding, so that learners are attracted to and benefit from more advanced skills.

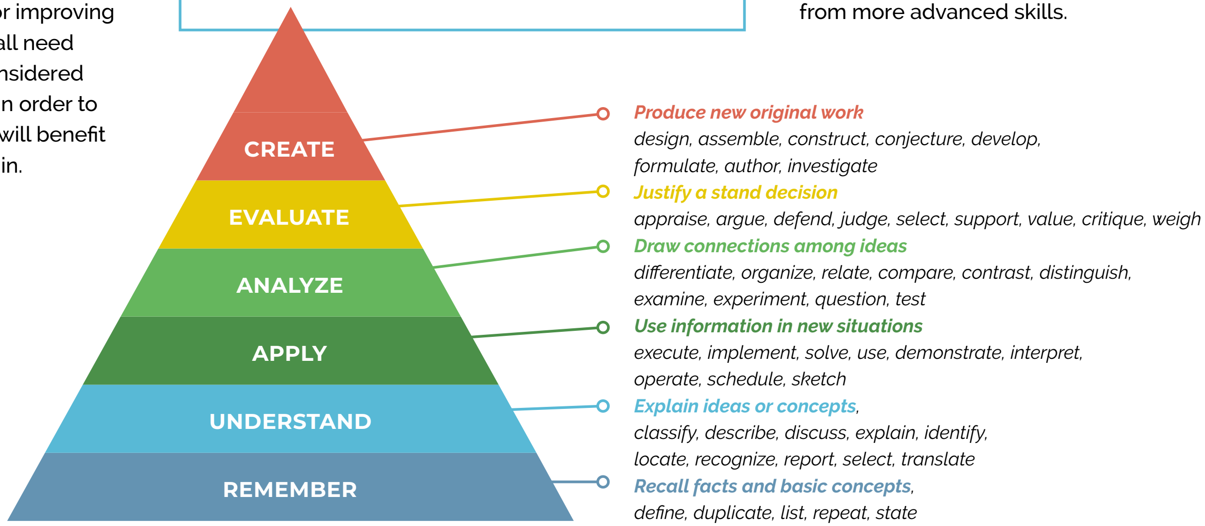


***Figure 3:** Bloom's taxonomy of learning objectives*

1.3 LIST MAJOR COURSE TOPICS IN LINE WITH LEARNING OBJECTIVES

Although most of your curriculum's development happens in the storyboard phase, it is very useful to be explicit about the major topics that your course will cover from the very beginning. This is a relatively easy and quick step, and you will likely have these topics in mind from your work to elaborate specific and clear learning objectives. Still, being explicit about the course's main topics will help you in numerous ways:

1. If you will market your course openly, having a clear overview of the topics that will be covered will help you attract participants. Potential learners want to know whether the course is for them or not.
2. Taking stock of the topics you intend to cover can help you be realistic about the proposed timeline and expected time commitment of your learners. If you have too many topics for the time available, you will have to make choices including prioritising and dropping content, or making some sections elective, giving your learners the possibility to choose.
3. Having an overview of the major topics might highlight the need for external support; it's rare for a single course leader to deliver all the content.
4. Having an overview supports any interactions with the course/project commissioner. Checking regularly with them helps to ensure they are satisfied with the end-product.

1.4 SETTING COURSE DURATION, TIME COMMITMENT AND RHYTHM

After discussing the above elements of your blended course blueprint, you will start to have a clear picture of the course: you know who your learners are and what should be achieved, you have a clearer picture of possible course topics, and you might even have a fixed course duration dictated by your commissioner or budget.

In some cases, though, you might be choosing course duration yourself. This will vary wildly depending on the type of blended course you are developing, the number of attendants, and the type of certification/accreditation required to participate. There is no set framework for the duration of a blended course, but keep these tips in mind when choosing an appropriate course duration:

- If possible, discuss the duration with the course development team and intended participants. Discover any other pressing commitments that might interfere with attendance.
- Try to discover how the course relates to major holidays in the countries of your learners. These might be Christmas or other religious festivities, or summer holidays–particularly if schools are closed for a long time, which means that learners who are also parents might not be available.
- If your blended course runs for more than eight weeks, be sure to give space for a break of at least one week to allow participants to keep up with the course content or their other professional/personal commitments.

Learners decide duration

- In some cases, particularly online self-paced learning such as MOOCs, course duration is not really an important factor.
- Learners are most commonly able to progress at their own speed and once some sort of moderation support is available, the course can in theory run itself.
- This changes when facilitation of learning is more active or when synchronous elements are entered into the design.

Estimating learner time commitment

A very common question from learners is, "how much time will it take for me to complete the course?"

Calculating study hours for is a difficult task. Although it is relatively simple to calculate the amount of synchronous study hours in a course, when more asynchronous learning takes place, this becomes harder, since people learn at very different speeds. It becomes particularly problematic when a blended course offers different forms of media and learning pathways. For example, some learners will always take more time compared to others when developing their own cases.

However, there is a short and simple solution to this. The best approach is to roughly estimate how much time you would put into completing the asynchronous elements of a course in blocks of 30 minutes. Once you have that, add it to the known number of contact/synchronous elements and you have an approximate figure.

Some 'rules of thumb' can help estimate learning commitment:

- An average reader employs 5-7 minutes to read and absorb a standard A4 page of technical text with around 450 words.
- The average learner will watch an educational video as part of a course twice, so double the video duration.
- The average learner will read an assessment question and answer options at least twice.

Monitoring time commitment

- After the first iteration of the course, this is one of the clearest pieces of information that you will receive.
- It is important to use your learners' experiences to refine both how you express course time commitment, and how much content you put into your course.

For example:
An online course programme runs for 4 weeks. There are two live sessions per week of two hours each. There are also various self-study components for learners to engage with. Each week, there are two, ten-minute videos with accompanying texts and an assignment, and you advise learners to spend no more than two hours on it. For the last week, instead, there is a one hour assessment.

Therefore:

- Live sessions: 2 x 2hrs x 4 weeks: 16hrs
- Videos: 2 x 10 mins x 4 weeks: circa 3hrs (re-watching)
- Texts: 1hr x 4 weeks: 4hrs
- Assignment: 2hrs x 4 weeks: 8hrs
- Assessment: 1hr x 1 week: 1hr
- Total: 16+3+4+8+1 = 32hrs total, or 8hrs per week.

In describing this to your learners, always give an estimated time range (e.g., 25-40 study hours). They will then get a rough idea of how much time they will allocate for the course overall.

Course rhythm

Helping learners know where they are in the course and when they are expected to complete specific learning activities is very beneficial, as learners appreciate consistency and predictability from educational experiences. Therefore, putting attention on your course's rhythm is essential. A course's rhythm is a schedule that repeats across the course. It varies according to the course type and logistics, but some basic principles can be applied in all instances:

- If your course runs for several weeks, **use a typical week** as the basis for your rhythm, and state what happens each day, Monday-to-Friday.

- Your rhythm shouldn't focus on specific topics or content, but rather on the **types of learning activities** that your learners will engage in. For example:
  - Monday: Self-study
  - Tuesday: Live plenary session
  - Wednesday: Group meetings on assignment
  - Thursday: Live plenary session
  - Friday: Self-study

- Set **synchronous course moments** first. These are the main elements of quality learning. These moments should be clear for learners as they must be present, whether face-to-face or online, and might need to plan around other commitments. If online, these need to account for time-zones; if face-to-face, they might need to consider for travel concerns such as public transport schedules or rush hours.

Indonesia, Peatlands restoration Photo: Aris Sanjaya, CIFOR

- Set **clear deadlines** for assignment sharing and share them repeatedly. It is useful to regularly remind people of when content is to be expected, and if there is flexibility or not.

- Set **clear times** for when new content becomes available. For online courses in particular, our experience shows that some learners advance faster than others and become lose interest if they don't know when new content can be accessed.

Setting the rhythm in the blueprint phase is not essential and can come during or after the storyboard stage of design. However, it is beneficial to consider it in this phase, as the space and time given for certain course elements may highlight limitations you are not already aware of.

1.5 SET CLEAR COURSE OUTCOMES AND CERTIFICATION REQUIREMENTS

Research on the Afrormosia tree, Yangambi, DRC. Photo: Axel Fassio, CIFOR

Designing with the end of the course in mind

Across the various design and development phases, it is easy to lose sight of what you are aiming to achieve with your course. Thinking about how you will assess the impact of your course can help make sure that every aspect of it is geared towards achieving the learning objectives you outlined in the blueprint.

More specifically, how will you know that you learners achieved the set learning objectives? Developing assessments helps you set clearer design goals, supports learners in keeping track of their achievements, and provides more structure at the start of the design process. It will also help you see whether your aspirations for the course and the learning objectives are realistic. Achieving alignment between your aspirations, learning objectives, and assessments is an important basis for the design of your course.

In the storyboarding phase of this manual we dig deep into assessments. But thinking about how your learners complete your course, and even what constitutes a successful learning experience, is also important in the blueprint phase. This is because you might want to consider assessments as a major learning activity, and think about a certification of completion or competence.

There are several things that can constitute "completion" for a professional blended course. Deciding where yours stands on this spectrum requires some thinking.

Below are some of the considerations that need confirmation to provide learners with a path to success and a clear course end.

Certification

The vast majority of learners want to have their accomplishments officially recognized. Most will be satisfied with a certificate of completion, whereas other learners might want more:

- A certificate of completion attests that the learner has attended and completed at least a set minimum of the course's curriculum. It says nothing about the quality of their contribution or what they have learned from the experience.
- A certificate of competence shows that the learner has taken on new knowledge and/or skills, and that the course instructors have assessed and verified this competence in some way.

It is relatively easy to develop and award a certificate of completion for your blended course and, in most cases, you are free to set the minimum attendance standard as you see fit. Commonly, this is set at 80%, but this is heavily dependent on many factors in the blended design. If you are to pursue a higher-level certificate of competence, you will need to incorporate some element of assessment in your design. Later in this manual we will support you to do so.

Non-certification

As course lead, you can decide when to not award a certificate. If a learner seems on track to fail the course or miss out the chance to earn their certificate, it is important that you quickly discuss this with your team and the participants themselves. There may be reasons for the poor performance. You can consider them and find a solution. In this case, it is beneficial to have a ready-to-share document spelling out the process and standards that the participant should adhere to if they are looking to earn a certificate.

Accreditation

If you are developing a course according to a legally recognised formal educational standard, that's great! However, this manual will not help you with this. Most accreditation bodies offer supporting materials to help guide your course design, development, and implementation. We encourage you to seek the relevant body in your own country and industry.

Ceremonial moment

Participants usually enjoy and benefit from a public recognition of their achievements, so we recommend to organise and facilitate a ceremonial close to the course if possible. This could be the moment in which participants receive their certificates, or when they publicly share some key learning or their next steps. The format and content of such a ceremony is open to your own creativity, but remember to give everyone their moment!

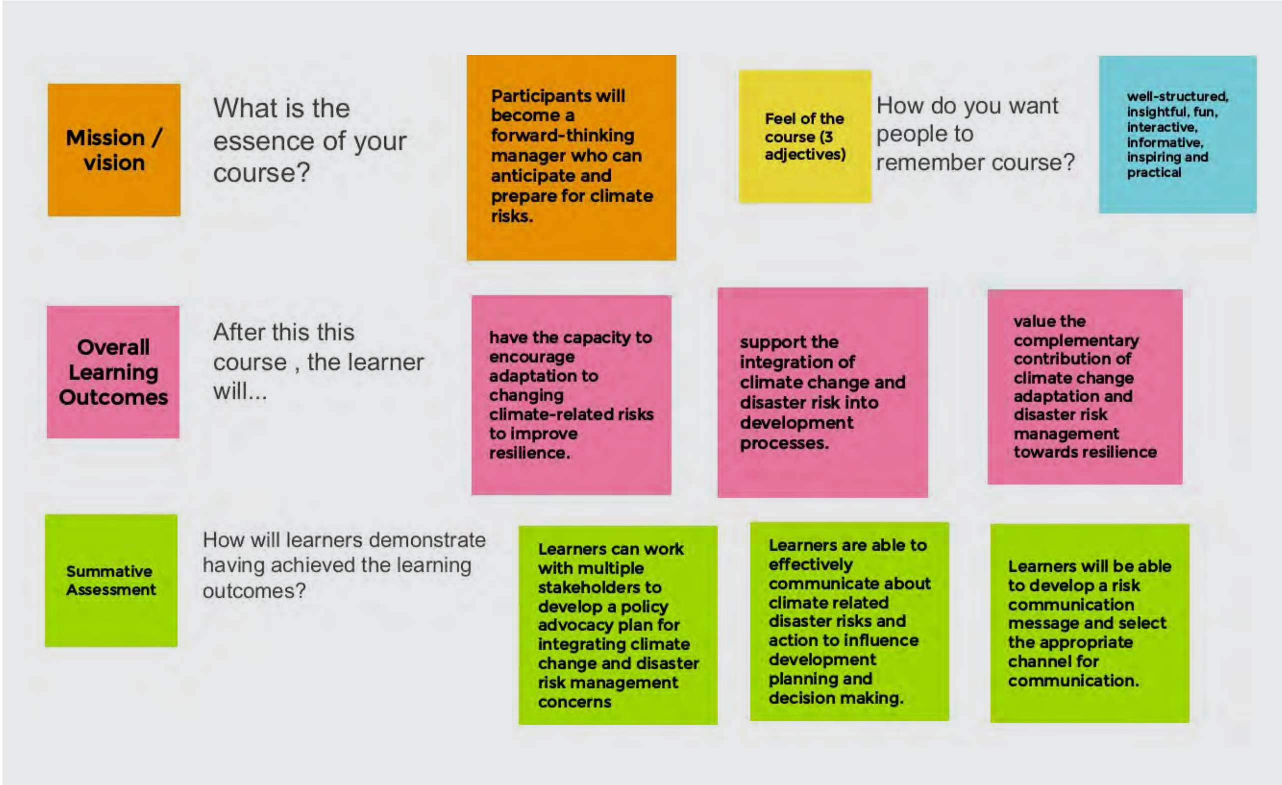
1.6 CONFIRM MAJOR LOGISTIC DECISIONS

In the blueprint phase you will take major decisions in line with the Jukebox model. You will be deciding the "who, what, when, where, and how" of your course and logistics will play a leading role in this. There is no set format for this important discussion. However, we have created a checklist which you can find below– containing useful information that can help you make decisions on course logistics.

***Table 3:** Important logistical considerations when organising courses*

ITEM	WHY CONSIDER THIS
Budget	Your course budget will determine a lot of what you do. Whether it is travel or face-to-face learning, how much budget should be spent on the course's design, development, and implementation, or where and how the course will be held are all early key factor to consider.
Project duration / timeline	The course may need to be live or completed before a specific date. Budget may need to be spent by a specific date. Such constraints have a large impact on design.
Number of participants	Whether there is a set number of participants and what this number is will be important to know. For example, allocating time for personal coaching and one-to-one feedback is more feasible for smaller groups.
Location of participants	Whether people are spread around the world or in the same room will shape decisions on almost every course element.
FACE-TO-FACE	**SPECIFIC**
Travel, visa, insurance costs and arrangements	If learner attendance is supported by the host, sufficient attention to how people are brought together is needed.
Classroom facilities and materials availability	The available technical resources for interactive work during course sessions will impact what is possible.
Security considerations Field visit/excursions	Whether there are safe options to visit real-world examples related to the course content opens excellent opportunities for learning.
ONLINE	**SPECIFIC**
Location/time-zone	The time that participants can be online informs synchronous session planning.
Internet connectivity and costs	Whether people can reliably log in for online course elements, and whether they are happy to do so, will determine their uptake of online course content.
Access to devices	Many people learn from mobile devices. However, some exercises might be easier to complete on a laptop. Knowing about your learner's device accessibility is important.
Access to software (potential geo-blocks)	Most learning software is freely accessible, some requires paid accounts. In some instances, USA-based software is restricted in countries by the US State Department.

Figure 4: Blueprint developed by G.J.M. Gevers for the online WCDI course Managing Risk in the Face of Climate Change, using the online tool Google Jamboard.



Rounding off the blueprint phase

As you can see from the above sections, there is quite some discovery and decision-making that happens during the blueprint phase! By now, you will have a much clearer understanding of what is going to happen during the run of your blended course. Now you understand why this will happen, how learners and other stakeholders will benefit, and what you need incorporate into your course design.

There are different templates for what the blueprint document might look like, and this will vary a lot depending on your course type, your own organisational processes, styles, and even your personal preference. We will not prescribe a specific template. However, we suggest that you check your blueprint ideas with a trusted colleague or contact, or someone who can point out any inconsistencies and offer fresh insights.

Now comes the truly detailed phased of the course design: the storyboard. Be sure to have everything and everyone you need with you as you move towards this phase, and seek help from someone who can help you point out any inconsistencies in your previous design phases.

Next you will find three examples of a blueprint. The first two were developed during an online meeting using Google Jamboard as a virtual canvas. The third one is a simple word table and has a different set up, including module specific information. It can therefore be seen as a more elaborate blueprint, with a storyboard basis.

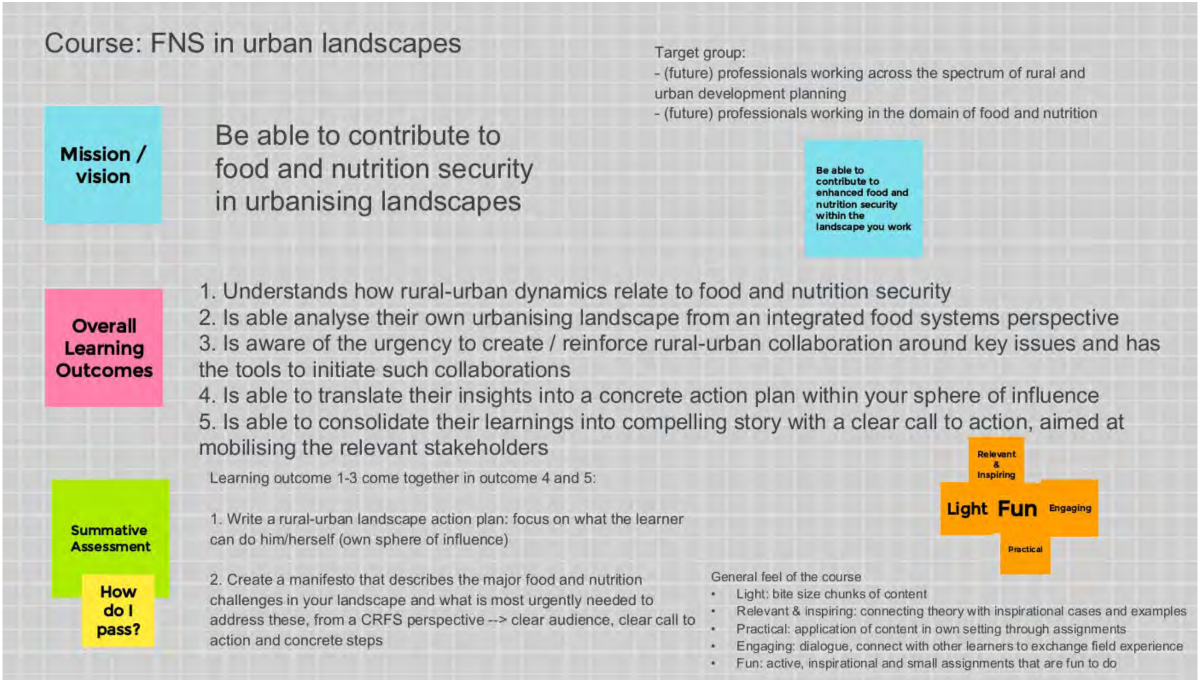


Figure 5: Blueprint developed by L. Roosendaal and T.J. Harding, with input from a team of FNS experts, for the GLF-WUR MOOC Food and Nutrition Security in Urbanizing Landscapes, published on edX.

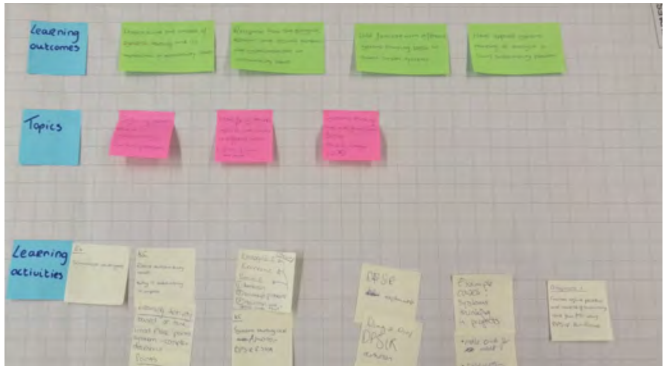
Table 4: Blueprint template developed by WUR instructional designers to inform MOOC design. Blueprint for the WUR MOOC Environmental Gamechanger – Lead the Way to Sustainable Development (previously Becoming an Agent of Sustainable Change), published on edX.

Title of MOOC	**Becoming an agent of Sustainable Change**
Duration	7 weeks
Hours per week	About 5hrs a week
Course level	Bachelor
Credits	1-2
General learning outcomes	After this MOOC, the learners: - Are able to critically discuss the concept of sustainability and reflect on its use by different actors in society - Have appropriated key competencies for sustainable development and put these into practice through a personal project - Are able to reflect on their own sustainability competencies and how they can apply these in their field of expertise and/or daily lives

Module title	**1. Dissecting Sustainability (introduction)**
Learning outcomes	After this module, the learners: - are able to understand and critically reflect on the concept of sustainability - have a general sense of the different topics covered in this course, what they will learn and what is expected from them- including brief explanation of sustainability competencies - are able to identify sustainability issues in their own environment
Key topics	- Sustainability and its uses in society (why sustainability, positive and negative uses of the concept) - Sustainability in your own environment - Sustainability competencies
Learning activities	Knowledge clips Recap questions Practice questions Discussions Questionnaire covering learner's current knowledge and idea of sustainability Identifying sustainability issues in your environment
Assignments	Step 1 of continuous assignment: Identifying a Sustainability Issue - Identify and select a sustainability issue in your own environment - Learners will use this issue as a case to base their continuous assignment on in the following modules - This case can also potentially become your personal sustainability project
Assessment	No graded assignment (but start working on your own sustainability project)
Teacher	T.b.d.

PHASE 2: THE STORYBOARD

Draft storyboard for one module



You should enter the storyboarding phase with a clear understanding of what you want your course to achieve. The storyboard phase is about adding as much detail and logic as possible to your plan, building a structure and flow that guides your learners' experience. This phase is also known as curriculum development. At WCDI, we focus on the storyboard method particularly when blending learning settings and incorporating online learning[1].

The core of this step is to take your aspirations for the course's overall learning outcomes and specify the content that needs to be delivered to fulfil them, as well as the most effective way to do so.

The result –the storyboard– should be a very detailed, visualised plan containing the course topics and learning activities. Your storyboard will help you paint a very clear picture of what your learners will experience during the pathway. Regardless of the type of course you are creating, making a storyboard can be an intensive and time-consuming process, so make sure to dedicate sufficient time and resources to it before the course's start.

Storyboarding can be an individual activity. However, it is best completed in a team of people with different perspectives and expertise. The process can take place in person, online, in one session, or in many. Yet, the best way to create one is during an intensive workshop. The process encourages brainstorming and ideas to flow, pushing creative and critical thinking. A deadline creates the necessary urgency to achieve at least a good first version. In this section of the manual, you are presented with the most common steps and considerations you'll encounter when completing a storyboard workshop.

The workshop output can look very different, depending on what course is being designed, and the organisation/people developing it. Commonly, it is a colourful and active visualisation. Below, you can see some examples, but you are encouraged to browse online.

In person storyboarding exercise. Both for the development of the WUR MOOC Environmental Game-changer – Lead the Way to Sustainable Development, published on edX

1: We use and adapt the thinking of Gilly Salmon and the Carpe Diem approach to learning design: https://www.gillysalmon.com/carpe-diem.html

***Figure 6:** Online storyboard for the GLFWUR MOOC Food and Nutrition Security in Urbanizing landscapes, developed using the online whiteboard Miro.*

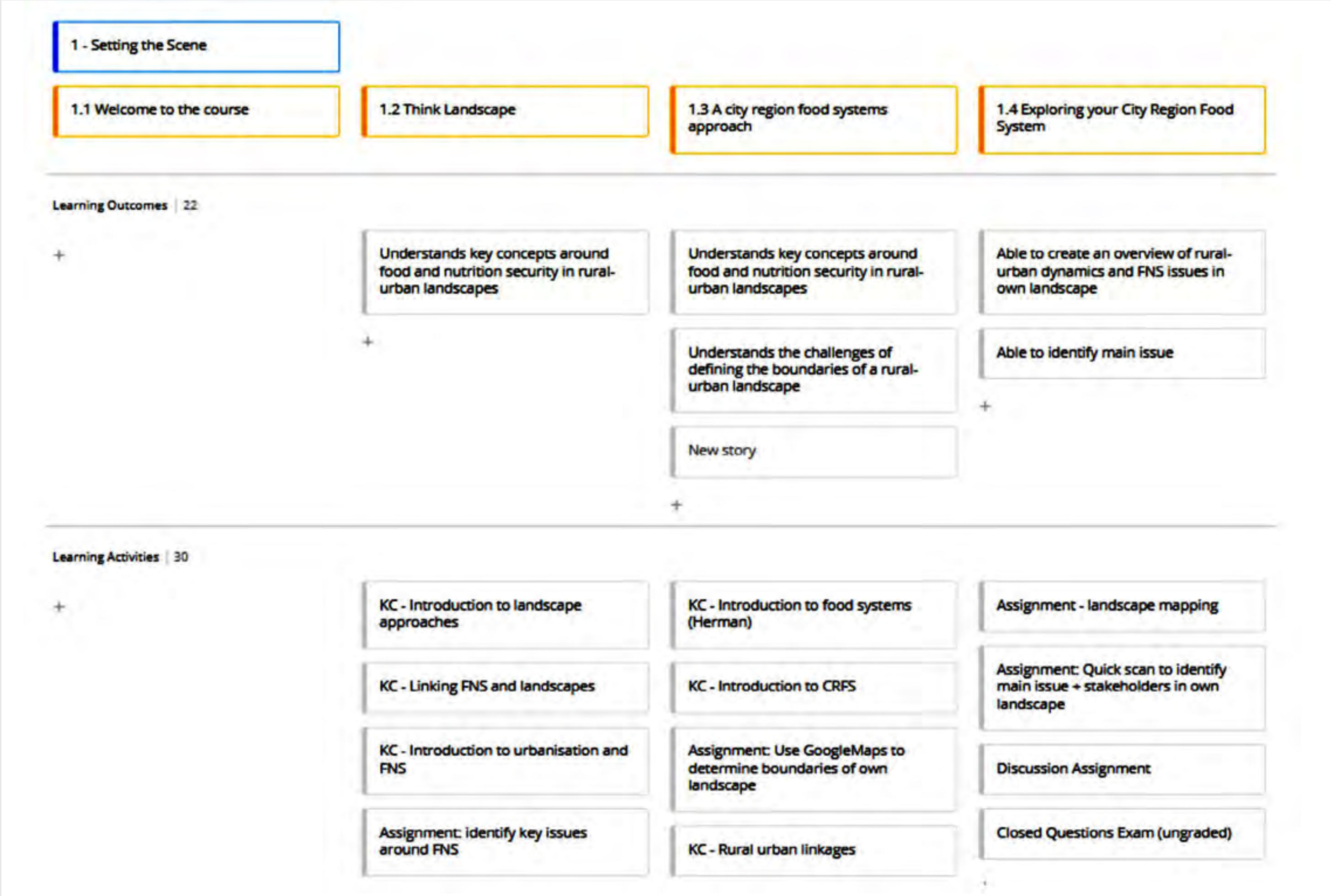


***Figure 7:** Snapshots from a storyboarding exercise done through Google Jamboard, for the online facilitated WCDI course Managing Risk in the Face of Climate Change by GJM. Gevers.*

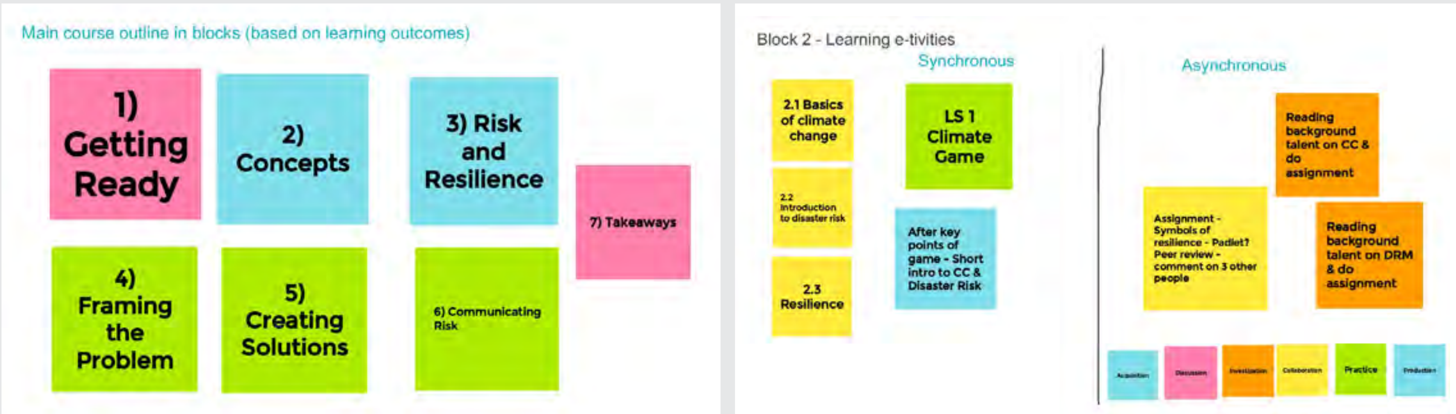


***Table 5:** Not a full storyboard, but an outline of the key learning objectives, topics, and activities per module for the GLF-WUR MOOC Climate Action in Biodiverse Landscapes, published on edX.*

MOOC outline - Climate action in biodiverse landscapes
Learning objectives:

- I can explain the basic principles of climate change and its impacts on biodiversity, businesses and sustainable development within a landscape
- I can apply participatory tools and methods to assess climate vulnerabilities and adaptation and mitigation strategies to support landscape decision making
- I can design innovative collaborative landscape interventions that address/combat climate change and identify potential sources of climate finance

Module 1 **Setting the scene**	**Module 2** **Climate impacts**	**Module 3** **Stakeholder collaboration**	**Module 4** **From impacts to solutions**	**Module 5** **Climate Finance**
Key topics:	*Key topics:*	*Key topics:*	*Key topics:*	*Key topics:*
Defining Climate Action	Climate projections, IPCC scenarios	Stakeholder dynamics	Impact chain	Climate Finance
Climate change science (basics)	Climate data	Stakeholder analysis	Climate measures	Business cases for climate
Climate change & biodiversity	Climatic and non-climatic drivers of landscape change	Multi-stakeholder partnerships (MSPs)	Case examples	Next steps
Landscape approach	Climate impact assessment	MSP for climate action		
	Vulnerability			
Video/knowledge clips	*Video/knowledge clips*	*Video/knowledge clips*	*Video/knowledge clips*	*Video/knowledge clips*
1. Climate Action	1. Climate projections	1. Stakeholders dynamics	1. Impact chain assessment	1. Climate finance
2. Get a grip on Climate Change: Course overview	2. Working with climate data	2. Stakeholder analysis	2. Identifying and prioritising climate solutions	2. Climate finance for nature based solutions
3. Climate change science	3. Climate Impacts at landscape level	3. What are MSPs (Rationale of MSPs for landscape climate action)	3. Importance of nature-based climate solutions (incl examples)	3. How to develop a business case for climate
4. Climate change & biodiversity interconnections (intro)	4. Climate impacts on biodiversity	4. Principles of MSPs	4. Adaptive Capacity Assessment (theory)	
5. Landscape approach	5. Climate impact assessment	5. How to design & facilitate MSPs for landscape climate action	5. Adaptive Capacity Assessment (tool)	
	6. Vulnerability			
	7. Climate vulnerability assessment (CVA)			

2.1 THE STORYBOARD WORKSHOP

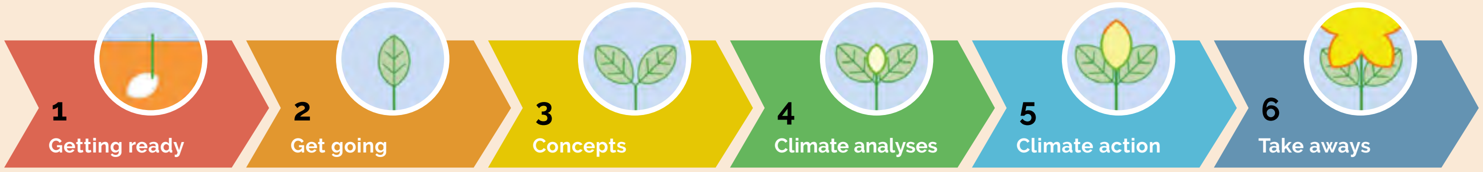


***Figure 8:** Course flow visual developed for the online facilitated WCDI course Food Security in a Changing Climate, by GJM. Gevers and I. Hennemann. The course flow image helps participants to gauge their progress in the course. Visual by: https://www.moniquevandenhout.nl/*

Set up

Regardless of the setting–which can be online or in person–storyboarding is best done in an intensive workshop format, with the whole team of course developers present to provide input. It is also helpful to have someone facilitate the process. A facilitator can keep track of time, ask questions to advance the process and specify the details, while making sure everyone is being heard, and keeping discussions focused on the goal. The time needed for a storyboarding exercise differs depending on the size of the course being developed, and can take up to a few days. The first step is to get your team together, either physically or virtually. It is important to create a setting that allows for a dynamic and creative group activity, while giving the possibility to visualise the process while collectively contributing to the same design.

A big whiteboard or sheets of paper with post-its or a digital equivalent are recommended. Working with (virtual) post-its on a canvas of some sort supports the creative process and has the advantage of providing an overview of the course design, ensuring short and concise contributions. Moreover, (virtual) post-its can be moved around, making it easy to make changes in the course set up.

The steps below describe a possible storyboarding process, which is based on our own experiences facilitating design sessions with colleagues for different types of courses. These steps follow our approach, which is informed by curriculum development processes like the Carpe Diem workshop developed by Gilly Salmon.

Formulate a course wish: "What do you want learners to say about your course?"

If your learners were to describe their experience of the course to their colleagues, what would you want them to say? Besides the learning objectives and content you want to deliver, you'll want to think about the kind of experience you wish to provide. Do you want your course to be inspiring, relevant, interactive, or demanding? If so, what does this look like? What makes a course inspiring? Maybe this means providing diverse case studies that show learners the kind of impact they can make. If you want to develop a demanding course, what does this mean, and what will the effect be on your target audience?

A way of getting everyone's input on this is to ask participants to take a few minutes to individually write down three adjectives on (virtual) post-its that reflect their take on what the course experience should be like. When everyone has written down their adjectives, the facilitator can initiate a discussion. This step should conclude with a selection of adjectives that inform the course design, and that everyone agrees upon.

Agree on module/block titles and content

Now it's time to think of the main structure of your course, the blocks or themes (from here on referred to as modules) in which the content of your course will be organised. These should be based on the overall learning objectives that you have formulated in the blueprint. Write the modules' titles on post-its and place them in sequence on the (virtual) board. Make sure that each module has its own learning objective. The sequences of modules you come up with forms the framework upon which you build the rest of your course. You can later visualise the overall structure in a course flow image that clearly communicates the course content and logic to the learner. A clear and attractive course flow image that you may elaborate on with dates and topics, helps to guide the learner through the course. See the image below for an example.

Develop assessments for the learning objectives

Before further specifying the content of your course, it is a good idea to think about how learners will demonstrate having achieved the learning objectives you've formulated. In other words, we're talking about assessments. Having a detailed idea of what learners need to produce, show, or do, and what the criteria against which you will measure their success are, allows you to design and develop content with very specific goals in mind. That is, assessments provide a more detailed goal for what you're trying to achieve. This makes it easier to ensure relevance and alignment between learning objectives and course content. When designing assessments, you can help yourself by creating an assessment rubric in which you specify the criteria against which learner performance will be assessed. This, however, will require some thinking. If you want to develop rubrics, we advise you to allocate some time for this. You will find an outline of the basics of assignment, assessment, and rubric later in the manual.

Assign specific learning objectives to each module

The next step is to further specify a set of supporting learning objectives for the different modules. This means thinking about lower-level learning objectives that need to be achieved in each section of the module to fulfil the overall learning objective you formulated for it (see Bloom's taxonomy). During this step you will have to keep in mind what your learners need to know and do in order to successfully pass the assessments you defined in the previous step (e.g., the rubrics you developed). Write down the learning objectives you think of on separate post-its and discuss with the team. When you agree on a set of supporting learning objectives, place them below the overall learning objectives of each module.

Module	Module learning outcome	Sub-learning outcomes (submodule level)	Sub-learning outcomes (unit level)
M1 Setting the Climate Scene	I can explain why the landscape is a good entry point to undertake climate action and why integrating biodiversity in climate action is essential.	I can explain how climate change and biodiversity are interconnected	The learner can give a definition of biodiversity and a biodiverse landscape
			The learner can explain why biodiversity is essential to human well-being
			Ther learner can explain how climate and human induced pressures affect biodiversity and vice versa
			The learner can give some concrete example of climate change impacts on biodiversity
		The learner can explain why conservation is an important climate change measure	The learner can explain why maintaining biodiversity increases ecological resilience to climate disturbances*Healthy ecosystems are imperative for the earth's capacity to mop up C02
		I can explain the landscape approach and its application as a starting point for climate action	The learner describe what a landscape is
			The learner can list the 10 principles of a landscape approach
			The learner can analyse the different functions in a landscape
			The learner describe how climate change is impacting these differet landscape functions* negative (and positive) impacts on e.g agriculture, natural areas, water bodies, urban areas, species migration etc.
			The learner can explain why and how the landscape can function as a starting point for joint climate action

***Table 6:** Course design based on detailed learning objectives by I. Hennemann and T.J. Harding for the GLF-WUR MOOC Climate Action in Biodiverse Landscapes.*

Brainstorm the content needed to reach the objectives

Now that you have a set of learning objectives for each module, you can further specify the content needed to achieve them. You can do this by writing down the topics that need to be addressed on post-its and placing them below the corresponding learning objectives. It can be helpful to specify your learning targets into even more detailed categories (see image below for an example). This approach may be more time consuming, but you'll find that it pays off in terms of providing structure and ensuring alignment between your learning objectives, assessments, and learning activities–which we will talk about in the next step.

Chances are that you have a wealth of knowledge and resources you want to share with your learners. We know it can be difficult to keep things focused and concise when there is so much to be share and learn about a topic. You will have to be critical: is the content you come up with essential in fulfilling your learning objectives? If you find that it is not, park it somewhere outside of the course design. You can potentially use it as optional content. If you find that the content becomes too much for the time commitment you indicated, you may have to take a step back and reconsider some of your learning objectives. It is better to have fewer well covered learning objectives than many insufficiently ones.

In outlining the content of the course, it is also good to keep an eye on the structure. Depending on the platform you use to deliver your content, you'll have different choices for creating a logical configuration. Keep in mind that you don't want to offer too much content in one session, page, chapter, or whatever subdivision unit you are using.

Brainstorm on learning activities to reach objectives

After you have specified the content to be delivered in your course, it's time to think about how you will deliver it. We are talking about learning activities! In designing them, you can consult the ABC Curriculum Design framework, which outlines 6 types of learning activities that support the learning process both for in-person delivery, as well as online. The type of learning activity depends on the learning objectives you've formulated. The lower-level objectives specified in Bloom's taxonomy require different types of learning activities, compared to higher-level learning objectives.

During this step you will have to be critical and make sure that your activities support the achievement of the course's goals. Once in a creative flow, it can be tempting to include activities that are insightful and fun, but which may not help in achieving the aims you outlined in previous steps. Make sure that you don't put too many learning objectives into one activity and keep it at a maximum of two as a rule of thumb. Don't forget to keep in mind time commitment and other logistics.

Assess content and learning activities for diversity, relevance, duration.

After you've specified the "what, how, and when" of your course, it's time to take a step back and look your design in its entirety. It will be most effective when it contains a variety of learning activities, so we recommend to check it for diversity, as well as balance. If a certain type of learning activity is underrepresented, creating a more balanced offer may improve the

Optimal balance of synchronous and asynchronous learning

If you are developing a course that combines synchronous and asynchronous learning, make sure that you make optimal use of the two. This means reserving your synchronous learning for learning activities that require interaction or collaboration, and keeping asynchronous learning for the acquisition of knowledge or individual assignments.

effectiveness of your course. At this stage, it is a good idea to check whether the time needed from your learners for each activity is sufficient. You might also want to test if it's still in line with the estimations you made in the blueprint, and if this time investment is balanced across the modules. Lastly, check the relevance of your content and ensure that the learning activities truly contribute to achieving the overall learning outcomes of the course. This exercise will make it easier for you to figure out which parts of the design you can scrap, and to find out if you need to downsize it.

Check for alignment, flow, and structure

It can happen that adding details to your course design has altered its overall structure and flow, so it's a good idea to ensure that your course's flow still makes sense, and whether your structure supports it. A good indicator of this is to figure out whether you can capture this nicely in a visual (see the example below).

Moreover, it is good to check one more time whether your course aspirations, overall learning objectives, and assessments still align.

Complete 1st version and share for feedback

Are you happy with your storyboard? It is always a good idea to share your course design with others for feedback, as something might be logical for you but not for others.

Keep these points in mind when sharing your draft:

- Be open to critical feedback! Don't share it only with like-minded colleagues. Peers from other organisations or within your network can help, too. You might also share it with alumni of other courses you have been involved in.
- Think about what you want people to give feedback on:
  - Are the learning objectives and outcomes clear and logical?
  - Is the course process and objective described well and attractively?
  - Is there a consistent flow across the modules and proposed learning activities?
  - Do they perceive any imbalances, in particular relating to sync/async learning as well as group vs. individual learning?
  - What stands out as the most appealing elements to them? What stands out as needing improvement/clarification?

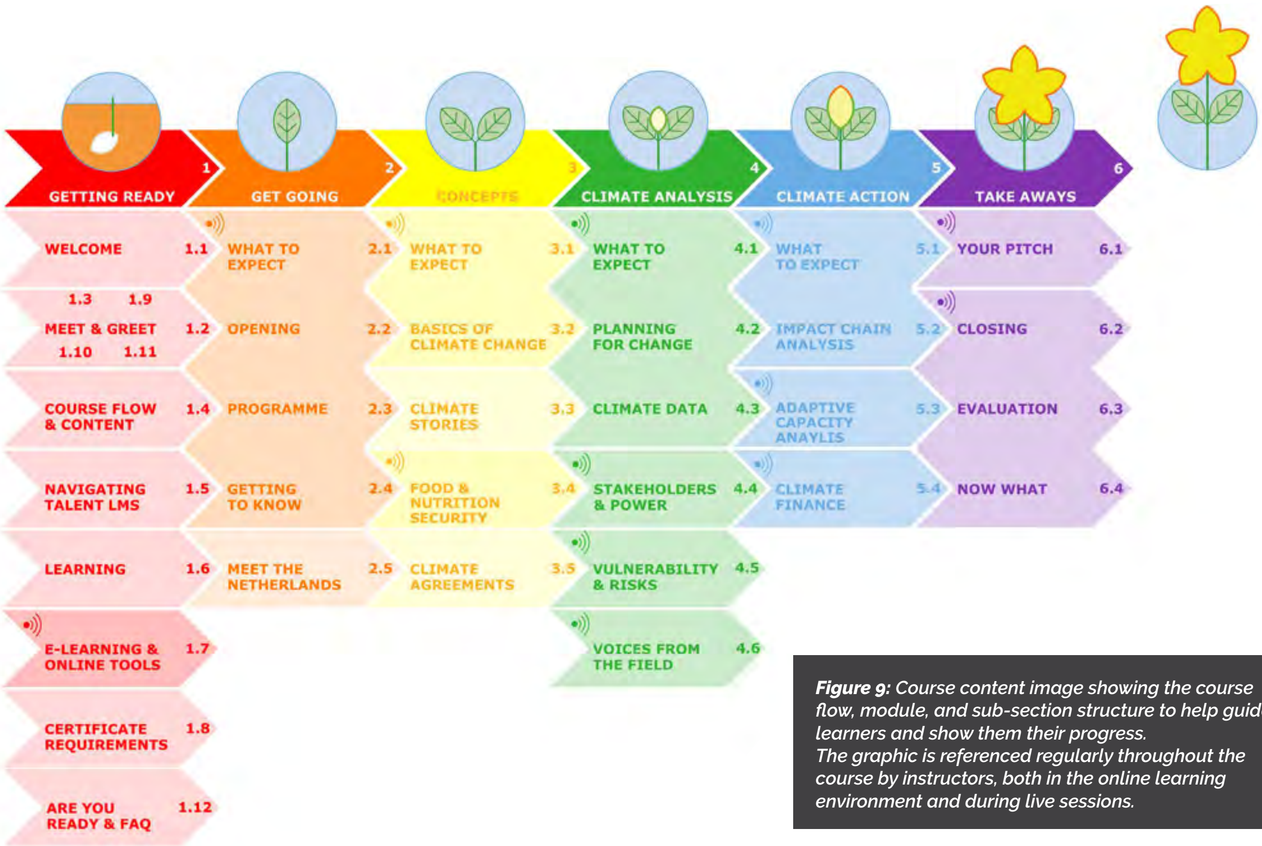


Figure 9: Course content image showing the course flow, module, and sub-section structure to help guide learners and show them their progress. The graphic is referenced regularly throughout the course by instructors, both in the online learning environment and during live sessions. Learners appreciate seeing their progress and knowing what is upcoming. Developed for the WCDI online facilitated course Food Security in a Changing Climate by GJM Gevers and I Hennemann. Visual by https://www.moniquevandenhout.nl/

2.2 DOING A STORYBOARD EXERCISE ONLINE OR IN PERSON

Indonesia, Peatlands restoration Photo: Aris Sanjaya, CIFOR

Doing a storyboarding exercise in person has its advantages. Standing, walking around, interacting, physically adding, removing, or relocating post-its, discussing and taking breaks together, can all help with the creative process as well as getting through the tougher phases of impasse or disagreement. It requires for the people involved to meet in the same space for at least a few hours. However, if this is not possible, storyboarding can also be done online.

If you want to do the storyboarding exercise online, the same principles apply: create a setting that allows people to work on the same medium simultaneously, allowing for a process of co-creation. Luckily, there are many online tools that allow teams to work together on the same virtual canvas.

When planning an online storyboarding workshop, keep in mind that not everyone is used to working with online tools, and they might need getting used to. Because the use of these devices should not hamper but support the creative process, it is important to ensure that everyone is comfortable using them before starting the exercise.

At WCDI we develop blended courses with online live sessions and an online learning platform for individual learning, a mix of plenary sessions, group, and individual assignments, and a blend of learning activities. Based on our experience in developing and delivering these courses we have summarised a few tips:

- Particularly in online settings, it is easy to underestimate the time needed to complete certain activities, and the risk of having too much content is high. It could be better to focus on fewer learning objectives, making additional content available for those who want it (e.g., optional "deep dive" sessions).
- If you are developing a course that requires learners to use online tools, or find their way individually on a learning platform, plan for time and activities to familiarize with the latter. For example, WCDI runs an online "technical check-in" session with all participants one week before the start of any course. This allows a first quick introduction to all the tools used in the course and the identification of any technical challenges. Such a process is the main reason WCDI courses universally get off to a good start.
- If you intend to make participatory learning an important part of your course (e.g., with a lot of interaction, group work, and peer feedback), make sure that you create an environment conducive to it. This means both logistically, and in terms of community formation. Invest time at the beginning of the course for participant introductions and novel games/quizzes that allow people to get to know each other's personalities. In the first formal session of the course set the "rules of the game" for a safe learning environment (more on this in the 4th phase).
- One-on-one time with the instructor/facilitator is usually highly valued by learners (e.g., in the form of coaching sessions) but requires a lot of time investment from the facilitators. Ways to increase a sense of individual attention would be to work with peer groups or a buddy system in which learners work more intensely with a small set of learners (e.g., for discussions and feedback). You can also significantly reduce the time needed to provide individual feedback by working with rubrics. The best would be a combination of the above.
- Online courses have the advantage that learners engage with the content in their own context, meaning that they can apply what they have learned directly to their work. Make use of this opportunity in your course!
- Ask learners to formulate their personal learning objectives at the start of the course. These could be content related but also include soft skills like speaking up in group discussions, improving their English, taking a leading role in group processes, etc. Letting learners think about what they want to get out of the course helps them feel accountable for their learning. Usually, there is a specific activity at the beginning of courses which promotes and encourages learners to share these objectives. In doing so, they commonly find that other peers have similar goals. helping them see each other as equals. You can come back to these personal objectives throughout the course (e.g., in the form of reflection assignments). Keep in mind that you may have fast, slow, and digitally challenged learners–if your course is online (e.g., bad internet connection). Thinking of ways to engage all three in your course design ensures that you do not lose learners at some point.

Indonesia, Peatlands restoration Photo: Aris Sanjaya, CIFOR

Additionally, we found that keeping in mind the 6 principles of blended learning as developed by Joitske Hulsebosch[2] is very helpful in designing effective blended courses:

1

Connect synchronous and asynchronous activities

This means using a combination of synchronous and asynchronous learning activities. An example would be a "sandwich" of activities, such as getting learners to choose and research a topic before a live session, having them present on it during the live session, and then apply what they learned in real life afterwards.

2

Use "pull," not only "push"

You want to motivate your learners to be assertive, engaged, and motivated. This generally does not happen when you offer everything on a silver platter, allowing learners to sit back and let instructors do all the work. It is better to motivate them to get out there themselves–for example by researching a topic and reporting back, interviewing people in their own network, etc.

3

Blend social groups

Learning from others happens best when you mix the social setup in which learners learn. You can think of mixing different setups like working individually, as well as having a "home base" group of learners that stays together throughout the course, or peer feedback sessions with other learners, small group discussions, etc.

4

Personalize

Learners tend to be more engaged when they can link or apply what they learn to their own context. Since you cannot cater to everyone's unique situation, you can "personalise" your course by offering optional content on specific topics, allowing learners to work on their own cases, asking them to apply what they learned in their own context, or allowing them to choose from different assignments. For instance, you can keep the set up the same, but the topic is different.

5

Stimulate Social learning

Spend some time at the start of your course to build a community in which learners feel motivated to share experiences with their peers. Each learner is an expert in their own way, and all experiences are input for learning. Make use of this by making learning from each other an explicit part of your course (e.g., a learning objective).

6

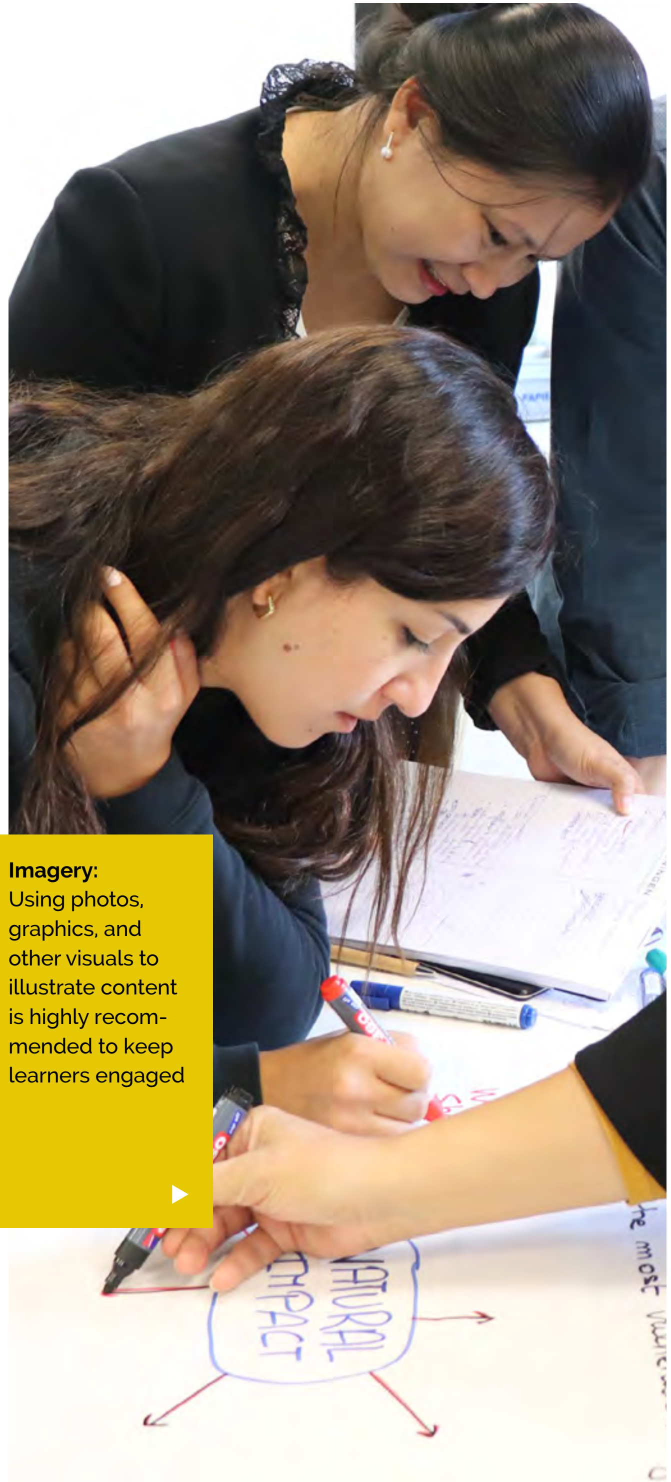
Nudge and Chunk: Bitesize

Try to avoid cognitive overload by keeping the content you deliver crisp and concise. Particularly in online education, cognitive overload tends to happen a lot faster than in face-to-face settings. It is better to combine a set of short learning activities than trying to cover a set of learning objectives in one long activity. Also keep in mind that breaks are essential to process information, so if you engage in live sessions, make sure you plan them out.

2: Source: Hulsebosch, J. & Wagenaar, S. (2021). Blended Leren Ontwerpen. Thema.

PHASE 3: DEVELOPING LEARNING RESOURCES AND ACTIVITIES FOR YOUR COURSE

Food Security in a Changing Climate Course 2019



Once you have completed your blueprint and storyboard, you have a clear picture of the content of your course. Now it's time to move to the third phase, that of content development.

Whether you are curating materials for an offline, online or a blended course, some common factors will determine the uptake and impact of that content on your learners. Obviously, depending on the type of content you are presenting, some design considerations are more important than others.

It is not our goal to guide you through all your content development steps. Rather, in this section, we want to highlight what in our experience has proven to be the key to success. In this section we will look at:

Session plans: You already heard about the need for clear structure and flow, and this is especially relevant for the vital parts of any course, the live sessions;

Flipped classroom thinking: Experience shows the benefits of having learners exposed to theory before coming to the live session for application and follow-up

Assignments and assessments: Creating engaging ways for learners to apply and prove what they are learning is highly motivating and excellent to enhance the learning experience

Rubrics to support learning via assessments: Whether your learners will be assessed by an expert or a peer, it is best to develop a rubric.

Maintaining structure and consistency: It is essential that your course structure is coherent and includes specific moments for learners to see where they are in the overall course flow

Imagery: Using photos, graphics, and other visuals to illustrate content is highly recommended to keep learners engaged

3.1 DEVELOPING CLEAR PLANS FOR LIVE SESSIONS

Busy professional learners

It is likely that your learners are attending your course alongside other professional commitments, so the time they can dedicate to attend live sessions might be tight. Help their planning and agendas by starting and finishing your live sessions on time.

Many professional learning courses have live sessions at their core. Face-to-face courses naturally have more of these interactions, but online courses increasingly seek opportunities to bring people together in live video conferencing moments.

This is because, generally, professionals learn best when talking, sharing, or listening to each other or experts. This "synchronous" engagement brings out the best in people. Learners ask questions and reflect better, and the learning environment is generally more dynamic and livelier than asynchronous learning and engagement.

However, completing an efficient and effective live session calls for real skill. Later on, you will learn about facilitating learning, an activity based on a clear and logical session plan. The purposes of the session plan are:

- To ensure the planned activities deliver the specific objectives;
- To ensure that your potential activities are suitable, given the time constraints;
- To ensure that your learners have sufficient time and space to engage with the content and activities without being rushed.

What's in a session plan?

You are encouraged to make a specific session plan for every section of your course, regardless of whether it is online or offline. And you are encouraged to set aside dedicated time for making your session plan and discussing it with any relevant colleagues. Such a document is not complex, and contains simple information such as:

- The date, time, and overall duration of the session;
- Information on where the session is held (offline and/or online);
- The specific objectives of this session;
- An agenda breakdown for specific activities and break moments;
- The roles of those in attendance, including the host, speakers, learners, and anyone else in "the audience."

The session plan can be a simple narrative text or perhaps a table. See here a generic session plan template and example:

Session title	Group assignments on landscape investments
When	Tuesday 1st September, 10:00 – 12:00 CEST
Where	This is an online session. Join the session here: ww.examplelink.zz/12321354
Session focus	Participants have been exploring videos on landscape finance. In this session, we will discuss in groups what take away lessons there are, and what these mean for our group cases. After group discussions, each group will present in plenary and give peer feedback.
Facilitator	Angela Adid

Table 7: *A simple example session plan for a 2hr live session*

SCHEDULE	ACTIVITY	WHO
10:00 – 10:20	Welcome, agenda and Q&A on content	Facilitator
10:20 – 11:00	Group work on cases	Case groups
11:00 – 11:15	Tea break	
11:15 – 11:50	Group presentations	Group reps.
11:50 – 12:00	Closing remarks and next steps	Facilitator

Sharing your session plan with learners

It is for you to decide whether you will share your session plan with your learners or not. Our experience shows that for some learners, having the session plan helps frame their preparation and ultimately their contribution to the session. At the very least, learners should know what is expected of them. Other trainers do not share a detailed session plan with learners, preferring to only talk about session contents at the beginning of each session. This can be done to prevent any misinterpretation of what will happen, but also to lighten the workload and reading of learners.

Some trainers also have two versions of their session plans: one for participants with general information, and one with additional notes for themselves and other facilitators. For example, they might have an additional column with points to watch out for, specific questions for learners at specific moments, reminders to mention specific examples, etc.

General tips on session plans

To close this section on session plans, here are some tips from our experiences with WCDI blended courses:

- Do share your session plan with participants. It is their choice to study it in advance. Some, however, will appreciate the clarity it gives them on what to expect.
- Be open to learners' feedback on the session plan. They may not understand some elements or have suggestions that suit their needs.
- Always leave at least 10 minutes at the beginning of your plan for a welcome session and an informal chat.
- Never plan less than 15 minutes for a break.
- Always close the session with around 10 minutes of plenary wrap-up, mentioning next steps and addressing a final burning question.
- Refer to the session plan at the beginning of the session; some people may not have read it if you shared it.
- Use the session plan as a guide. The flow might change depending on interesting developments or challenges during the process. The only fixed elements are the start and end time.

3.2 FLIPPED CLASSROOMS

Traditionally, learners are exposed to new theory and content in the classroom. After a lecture, there is an assignment that they complete on their own time and away from the classroom. However, this process is being increasingly "flipped". Particularly for professional learners, there are lots of advantages for going through theory, cases, and other content on their own and using "classroom" time-meaning any live session where learners are together–for applying and reflecting on content interactively. This is the underlying concept of the flipped classroom: exposure to new ideas and content is done at home, and they will be then applied in the classroom.

Flipped classroom thinking benefits from the growing use of videos to convey knowledge. People are used to watching videos to learn something, so the burden to read a lot of text is reduced, and self-study becomes more engaging and attractive for learners. Flipped classrooms also enable professionals to be more active and engage with each other when together in a live session. In this situation, learners get to pose and answer questions in real time to experts and each other, having the space to show and test what they have learned and build or create something based on the course's content. The result is a far more dynamic classroom setting.

> **Flipped classrooms in WCDI courses**
>
> Since the outbreak of the COVID-19 pandemic, all WCDI professional courses have been held online. Almost all courses adopted a flipped classroom setup. Presentations are recorded into short clips for learners to watch individually. Live sessions are then based on interactive group activities that explore the relation of video content to the learners' own realities.

How to arrange a flipped classroom

By now you will know that there is no "one size fits all" for blended courses, or even specific learning activities. You are encouraged to do an online search for more detailed material on flipped classrooms. However, here are some tips from our experience.

- **Firstly**, when you decide to create a flipped classroom setting, be sure to communicate the plan to learners. They should know that they must watch or read the preparatory content beforehand to benefit from the classroom exercise. This applies even more if learners will be in groups in the classroom setting, and there will be "peer pressure" to be well prepared.
- **Secondly**, when distributing the content that learners must study before the classroom activity, be sure to share a session plan so they can see the relevance of the content they are studying.
- **Thirdly**, before the classroom(live) session element, send reminders and offer support to ensure the access and uptake of the assigned content.
- **Finally,** take time at the beginning of the classroom(live) session to briefly run-through the content and pick out any difficulties or questions.

Ultimately, flipped classrooms for professional learners are designed to prevent people from having to sit down and listen to presentations for long periods of time. Bringing professional learners together is a valuable opportunity for peer learning. Use this best with interactive events and keep content exposure outside of the classroom whenever possible.

3.3 FORMULATING ASSIGNMENTS AND ASSESSMENTS

Mapping workshop, Ghana. Photo: Axel Fassio CIFOR

Regardless of whether learners need a final grade to pass the course or not, assignments and assessments are valuable tools. Having professionals' complete assignments in which they apply their new understanding to their own cases is increasingly common. Some learning professionals even say that true learning can only be said to have happened when applying knowledge to the real world.

Our experience demonstrates that learners also benefit from presenting their case studies to peers, and are appreciative of the feedback they receive, feeling pride in showcasing their progress. This, of course, relies on a safe learning environment. Hearing about peers' cases is also highly informative and beneficial for the cohort. There is much to be taken from the diversity of seeing course content applied in different contexts, as well as hearing how peers may have struggled or succeeded in the application of course content.

Many online courses commonly present closed questions and multiple-choice answers. These have several benefits:

- Interactive elements, where learners are physically required to click or take action, are more motivating than purely reading or watching content.
- Assessments are useful transition points to move between one topic and another, giving the learner the opportunity to see what they have learned before moving on.
- Some courses, instead, allow learners to compare assessment scores, and even offer rewards to high scorers. Competition, when managed appropriately, is highly motivating. Some course designers, however, do not do this, feeling that competition is not appropriate for their style.

Other forms of assessment can also be found in designs for blended courses. Grading can be awarded by instructors or peers on submitted assignments. This "peer review" format holds the benefit of requiring a peer learner to think more critically about the application of course content in a context different to their own. Such a review may even take place in an interview setting.

There is also a high level of value, on numerous fronts, that comes from learners completing well-structured assessments, which are learning tools in their own right.

Mapping workshop, Ghana. Photo: Axel Fassio CIFOR

Regardless of the situation, assignments and assessments can be confronting for learners. Therefore, it is essential to take learners by the hand and be clear and informative about what is expected of them in terms of content and process. Here are some concise tips from experience about setting quality assignments and assessments:

Tips for setting assessments:

- Be clear about the consequences of passing or failing assessments. Sometimes learners don't have to pass assessments to make progress or finish a course, as valuations can merely be used to highlight where the learner should dedicate some post-course time. For other courses, instead, assessments are gateways to more content and ultimately a certificate. It is essential that learners know what passing or failing means.
- Experience shows that most learners enjoy assessments. You can consider setting assessments at the end of modules/sections or, even more often, at the end of specific learning activities. Assessments in the form of short exams or closed questions can offer quick rewards and insights.
- If you are making closed-question assessments–essentially quizzes–consider the learning benefit for your learners. If you are providing multiple choice questions, as is commonly done, you should give them feedback with every answer they have as an option. This means that a text informing them of why their chosen response is correct or incorrect will pop out every time.
- Test your assessment questions with a colleague. Make sure that:
  - Each question can be answered correctly with the options given;
  - Each question can be answered based on course content already made available to learners.
- If you decide that assessments should not be central to course progress, you might consider a form of competition among learners. You could ask the group to vote on whether they want to have a "leader board" for assessment questions, with the winner getting a novelty prize (for example: the facilitator has to sing a song or wear a wig for a live session).
- If you are planning for exam style assessments, split the burden across multiple points in the course as opposed to one large final exam.

Tips for setting assignments:

- As with any learning activity, if you are setting up your course to have multiple assignments, be sure to use a diversity of formats and activities. Call on the learners' different skills: some will excel at script-based assignments, others will excel at presenting, using data, or creating a tool, for example.
- Make sure the assignment is framed to test the learners' ability to use course content. Sometimes assignments can call too much on skills or knowledge that are not part of the course curriculum. It is common, for example, to see learners put too much energy into making a visually attractive poster, while it is the content of the poster that is assessed.
- Set very clear steps for what learners should do with their assignments. Explain the assignment in plenary, where possible, so that you can confirm that learners understand the assignment.
- Show an example of the completed assignment. This can either be from a previous learner, or an example that you create.
- Give very clear instructions about submitting/sharing the completed task. Give hard but realistic deadlines, especially if there are peer review elements. Learners should not delayed each other.
- Where feasible, give learners the opportunity to share their assignment result with peers. Peer reflection, review and feedback is highly valuable. You will hear more on this later in the manual.
- Even if learners give feedback to each other, make sure to give positive or constructive feedback to each learner.
- Also, be clear yet discreet if you feel that the learner's result is a consequence of insufficient attention to the material.

3.4 RUBRICS TO SUPPORT LEARNING VIA ASSESSMENTS

Bonn, Germany, GLF workshop. Photo: Mokhamad Edliadi

Whether your learners will be assessed by an expert or a peer, it is best to develop a rubric. Making a rubric and sharing this with learners confirms what is expected of them either as the person taking the assessment, or as the person giving grading and feedback.

Developing rubrics has other advantages, too. From a design perspective it can be helpful because it pushes you to detail what a learner must be able to demonstrate in order to achieve the learning objectives you've formulated.

Firstly, rubrics provide a standard against which learner performance can be assessed, making assessment easy, fair, and transparent. Secondly, rubrics designed for final assessments can also be shared at the start of the course, so that learners have a very clear idea of what is expected of them and can assess their own progress throughout the course. Thirdly, rubrics are a valuable resource for peer assessment exercises.

The example rubric, template, and tips below were developed for the design of MOOC on edX. You can use different formats, and you are encouraged to search and learn more online.

Table 8: *In this empty template, you can see the general structure of a rubric. Below, you can see what the progress across scoring columns implies.*

CRITERIA	0 (insufficient)	1 (needs work)	2 (satisfactory)	3 (excellent)
Criterion 1 and explanation	Is lacking	Clarification of the criterion on this level	Clarification of the criterion on this level	Clarification of the criterion on this level
Criterion 2 and explanation	Is lacking	Clarification of the criterion on this level	Clarification of the criterion on this level	Clarification of the criterion on this level
Criterion 3 and explanation	Is lacking	Clarification of the criterion on this level	Clarification of the criterion on this level	Clarification of the criterion on this level
...etc.				

***Table 9:** Rubric developed for the final step of the ongoing assignment "My Climate Action Journey" for the MOOC Climate Action in Biodiverse Landscapes published on edX. The rubric was used to guide a peer review activity in which learners assess the work of two peers using the criteria outlined in the rubric.*

CRITERIA	INSUFFICIENT (0 points)	NEEDS WORK (1 points)	GOOD (2 points)
Personal drive for course participation	The learners' personal drive for taking this course is not described.	The learners' personal drive for taking this course is not described.	The learners' personal drive for taking this course is described clearly.
Presentation of climate related issue in his/her work or landscape	The learner did not provide a climate-related issue that they want to improve.	The learner provided a climate-related issue that they want to improve, but the explanation is not entirely clear at some points.	The learner provided a climate-related issue that they want to improve and the explanation is fully clear.
The description of who and what is most vulnerable to climate change and why	No description is provided of who and what is most vulnerable to climate change and why.	Some description is provided of who and what is most vulnerable to climate change and why, but this is only done with some key words.	A clear description is provided of who and what is most vulnerable to climate change and why.
Justification of one specific climate measure that should be put in action in their landscape	There is no specific climate measure selected that the learner wants to put in action in their landscape.	There is a specific climate measure selected that the learner wants to put in action in their landscape, but it is very briefly justified.	There is a specific climate measure selected that the learner wants to put in action in their landscape, and a clear justification is provided.
Personal contribution to putting the climate measure into action	There is no clear personal contribution mentioned for putting the selected climate measure into action.	The personal contribution for putting the selected climate measure into action is mentioned, but very briefly.	The personal contribution for putting the selected climate measure is clearly described.

Tips for developing a rubric:

Step 1. Define the criteria

Criteria can be content, language (spelling, grammar), and reporting related criteria (elaboration/focus). Remember to align criteria to the learning outcomes.

- Name all the aspects that need to be included in the assignment;
- Give the criteria short names, for example "introduction;"
- Order the criteria in a logical order;
- Add the criteria to the left column.

Step 2. Define the 3 levels

Describe the indicators for each criterion in each of the cells of your rubric. Start with the extremes (poor and excellent):

- Poor: describe when the work is insufficiently done for this criterion;
- Good: describe what the work looks like when it is well done for this criterion;
- Excellent: describe what should be included when the work is very well done for this criterion.

Tips for formulating the indicators:

- Describe something that can be **observed** in the assignment (i.e., the student finds connections between facts);
- Describe **characteristics** of the product (i.e., the introduction is unstructured);
- Use **qualitative aspects** (i.e., the text contains at least three examples of ...);
- Be **specific** (i.e., the introduction explains the importance of this topic).

3.5 THE IMPORTANCE OF STRUCTURE AND CONSISTENCY

Assignment in the GLF-WUR MOOC Food and Nutrition Security in Urbanizing landscapes, showing a clear assignment set up with signposting. Just like a session plan, a description on how to complete an assignment is essential to guide learners. The standardisation of such guiding content is important to help learners easily understand and absorb it.

MODULE 1: SETTING THE SCENE

ASSIGNMENT 1A. MAPPING YOUR LANDSCAPE

	Goal	Explore and visualize your rural-urban landscape and the main food and nutrition issues in it
	Time	45 minutes

What to do

Take out a *big* piece of paper, find some drawing utensils (use colours!) and start drawing your landscape by following the steps below. Include both visible and invisible elements. Try to visualise everything without using any words (or as little as possible). Add the name of your landscape as a title to your map.

- **Step 1:** Draw the main *biophysical features* of your rural-urban landscape. Yes, this means you need to zoom out so far that your landscape includes rural and urban parts!
- **Step 2:** Map the *major functions* of the different areas in your landscape, e.g. how are the functions production, consumption and protection manifested in your landscape?
- **Step 3:** Now identify *the main FNS* issues in your rural-urban landscape and draw them in your map.
- **Step 4:** For this course we want to ask you to select one main FNS issue. This will help you to stay focused throughout this course (and makes your life easier). Pick one of the issues you identified in step 3.
- **Step 5:** Put a circle around the main issue in your landscape map

Tips

- You can work with a legend to reduce the amount of writing on your map.
- You will be able to add to and revise your landscape map in the next assignments, so don't worry too much about doing something wrong. Leave some extra space to add other elements later on.
- For selecting your FNS issue: pick one that you find most interesting and/or are most familiar with

Need inspiration?

Are you not sure what issues around food and nutrition are relevant in your landscape, or are you stuck with your landscape map? Go to the 'Share & Inspire' discussion in 1.2.4 to see what others have done.

Share & Inspire

Find instructions on how to share this assignment in edX unit 2.4.2.

In any course–although particularly in online courses–well organised content and materials are a determining factor to your learners' experience. Especially if you expect your learners to do a lot of the learning at their own pace, you need to make sure that finding their way through the content is not an obstacle to their progress. It is therefore wise to take some time to decide on the best structure for your course.

In the storyboarding phase you already looked at the relevance, flow, and structure of the course content. As such, your course should follow a coherent storyline that logically leads the learner from start to finish.
If you are using a learning platform, make sure that the structure of your course makes sense from a user(learner) perspective, so that learners can easily find their way through the content and resources
In the absence of a facilitator, it is good to establish teaching- or instructional presence in your design, meaning that you should include aspects of your plan that take the learner by the hand as a facilitator would. This can be done by signposting, which is the consistent use of words, phrasing, and visuals to guide learners through the content. Signposting already starts with the course flow and structure and continues to be important for content delivery.

It may seem like an insignificant detail, but using the same wording, colour scheme, layout of (virtual) chapters, set up of assignments, recurring images, etc., throughout your course creates an organised and clean environment. This helps you limit any uncertainty and confusion on the learner's side, contributing to a smooth and serene learning experience.

Here are some things to think about:

- Use the start of the course to clearly explain the set up and provide all essential information (e.g., course structure and important dates, ways to contact the learner, FAQ, certificate requirements, links to external resources and platforms) in a way that learners can easily get back to.
- If you use a course flow and structure visuals, repeat this throughout the course in strategic places to remind the learners of where they are in their journey.
- Consistently introduce the what, the why, and the how at the start of a new module (e.g., a "what to expect" page) and end each module by summarising the key learnings and making the link to the next module.
- Be consistent and concise in the way your present assignments. Below, you can see an example of an assignment in a MOOC which includes signposting in the form of icons and set up.
- Use icons to signal different elements of the course. For example, if there is an ongoing assignment throughout the course, you can differentiate the ongoing assignment elements from other assignments by using an icon.
- Refrain from busy designs with elaborate text and decorative (non-functional) images, keep it clean.
- If you release new content as the course proceeds, make sure you do this on set days and make it part of your course rhythm.

Keeping in mind these details can significantly improve the learning experience and impact of your course.

3.6 USING IMAGERY TO BOOST LEARNING

Food Security in a Changing Climate Course 2019

You probably already know about the power of images to convey messages. In professional learning settings, and particularly in topics such as landscape approaches, visuals are especially important. This applies even more to contexts in which people of different cultures, nationalities, and backgrounds are mixed.

Ranging from photographs of landscapes, animals, or people, all the way up to complex organograms, images are very useful to shape the learning experience and take away messages. It is simple: for a high quality and effective blended course, you must use the right images, and you must do so in the correct way.

Using imagery for professional landscape learning could be a topic for its own manual, and here you won't get all the details. However, you can see a list of tips to guide your image use. These tips are relevant for all learning scenarios (online or offline, in presentations, videos, posters, etc.).

Content and format of images:

- Use images to enhance or exemplify a learning point. You can also use images to liven up a presentation, a video, or learning environment. If your purpose is decorative, be sure the image is not too dominant.
- Be mindful of cultural sensitivities. Make sure the image you show in your course is not derogatory to any potential learners. This can be hard, as you may not know all the cultural ins-and-outs of your cohort. For example, showing poverty in a country might not be welcomed by a learner from that country when in an international peer group.
- Be accurate with natural features in images. If they are prominent in your images, be sure to be precise about crops, trees, and geographies.
- If using photographs, be sure to attribute the source properly, even if the photo is a stock photo (bought from a provider).
- If using graphics, make sure that any text is legible, and do not stretch the image out of proportion.
- If using graphics to show a framework/model, accompany the image with some narrative text.
- If you are sharing images in an online course, shrink the image size so that learners with poor connection can still access it.

Participant/learner images:

- Your learners might share images as part of the course. At the beginning of the course, it is important to let know all participants that as professionals, they are responsible for the images they share. Inappropriate or trademarked images will not be allowed.
- Get written permission from participants (even via email) about using images they may provide. This includes images of themselves that might be taken before or during the course. Your organisation will have its own rules on this, so remember to check! Instances can include group photographs, field trip photos, recordings of online live sessions, images shared in presentations/posters/assignments, and so forth.
- Inform learners when images will be saved and when they will be deleted.

PHASE 4: IMPLEMENTATION OF THE COURSE

Food Security in a Changing Climate Course 2019

The time has come! You have designed your course structure and flow, and you have developed the content you need for it. Your learners (might) have completed a pre-course assignment and they are eager to meet you and each other.

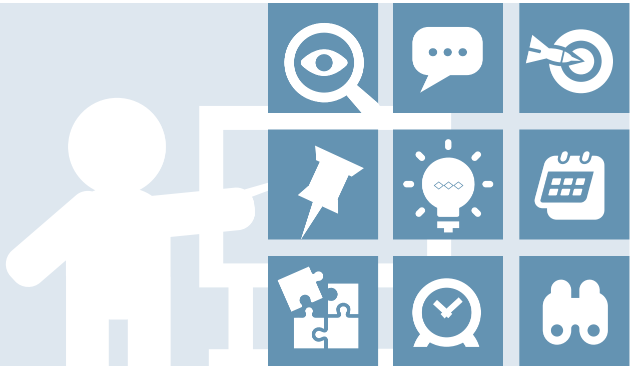
As with other sections, this is not a comprehensive guide to everything you must do during the implementation of your course. This section will focus on what experience has shown to be of upmost importance for professional landscape courses to succeed: the facilitator.

How the facilitator approaches the course and the decisions that she/he will make are vital. In this section, we touch upon:

In this section, we look at the approach and activities you will take to rollout and successfully complete your course.

- The role and skills required to facilitate learning ▶
- Creating a safe learning environment Learning styles ▶
- Linking learning to reality (cases and field trips) ▶
- Creating and maintaining learner motivation ▶
- Energizing learners ▶
- Individual commitment ▶
- Plenary sharing ▶
- Participatory tools ▶
- Closing off the course ▶

4.1 YOUR ROLE AS FACILITATOR OF LEARNING

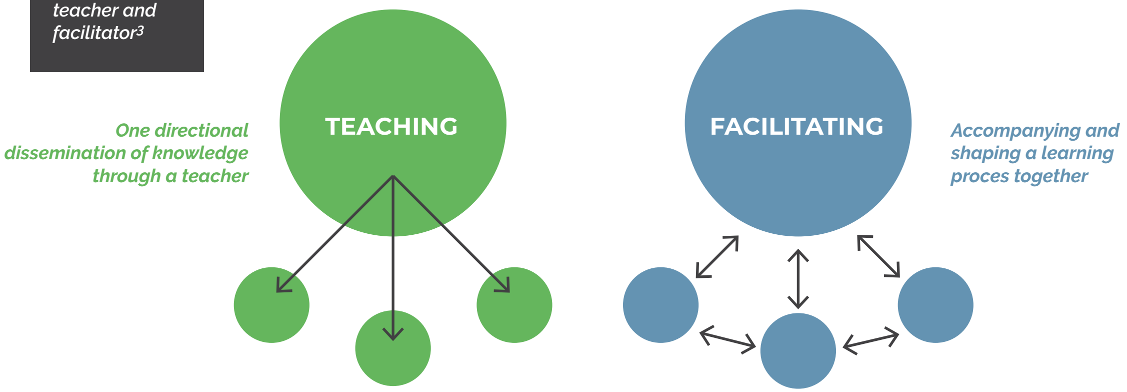


Being a course facilitator is not the same as being a teacher. There is a difference between teaching versus facilitation, as each role its own objectives and methods. Teaching involves a more one-directional dissemination of knowledge via the teacher, who holds the knowledge and expertise, directly presenting the content to students.

Facilitators are more concerned with the learning process among the cohort. They guide the participants to new insights through presenting new concepts, facilitating discussions, presenting real-life cases, and encouraging critical reflection. Facilitation is especially relevant when dealing with adult learning, as learners have already obtained knowledge and skills related to the course topic. Therefore, facilitation focuses both on the learning process between the facilitator and the learner and perhaps more importantly, on how learners benefit from the cohort.

Facilitation styles: Every facilitator has collected their own unique set of experiences, ideas, insights, knowledge, and characteristics. This will result in your own personal facilitation style, be it more formal, informal, outgoing, humorous, narrative, etc. You will be the best facilitator when you are not trying to be someone else. Just be yourself! Practicing and gaining experience in the facilitation of courses and workshops will help you find your own style.

***Figure 10:** Role differences between teacher and facilitator*[3]



3] https://www.publichealthnotes.com/facilitation-vs-teaching-20-differences-we-must-know/

Facilitation skills: Facilitators wear many hats, but a lot of their work happens in the following areas:

- Planning, guiding, and managing a workshop
- Curriculum and content development
- Arranging relevant speakers/content
- Enabling teams to do their best work
- Asking vital questions to get at the core of the problem.
- Clear communication
- Active listening
- Motivating
- Creating focus in a group
- Flexibility
- Organisation
- Balance between content and process
- Knowledge of digital tools
- Culturally sensitive
- Asking questions
- Time keeping
- Energetic
- Pay attention to group dynamics
- Constructive feedback

Types of facilitation: In blended courses, facilitation happens in two main scenarios:

1. Offline or face-to-face facilitation
2. Online or remote facilitation. This type of facilitation can again be divided in:
   a. Synchronous facilitation (same-time): both learners and facilitator are online at the same time; these are live online sessions.
   b. A-synchronous facilitation (own-time): learning relies on participants accessing delivered content according to their own availability; facilitators provide instructions and feedback based on an agreed schedule.

***Click here** if you want more tips on remote facilitation.*

4.2 LEARNING STYLES

Youth Media Training in Indonesia. Photo: Lynsey Grosfield, CIFOR

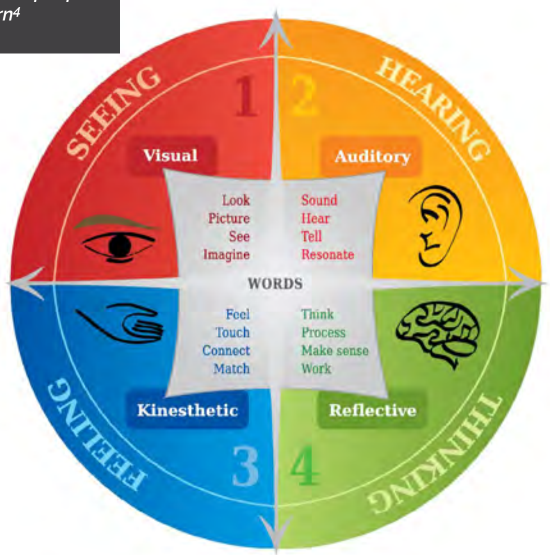
Understanding different learning styles is essential for a facilitator, as it allows you to keep learners motivated and engaged. Every individual has their own preferred style, which can be classified in various ways, such as the learning styles based on Kolb's (1984) learning cycle. This learning cycle suggests that an individual or organisation learns by going through four stages. First come learning from concrete experiences (feeling), secondly comes learning from reflective observation (watching), third we have learning from abstract conceptualization (thinking), and lastly, there is learning from active experimentation (doing).

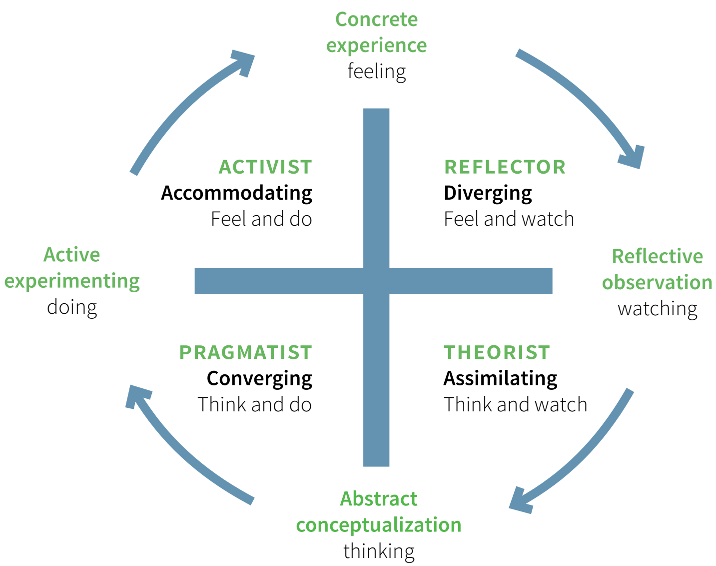
Based on this learning cycle, four learning styles or preferences can be identified. Every learner tends to have one or two preferred learning styles.

1. **Activists:** learn by doing and participating;
2. **Reflectors:** learn by observing and thinking about what happened;
3. **Theorists:** like to understand the theory behind actions and think things through;
4. **Pragmatists:** like to seek and try out new things they have learned and put them into practice.

Another way of identifying learning styles is the VARK model, which includes the Visual, Auditory, Read/Write and Kinaesthetic learning styles[5]. For a facilitator it is important to realise that learners have different learning styles. To engage them and keep their attention, you have to offer a range of learning methods: brainstorming, role plays, PowerPoints, stories, maps, games, paired discussions, self-assessments, and so forth! As a facilitator, your challenge is to offer diverse learning methods alongside varied content, to ensure that all learning preferences are met.

***Figure 11 & 12:** Different perspectives on how people learn*[4]





4] *Brouwer et al. (2015). The MSP guide- How to Design and Facilitate Multi-Stakeholder Partnerships*

5] *The VARK Modalities. Click here to read more about learning styles **Click here** to do the learning style test!*

4.3 SAFE LEARNING ENVIRONMENT

Mapping workshop, Ghana. Photo: Axel Fassio CIFOR

A safe learning environment is key to take on new information. Creating one involves paying attention to a lot of things that make learners feel at ease, open-minded, and willing to learn. You must make sure that learners are open to reflect on their current knowledge, and to accept new ways of learning and critical reflection. Creating a safe learning environment implies creating space for positive feedback, participation, and listening, in a culturally adapted and respectful way. Barriers to a safe learning environment might be, for example, having a hard time unlearning old habits, (organisational) defensive patterns, structural information disorders, or power differences.

Tips for creating a safe learning environment:

- Set a "code of conduct" at the beginning of the course which stresses the importance of active participation, reflection, and respectful behaviour. You can even develop these rules for learning in a participatory exercise.
- Motivate all participants to engage in learning at all levels. These might be personal, intrapersonal, and interpersonal, or at the level of the individual, team, project, program, organisation, and even society at large.
- Make everyone feel part of the team (see also section X on energizers & icebreakers)
- Have sufficient live sessions where participants can see and talk to each other, whether it is online or offline.
- Make full use of the experiential learning cycle by catering to different learning preferences and using diverse methods.
- Make a habit of critical reflection, noting and addressing barriers to learning.
- Be open as a facilitator: share personal examples and learning experiences.
- Be pragmatic and flexible if the situation asks for a change in assignments, duration, roles, etc.
- Allow space for fun and creativity.

Specific tips for a safe online learning environment:

- Arrange an easily accessible online learning platform (Zoom, Google Meets, Hangout, etc). Provide clear instructions and be consistent with (online) location, fixed dates, duration, ice breakers, and style in the online sessions.
- Be creative with the online environment by using a variety of tools, such as Padlet, Jamboard, WhatsApp groups, use of music, etc.
- Involve the location of the participant: give them outdoor assignments, have them look for something in their house, let them take photos of the view from their window, etc.
- Have regular break out rooms; this allows people to discuss in smaller groups, which might make them feel more at ease.

Specific tips for a safe offline learning environment:

- Arrange a comfortable and spacious learning venue.
- Think about your room setup. An informal and café type of sitting arrangement makes people feel open, comfortable and facilitates group work.
- It is highly stimulating to have sessions outside the classroom, in the forest, the field or garden, as it triggers comfort and creativity.

4.4 THE ADDED VALUE OF FIELD TRIPS (OFFLINE)

Field trips are extremely valuable and should be integrated in any sort of landscaping course.

There are many perks to field trips:

- They offer the opportunity to exercise the participants' geographical observation skills;
- They allow for the analysis of real-life spatial dynamics and processes;
- They offer an opportunity to meet landscape actors, interact with them and train their communication skills;
- They bring landscape concepts to "life."

Integrating a field trip in your course will allow participants not only to acquire knowledge, but also develop their skills and attitudes through interaction with stakeholders in the field.

Field trips can be organised in many ways and can be informal or very well structured around field assignments and real-life experiments. For example, they can be structured as a "rapid rural appraisal," using PRA and RRA tools–which are widely available on the web. They can also be structured as in-depth data collection through focus group discussions and individual stakeholder interviews.

You can use travel time to ask learners to look through the window and draw on whatever they see and observe on it (make sure you use non-permanent markers). The drawings on the windows will make a good first analysis of landscape dynamics.

4.5 CREATING AND MAINTAINING LEARNER MOTIVATION

Course participants engaged in a role play[6]

Introduction exercise where learners have pinned themselves on a world map using ***Padlet****.*

Throughout this guide, we have talked about keeping learners motivated several times. Whether learning individually or in a group, it is common for learners to get distracted or lose interest and/or energy in certain parts of the course. This is true whether the course is online or offline, and whether learners are together in a nice venue or learning at home, alone.

In your first design phase, the blueprint, you learned how to frame learning objectives derived from a clear learning need; this is key for learners to see the relevance for their own aspirations. In the second design phase, the storyboard, you learned that activity diversity is essential to activate learners in different ways. In the third phase, that of content development, you gave further attention to developing rich, dynamic, and engaging content to get people interested and motivated through interactive assignments and assessments.
In the fourth phase, instead, you learned to motivate learners through facilitation techniques, and how to create a safe learning and sharing environment.

These are all essential elements to help push, pull, guide, steer, encourage, motivate, and drive your learners through a successful and rewarding learning experience. Take these points on board! Your learners will welcome any help to successfully complete the course. In this short section we want to quickly check-in on some additional considerations which will help you and your learners achieve your aspirations.

Building a team connection

At the start of any (online or offline) course learners are dropped in an unfamiliar setting: there are new people, a new venue or online learning environment, new rules of the game, etc. Your first goal as a facilitator is to make everyone feel welcome and comfortable. In an offline setting this will be easier, as you have face-to-face contact and can read body language better. Online it will be more difficult, but not impossible!

Building a team connection

At the start of any (online or offline) course learners are dropped in an unfamiliar setting: there are new people, a new venue or online learning environment, new rules of the game, etc. Your first goal as a facilitator is to make everyone feel welcome and comfortable. In an offline setting this will be easier, as you have face-to-face contact and can read body language better. Online it will be more difficult, but not impossible!

Digital mood board for learner and facilitator introductions using the tool ***Befunky.com***

The process starts by building a connection to the team. You can design the start of your course with the following elements in mind:

- **Icebreakers:** these are games where learners can introduce themselves in a fun way (see also "icebreakers & energisers") and get to know each other. This can happen live with name-games for example, but you can also ask learners to prepare a vlog, post photos, or pin themselves on a (digital) world map.
- **Course programme, objectives, and expectations:** give learners a clear overview of the process. Let them know what the course programme looks like, what are the requirements for a certification, how the sessions are organised, what are the deadlines for the assignments, what are the learning objectives, and the participants can expect to learn from this course.
- **Codes of conduct:** these are "house rules" jointly set up to contribute to a safe and comfortable learning environment. Make these explicit at the beginning of the course. This way you or other participants can refer to them throughout the course. For example, some rules might be to:
  - Start and finish on time
  - Respect everyone's opinion
  - Listen actively
  - Not use phones
  - Feel free to ask questions
  - Participate actively
- **Etcetera.**

6] **WCDI (2017) International Course: Think Landscape**

4.6 ICEBREAKERS AND ENERGIZERS

Youth Media Training in Indonesia. Photo: Lynsey Grosfield, CIFOR

Introducing short games in your online, offline, or blended course can boost energy levels and further contribute to a an environment conducive to learning. These types of games are called "icebreakers" or "energizers," and their goal is to[7]:

- Help people get to know each other quickly
- Encourage interaction, teambuilding, and trust
- Help create a warm and friendly atmosphere conducive to learning
- Allow people to share their knowledge and experiences
- Turn passive participants into active ones
- Make everything clear
- Revive energy and stimulate creativity

Icebreakers: Courses often involve meeting new people, and initially participants might feel a bit shy or uncertain. Icebreakers are games designed to help people get to know each other in a relaxed environment, encouraging them to share more about themselves, such as names, hobbies, and cultural or organisational backgrounds. When to use: Icebreakers support the team building process and are therefore most useful at the beginning of courses.

Energizers: these are quick and fun games that boost the energy levels of your learners by refocusing their attention. These games often include a physical or mental challenge and can shift the mood of the entire group. You can use them simply as a "fun and quick game," or you can be creative and link the energizer to the content of your course, using it as a reflection exercise as well. When to use: Energizers are most useful after a long period of listening, discussion, or sitting down. Also after meals energy levels can drop, and it might be time for a short energizer!

Tips for Energizers & Icebreakers:

- Contextualise the exercise to the online-offline setting, but also to your audience and culture
- Keep it short, but allow time for these games during your course
- Make it mentally or physically stimulating
- Keep the instructions relatively simple
- Be creative in tailoring games to a course topic
- Demonstrate and participate as a facilitator
- Do not force people to join
- Make it fun

Specific tips for online courses:

- Be very clear in your instructions
- Use these tools more frequently, as people's energy drops in front of a screen
- Be creative with online tools such as Padlet, Jamboard, and WhatsApp groups
- Make it physical and ask people to get up, take a photo, or look for an object
- Use music

Specific tips for offline:

- Make use of the space and objects: course room, hallway, outside, paper, markers
- Involve your learners: ask them to come up with their own energizer
- Contextualise the exercise: to the online setting, but also to your audience and culture

Spatial energisers (offline)

A landscape course or curriculum offers endless opportunities for creative and functional energisers and exercises. As a landscape approach is all about geographical concepts and perceptions of place, one can make endless use of maps, globes, and other geographical visualisations. Working with these tools triggers people's geographical intelligence, and help to create a "sense of place" and a "sense of belonging".

- Globes and maps can be used as entertainment; for example, using a plastic globe can give participants an opportunity to talk or express their opinion. Landscape drawing and mapping helps participants get a grip on their landscape by drawing the various spatial dynamics and processes taking place, sketching out stakeholders and their interests and visualising competing claims on a landscape's resources. In this way, spatial conflicts can be visualised in a neutral way, giving space for exchange of perceptions, and creating a common understanding of a landscape.
- Collectively drawn maps do not have to be geographically correct, as their aim is not to have a perfect representation of reality. Their aim is rather to trigger creative thinking and collective intelligence and create mutual understanding and shared visions.

Examples: There are many resources out there with energizers, icebreakers, and team building games. Below you can find a list of resources:

- Booklet: Icebreakers, Team Builders & Energisers - Participatory exercises for trainers and facilitators. Wageningen Centre for Development Innovation (WCDI).
- Blog: 30+ Best Icebreakers for Your Virtual and Hybrid Meetings
- Blog: 35 Ridiculously Fun Icebreaker Ideas, Games, & Activities In 2021 For Your Next Meeting
- Spatial energisers: see below

7] Gevers, I & I Hennemann (2019) Icebreakers, Team Builders & Energisers. Wageningen Centre for Development Innovation (WCDI).

4.7 INDIVIDUAL COMMITMENT IS KEY!

Course participants facilitate a reflection exercise around their case work[8]

To maintain the learners' motivation individual commitment is key. This is especially true for online and blended courses, since they ask for better planning and discipline from learners, and each one of them has to oversee their own learning trajectory. As course facilitators you must be mindful about the course workload, and realistic about what can be dealt with on a weekly basis along with your cohort's job or study commitments. Offering a mix of methods and breaking up the content into bite size pieces allow learners to engage and keep up.

Case-based learning

Case-based learning can be a useful method if you want learners to apply their knowledge to real-world scenarios. There are two ways for individual learners or smaller groups to work with cases:

1. The facilitator presents a real-life or a fictional case based on real-life dynamics. This requires the facilitator to share all relevant information related to the landscape case: geographic location, landscape functions, challenges, stakeholders, institutions, power dynamics, governance structures, etc.
2. The learners bring in their own real-life case. This must be a landscape the learner knows well, being able to easily present and analyse dynamics further.

There are several reasons why case-based learning is an effective method. First, it fits well in the approach of adult or experiential learning, which builds on the notion that adult learners already have a lot of work experience and build their knowledge based on real life events. Second, a case allows learners to analyse their case in more detail and to eventually develop an action plan.

Pre-course assignment

These are preparatory assignments for participants to make before the start of the course. They can contain individual questions about the learning, about a specific topic, or they can ask a learner to read/watch something in advance. This assignment can also contain questions about their "landscape case."

You should provide clear instructions on what they need to prepare if they need to upload or present the assignment and the deadline. For a case-based pre-course assignment it is helpful to develop a template with guiding questions. Some guiding questions could be:

1. What does the landscape of the area that you work in look like, and where is it located?
2. Who are the main stakeholders in your landscape, and how do they interact with the landscape?
3. What are the main challenges for your landscape?
4. What is your role in this landscape?
5. What do you hope to learn from this course that will help you better perform your job?

8] WCDI (2019) International Course: Food Security in a Changing Climate. 9] Reflection Methods - Practical Guide for Trainers and Facilitators.

4.8 SHARING REFLECTIONS IN PLENARY

During a course, and especially a blended one, learners get exposed to a wealth of information, concepts, experiences and (digital) tools. This can be inspiring but also cause confusion and overwhelm[9]. The use of reflection exercises can help improve learning by contextualising lessons and applying them to a work environment. This "reflective learning" can be seen as a sensemaking process which involves taking time to think, feel, discuss, and digest.

Guiding reflection questions are:

- What have you heard, seen, and experienced?
- What was most meaningful to you and why?
- How does it relate to your existing knowledge and experiences?
- How can you apply it in your professional work context?

When: As a facilitator you can explicitly plan reflection moments throughout your course. In general, reflections are most effective after some time has passed from the (new) experience, such as the end or beginning of a learning session. If you share reflections at the end of a session it would wrap up and capture the learnings. At the beginning of a session, instead, you could recap and refresh the topics covered in the previous session.
How: Be creative with the reflection sharing method, as there are a range of tools out there. However, keep in mind that some tools have to be matched with the phase the group is in, their level of experience, and the context. If you want to get some inspiration, have a look at Reflection Methods - Practical Guide for Trainers and Facilitators. This book offers a range of valuable tools that can help people develop their reflective capacities.

4.9 PARTICIPATORY TOOLS

Course participants working on an impact chain analysis[10]

Course participants working with geo-data[11]

Note: *In the third part of this series on designing blended learning for landscape professionals, you will have the chance to learn how to use a lot of tools. Here, we talk about why you should use them, and what it implies.*

The use of participatory tools makes your courses livelier and more practical. These tools are specific activities designed to guide participants through a learning process of joint analysis reflection joint planning joint decision joint action. Think for example of a stakeholder analysis, power role play, force-field analysis, fishbowl, or visioning exercise. Participatory tools are often used to encourage case-based learning where learners apply their knowledge to real-world scenarios. This allows active participation from learners who can work either on their individual case or in a case group.

Tips for the use of participatory tools

- Be aware that each tool has its own objective: some focus on analysis, others on planning or decision-making. Therefore, tools must be matched with the phase the course/group work is.
- Be creative with the adaptation of tools to fit your purpose, context, available time, and level of experience.
- Give very clear instructions: what is the objective? What are the steps? How much time do they have? Which materials should be used? Do they need any (online) resources? Etc.
- Make use of objects or visual aspects: papers, sticky notes, coloured markers, photos, balls, ropes, glasses, globes, etc.
- Ensure active participation of all group members.
- Allow time for (plenary) reflection after using the tool: what are the main outcomes? How did the tool help you gain new insights? Would you use it back home? What did you like/not like about this tool?
- Online:
  - When your course is online, make use of online tools such as Jamboard, Miro, Mural, Padlet, Google Earth, Google Maps, Polar steps, or geodata.
  - Make frequent use of break out rooms. Learners often feel more comfortable to discuss and work in smaller groups. The facilitator can regularly join the breakout rooms to provide more detailed instructions and facilitate the process if necessary. Allow sufficient time for break out groups, as communication is not as easy as offline.

Course participants engaged in role play[12]

Do you need more inspiration?

Have a look at more than 60 participatory tools for multi-stakeholder collaboration.

10] WCDI (2019) International Course: Food Security in a Changing Climate. 11] WCDI (2019) International Course: Landscape Governance. 12] WCDI (2019) International Course: Food Security in a Changing Climate

4.10 CLOSING YOUR COURSE

It is almost time for a celebration as the course is coming to an end! Learners have worked hard on their cases, gained new insight, shared experiences, and now it is time to consolidate everything into final presentations and action plans. Do not underestimate the importance of the proper closing of a course. Learners have invested a lot of time and energy and have become part of the group's dynamics. There are several activities you can undertake to properly close the learning journey.

Final Assignment or Presentations

Learners have worked hard on a specific case or cases and now it is time for them to show off their work! There are various ways they can do this. Depending on their type of case, they can share individually or in groups, and the method can range from:

1. Final assignment
2. Exam/test
3. Presentation
4. Pitch
5. Video/vlog
6. Showcase a product, etc.

As a facilitator you must find a suitable procedure that matches your blended course. The most important thing is that this last assignment should bring all the course learnings together, and create a space for learners to share this among their peers.

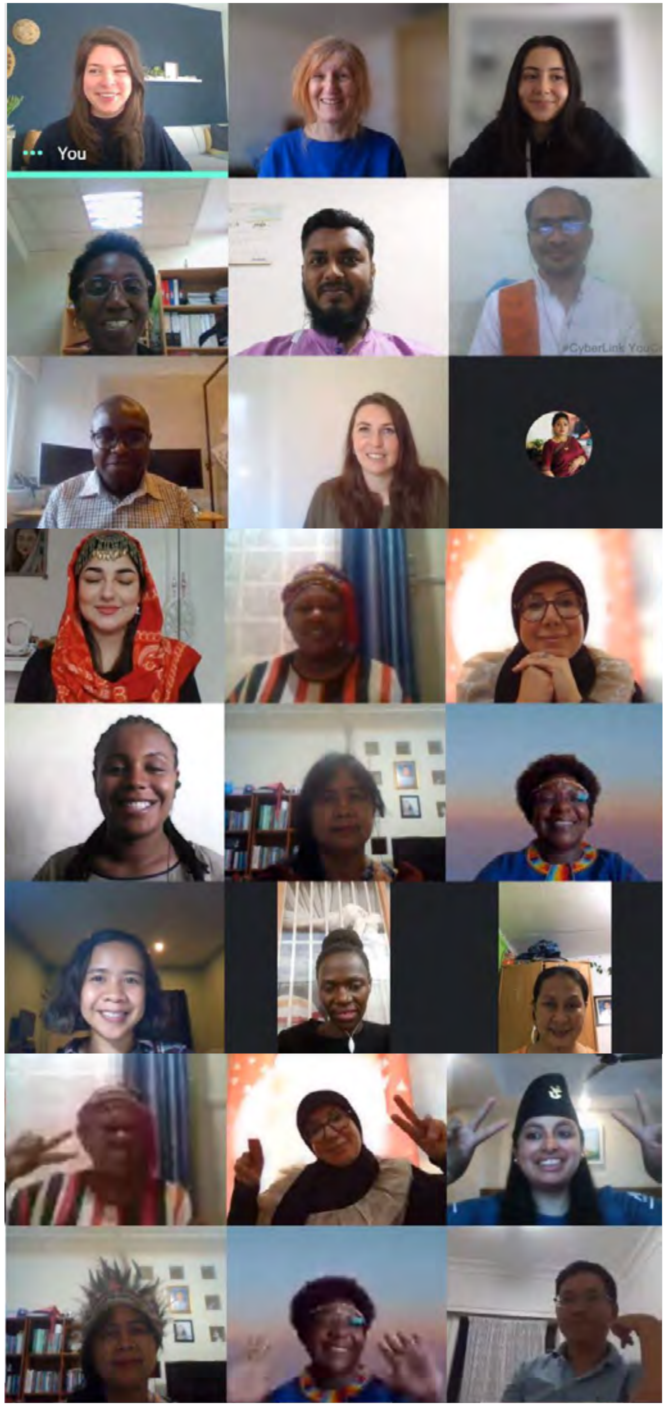
What is Intervision?

"Intervision is a form of expertise development in which professionals call on their colleagues, fellow professionals, or peers to help them gain insight into the problems they have at work" One participant can share a specific case or challenge and the others try to not come up with solutions, listening actively and asking questions instead. The process can help the case provider develop new ways of thinking and gain new insights regarding their own case.

Action planning

Towards the end of the course, it can be helpful for learners to reflect, look back at all their learnings and translate them into concrete actions. They may not find everything taught in the course appropriate to their specific situation. In some cases, they may want to adapt some of the materials to fit their job or work setting. Developing a personal action plan can do that! Learners identify actions they should take after the course is finished.

This template[13] illustrates what an action plan can look like. Feel free to tailor this to match your course context and learning objectives. The learners can keep these action plans to themselves, but they might feel the need to discuss it with peers. Intervision sessions can also be an effective method for learners to share their action plans in pairs or small groups.



13] https://docs.google.com/document/d/1QFBc6-8GSzm64LFt6480wAmFEgRlhops/edit?usp=sharing&ouid=110375406200700378178&rtpof=true&sd=true

Final presentation of Climate Class of 2021!

Closing activities

Once the learners have shared their final work the course has almost come to an end. To close the course, there are several activities you can undertake to wrap up the learning journey:

- **Summary/recap:** "What have we done throughout this course? Which topics did we discuss? What have we learned and experienced?" These are all questions the facilitator can capture in a recap activity. You can choose for a presentation format, a photo slideshow, a compilation video, or even make it participatory and ask learners to add their input.
- **Quiz/exam:** Testing the knowledge of the learners can also be a closing activity. This could be part of the course requirement for certification, but it can also be a fun closing activity. Making quiz teams/groups works quite well if you want to increase the sense of competition! This allows you to test their knowledge and insights in a fun and competitive context. Some suitable online tools are Mentimeter and the Zoom poll function.
- **Games:** Another way to close a course is to work with games where learners have the chance to show appreciation or share their most important insights. Think of writing appreciative words to your peers on flip chart papers, write a postcard to "person x" about their important input, use illustrative cards/photos to share a take home messages, etc.
- **Group photo:** this is always a nice memory for all learners to have! Also online this is possible. You can ask everyone to turn on their webcams and take a group photo that way. To make it more festive, you can ask learners to dress up nicely, wear a festive hat, or choose a virtual background or filter in Zoom.
- **Goodbye party:** if time and budget allow, you can organise a goodbye party or dinner. This will be an enjoyable and informal way to say goodbye. It could be fun to dress up in festive outfits, or cultural/traditional outfits if you have an international group!
- **Certificate ceremony:** certificates are a form of recognition which attest that learners have completed the course as prescribed (see also section 1.5). Organising a short certificate ceremony could be part of the closing activities and allows the facilitator or peers to share some appreciative words to the awarded learner.
- **Evaluation:** is an important part of your blended course, as it will allow you to improve course content, tools, facilitation, etc. It is useful to organise the evaluation around specific course elements such as:
  - Course topics
  - Course logistics
  - Venue or online learning environment
  - Facilitation
  - Suggestions

Course evaluation can be carried out in a participatory way at the end of the course, and/or individually and anonymously through a survey. Be open to the feedback and input from the learners. A course evaluation can provide you with a lot of useful input to redesign or change the course delivery accordingly.

Next steps: The last logistical steps you should take are:

- Access to learning materials: be clear on where and until when learners can access the online classroom and learning materials.
- How to stay in touch? Learners often want to stay in touch with each other once the course is finished. They may want to update each other on their work progress, networking opportunities, events, or possibilities for collaboration. As a facilitator you can make suggestions for communication forms, but also feel free to let the learners come up with ideas themselves. Perhaps a new community of practice is born!

COLOPHON

This manual is part of a series of practical guides and toolkits on the design and delivery of blended learning for landscape professionals. It combines the content knowledge on landscapes, landscape restoration and landscape governance, with the process knowledge on how to design and deliver blended learning trajectories. It's aim is to support landscape professionals responsible for learning, capacity development, education and curriculum design in their journey from 100% offline learning design to online and blended learning.

The manual is part of the Landscape Academy, which is a joint project of the Global Landscapes Forum, Wageningen Centre for Development Innovation and the UN Environment Programme. The Landscape Academy aims to promote learning and education related to landscapes, including the management, restoration and governance of these. It provides a curated series of online and offline courses and curricula for landscape professionals to build their knowledge and shape their careers. It also helps learning professionals to design and develop their own landscape learning products tailored to the needs.

The content of the manual is based on the blended learning experience of Wageningen Centre for Development Innovation, and the learning needs assessments carried out by the Global Landscapes Forum and partners. It is therefore considered a joint product, in contribution to the UN Decade on Ecosystem Restoration, established and implemented by the United Nations and its global partners.

Reference

James Mulkerrins, Tossa Harding, Ilse Hennemann, Bram de Groote, Cora van Oosten.
Wageningen Centre for Development Innovation, in collaboration with the Global Landscapes Forum.

Global Landscapes Forum is the world's largest knowledge-led platform on sustainable and inclusive landscapes, initiated by CIFOR-ICRAF, UNEP and the World Bank. GLF is designed to spark multi-stakeholder dialogue, share knowledge, inspire action and accelerate best practice in addressing some of the most complex problems facing the earth. https://www.globallandscapesforum.org/

Wageningen Centre for Development Innovation is part of Wageningen University and Research. It works on processes of innovation and change, through the facilitation of partnerships, the brokering of knowledge and learning, and the development of capacities worldwide. https://www.wur.nl/en/Research-Results/Research-Institutes/centre-for-development-innovation.htm

The Landscape Academy brings together relevant online and offline learning opportunities on landscape approaches and their multiple applications of restoration, management, governance, business and finance. It provides a curated series of courses and curricula for landscape professionals to build their knowledge and shape their careers. https://academy.globallandscapesforum.org/

This report can be downloaded for free at https://doi.org/10.18174/564863 or at www.wur.eu/cdi (under publications).

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