

Course design

This chapter gives an overview of the key processes in designing a course and compares their application in face-to-face and online learning settings. Upon studying the content of this chapter, you should be able to:

- ✓ describe the key steps in designing a course,
- ✓ compare the application of different planning strategies in face-to-face and online courses.

The chapter includes the following sections:

1. *The basics of course design: the key elements of the planning cycle*
2. *Baseline and needs assessment*
3. *Learning objectives and outcomes*
4. *Content, pedagogical methods and activities*
5. *Differentiation in learning*
6. *Resources: time, space, instructional materials*
7. *Monitoring progression, assessment, and evaluation*
8. *Questions for reflection*
9. *References and resources*



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1. The basics of course design: the key elements of the planning cycle

Designing a course is often compared to planning a journey, one that you will take with your learners. This means that you as an educator need to set out a roadmap and plan according to the key elements of each journey:

1. Map the resources you have at the starting point (your learners' existing knowledge and experience, their expectations, their needs...),

2. Define the final destination (the knowledge, skills or attitudes your learners will gain during and after the journey),

3. Decide on the mode of travel (the methods you will use, the activities your learners will be doing, the rhythm and the pace of the process...),

4. Structure the “check-in“ points (monitoring mechanisms, assessment, and evaluation).



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There are plenty of examples of key steps in planning educational processes, but we opted for a list that works in both formal and non-formal education. The key elements of planning and designing a course (as well as lesson planning) are grouped in the list below and discussed in more detail in the following sections.

1. Baseline and needs assessment

2. Learning objectives and outcomes

3. Content, pedagogical methods and activities

4. Differentiation in learning

5. Resources: time, space, instructional materials

6. Monitoring progression, assessment, and evaluation

2. Baseline and needs assessment

Knowing your learners' needs and capacities is a prerequisite of any planning. You need to know “the starting point of the journey” so you can position your course or programme accordingly. To compile a pool of information on your learners that you will use in designing a course or planning a lesson, as well as in monitoring and evaluation, you can try two different, but complementary approaches: needs assessment and baseline assessment.



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A needs assessment is conducted to understand the distance between the current condition and the desired one. It is a “*systematic approach to studying the state of knowledge, ability, interest, or attitude of a defined audience or group involving a particular subject*”¹. Often the first part of any planning process, needs assessment gives a rationale for your education programme and helps you to identify the solutions to your learners' challenges. In other words, it gives you a clear direction in setting goals and desired results of your education or training programme. The most common methods for conducting a needs assessment are surveys, interviews, focus groups, working groups, SWOT analyses, etc. Apart from a direct approach (including the target group directly, as is the case with the mentioned methods), needs assessment can be indirect (research review, working groups with other stakeholders to gather data on your learners' needs, etc.).

Baseline assessment refers to the primary data you gather on your learners' prior knowledge and experience (e.g., how much they know about sustainable development, or how much experience they have with non-formal education). The data can serve both as a starting point and as a reference point later in the process (you can compare your learners' performance at different points in time). Baseline assessment can give you a deeper insight into your learners' potential, and a framework for planning differentiation in learning. It can also help you define your own expectations from the very beginning. It can be done through questionnaires, tests, quizzes, specific tasks, informal observing, etc. The choice of how deep you will dive in depends on your needs, your learners' needs, and the context in which the learning is taking place.

¹ McCawley (2009:3), [Methods for Conducting an Educational Needs Assessment](#)

Application in different settings:

Face-to-face	Synchronous	Asynchronous
<p>Needs assessment can be done through indirect and direct approaches.</p> <p>The most common example of an indirect approach is exploring relevant research. It is peer-reviewed, relevant, and contributes to your credibility. However, make sure you check the sources, read the methodology, and compare the experimental sample with your learners to see if it has to be changed.</p> <p>A common example of a direct approach you can use is handing out questionnaires to your learners. You can use open or closed questions, depending on the information you want to get. Surveys are a fast and easy way but can be a hassle to analyse and usually don't offer profound insights.</p> <p>Talking to your students can be done individually through (semi)structured interviews or focus groups. They provide more information and have other advantages like stronger group cohesion or relationships. On the other hand, these methods are time-consuming, open to bias, and can't be generalized outside your group by any certainty.</p>	<p>While the methods are similar to face-to-face education, the delivery is quite different.</p> <p>If posting surveys, it is essential to include a short description of its aims and importance and ensure the anonymity of the learners. Use online programs or tools to help you with analysis – GoogleForms and similar programs to summarise the data and prepare a report (use as many visuals as you can). The initial learning curve is worth the effort.</p> <p>When organizing online focus groups or interviews, have a password-protected meeting. Choose a background that inspires confidence and doesn't detract attention from the questions you are asking – a neutral bookshelf or blurred background works well. Check your internet connection, invest in a good microphone, and ask for consent to record the meeting for a more detailed analysis. Plan for solutions for technical or other difficulties your target group might experience or for modifications if some conditions cannot be met (e.g., cameras on).</p>	<p>In fully asynchronous education, be aware that it will be more challenging to do a direct needs assessment with the learners who will take part in your course.</p> <p>Base your initial plans on recent research findings, search trends, and top search terms. If possible, organise initial meetings through a video conferencing tool or dedicate the first part of your course to online surveys. This will give you enough time to modify your plans according to your learners' specific needs.</p> <p>At the beginning of the course, include activities in which you will encourage your learners to share their motivation, expectations, and fears. This can be done through short questionnaires, posts, forum discussions, but also creative methods like posting videos or making infographics. At the end of the course, ask them to give feedback on the course content, what was missing and what would be beneficial to include in the course. You can use this data as indirect information on your learners' needs for future courses.</p>
<p>Baseline assessment can be done through similar methods as needs assessment, but with a different purpose (to get information on what your learners know or have experienced already related to the content of your course). A direct approach works best, but you can gather data by including other stakeholders, previous tests, or informal observations. The direct approach is easier in face-to-face settings, where you can offer timely support and explanations about baseline assessment and observe different types of behaviours while they're doing the tasks.</p>	<p>Like in face-to-face settings, in online synchronous education, you can observe your learners directly and offer timely support. However, this can be more challenging in situations in which your learners are experiencing technical issues (e.g., cannot have their cameras on) or in individual or group work in breakout rooms. In cases when you are using questionnaires, quizzes, or similar tools, make sure you communicate the goal of the baseline assessment and the instructions clearly so that the learners understand that they are not merely taking a knowledge test.</p>	<p>In online asynchronous settings, some of the methods of the direct approach are even more challenging (observation, immediate support). Regardless of the type of task you want to apply, make sure you explain the instructions and the purpose of the assessment clearly and post it somewhere easily accessible. You can set up tasks that will allow you to observe your learners' knowledge, reactions, attitudes, or other things you are interested in on your platform(s) in written format.</p>

3. Objectives and learning outcomes

Often used interchangeably, learning objectives and learning outcomes are focused on the “destination” of the journey and define what your learners will gain from engaging in a learning process. In this handbook, we will use the following definitions of **goals, objectives, and outcomes**:

1. Learning goals define the final vision of the change that the educational process, or your course, should bring upon the learners and the community (e.g., *To develop entrepreneurial skills of young people from rural areas*). They reflect what you as an educator want to achieve, but also what other stakeholders expect (e.g., any financial mechanisms providing your course resources, the government, project donors, etc.). The goals present the highest category in the hierarchy and serve as a framework for defining learning objectives and outcomes.

2. Learning objectives are more focused on the educator and can be defined in relation to the content and methods the educator is going to use or in relation to the educator’s expectations (e.g., *To improve the participants’ planning skills in organising entrepreneurial activities*). They are broader than learning outcomes and set the framework for the educator’s aims or expectations. On the course design level, they should be defined for the course as a whole, and for each module or lesson separately.

3. Learning outcomes are concise tools to measure the learners’ performance and attainment and to define the direction of the learning process. They should be meaningful and relevant to the learners, measurable, and achievable. On the course design level, you set the main outcomes (e.g., *The participants will be able to create a project proposal based on specific criteria*), but they should also be set for each lower level (modules and lessons) separately. One way to align them is to look for what needs to be achieved on the lower level to reach the higher level of results.

Setting clear and measurable learning outcomes should help monitor the learning process and align expectations (your expectations with your learners’ expectations). One of the most well-known tools for setting outcomes is **Bloom’s taxonomy – a taxonomy for learning, teaching, and assessing**. Developed in 1956, it served as a framework for categorizing educational objectives (what educators later started calling learning outcomes) – descriptions of what the learners will be able to do after being involved in planned educational activities. The framework now entails different domains in which learning takes place: [cognitive](#) (knowledge, intellectual processes), [affective](#) (attitudes, beliefs, values), and [psychomotor](#) (kinesthetic, physical skills). In 2008, Anthony Churches proposed an addition to the list of verbs, stating that a lot of outcomes are related specifically to the online learning environment. Some of his examples include²:

² Churches (2008), [Bloom’s Digital Taxonomy](#)

LEVEL	VERBS
Remembering	bullet pointing, highlighting, bookmarking, social networking, “googling”...
Understanding	advanced and Boolean searching, blog journaling, commenting, annotating...
Applying	running and operating (a program, an app), playing (educational games), uploading and sharing, editing...
Analysing	mashing (mashups), linking, reverse-engineering, cracking, mind-mapping
Evaluating	blog/vlog commenting and reflecting, posting, moderating, collaborating and networking (e.g., online forums), testing, validating (the veracity of sources)...
Creating	programming, filming, animating, videocasting, podcasting, mixing and remixing, directing and producing, publishing (e.g., vlogging, wiki-ing)

Churches also introduces *Collaboration* as a horizontal element, as an important mechanism that facilitates higher-order thinking skills. It consists of activities such as moderating, commenting, video conferencing, reviewing, chatting, emailing, etc.

Some of the limitations of the Taxonomy and learning outcomes in general include:

- Unintended outcomes: Learning sometimes happens unexpectedly. Expressive outcomes are the results of activities that have no intended outcomes, but the person is “uniquely changed in some way from exposure to the experience”³.
- Assessment: Some outcomes are less easy to recognise and pinpoint and are therefore less often assessed and acknowledged. These include expressive outcomes and outcomes directed towards attitudes, values, and behaviours.
- Stages of development: Some experts argue that learning doesn’t necessarily happen from lower to higher levels (e.g., we can make lemonade without knowing anything about acidic compounds in lemons).

These issues are addressed in the comparative table below, but what is important to emphasise here is that a certain level of **flexibility and creativity** must be attained in setting learning outcomes, especially in non-formal education.

Research on outcome attainment in face-to-face and online courses shows different results: some show that there are no differences, and some show that online education is less efficient in this area. Either way, research indicates that there are certain factors that influence the effectiveness of online education in terms of outcome attainment: the learners’ interaction with other learners, their ability to interact with instructors after the class, the quality of online platforms, and the challenges they face in their environment⁴. Research on blended learning shows that Bloom’s taxonomy is useful since it contributes to making the course more systematic and efficient and helps to create clear structure and vision⁵. For alternatives, check out the [Marzano’s New Taxonomy](#) or the Structure of Observed Learning Outcomes – the [SOLO model](#)⁶.

³ Anderson & Krathwohl (2001:21), *A taxonomy for learning, teaching, and assessing: a revision*.

⁴ Janmaimool & Nunsunanon (2021), [Online vs. Face-to-Face Lecture Courses](#)

⁵ Pikhart & Klimova (2019), [Utilization of Linguistic Aspects of Bloom’s Taxonomy in Blended Learning](#)

⁶ Rahman & Manaf (2017), [A Critical Analysis of Bloom’s Taxonomy](#).

Application in different settings:

Face-to-face	Synchronous	Asynchronous
<p>Learning objectives and outcomes set up and communicate the direction of the course. You should set objectives and outcomes on the course level first. While preparing your course, map the major topics that will be covered, and set learning outcomes for each topic separately before breaking them down to (sub)outcomes for each lesson. Experts advise writing <u>one to three learning outcomes per major topic, and one to three outcomes per lesson. Each outcome should be comprised of one action verb!</u> The outcomes set on the course level have to entail higher-order levels of learning (in any domain of learning – e.g., cognitive, affective, psychomotor), and can then be broken down into lower-level categories.</p> <p>Make sure you communicate the outcomes with your learners at the beginning of the course and share your expectations. The outcomes can be shared on the promotional materials, set on the background wall of your working space, and be a reminder of shared motivation.</p> <p>Set up monitoring and assessment mechanisms throughout your course at a regular pace. Include various tools and methods and encourage self-reflection to ensure your learners will share the changes in their attitudes and behaviours, and recognise unintended learning.</p>	<p>In online education, it usually takes more time to reach the objectives and outcomes set for face-to-face education. This is because online synchronous lessons should be shorter, include more breaks and be combined with more self-directed learning (which means more individual or group work outside your lessons or sessions). You can modify the outcomes accordingly: you might need to include <u>more outcomes of the lower-order cognitive categories or set a lower number of outcomes.</u> If you estimate that your course can encompass the same content as in a face-to-face setting, follow the same guidelines: <u>choose up to three outcomes per major topic, and choose only one action verb per outcome!</u></p> <p>Present the learning outcomes at the beginning of your course and include them in the self-study materials (if applicable). Make sure they are visible, clear and accessible to your learners in the general information about the course.</p> <p>Plan for regular monitoring and assessment to check for the attainment of the outcomes. Use the same methods as in face-to-face courses to keep track of unexpected learning, or less observable categories (attitudes, values, etc.), but don't forget to use digital tools to make it interactive.</p>	<p>When it comes to the number of outcomes and their position on the complexity scale, you can rely on the same guidelines as in synchronous online education: <u>never choose more than three outcomes per major topic and break them down into lower-order categories your learners can follow. Always include one action verb per outcome.</u></p> <p><u>The presentation of the learning outcomes is crucial in asynchronous courses.</u> Since the learners have greater autonomy in organising their time and effort, and you often cannot provide them with immediate support, they need to understand the purpose of every material and task from the beginning and have a clear vision of where it will lead them in terms of new knowledge, skills, etc. Furthermore, the way you present the outcomes might even be a key factor in your learners' decision on whether to enrol in your course or not. Make the presentation of the learning outcomes user-friendly and accessible at all times. Use concise language and make it short and impactful, but try to create additional explanations and examples (e.g., through video, visuals, or texts).</p> <p>In planning monitoring and assessment, you can use the same strategies as in other educational settings, but with the appropriate modifications and use of digital tools.</p>

4. Content, pedagogical methods and activities

The **content** of your course must derive from the objectives and outcomes you have set. The content and the topics can be organised using different strategies:

- main concepts/categories (no hierarchy, no sequence: e.g., *apps for creating audio material, video material, visuals, interactive presentations*),
- subordinate to a higher level (hierarchical, when the person needs to learn lower-level concepts as a prerequisite for more advanced ones, e.g., *learning a vocabulary set in a foreign language, then forming sentences*),
- chronologically (when time patterns are necessary, e.g., *processes, recipes*),
- cause and effect (problems and solutions, e.g., discussing policies),
- and others.

Chunking – breaking the content down into smaller units, is a very important mechanism in designing courses and lessons, especially in online education. While planning smaller units, make sure you define which information is essential, but also include additional materials for the learners who want to “dig deeper”. Plan a series of lessons or modules that will cover major topics, but do not include more than two key concepts per lesson. Encourage reflection and self-reflection before moving on to other topics. You can find a useful checklist for chunking course material [here](#).

The key task here is to organise a coherent structure and communicate that to your learners. Seeing the logical structure of the content will contribute to their understanding of the flow of the course as a whole and make it easier for them to follow the content, prepare for the lessons, and engage.

Application in different settings (content):

Face-to-face	Synchronous	Asynchronous
The content should stem from the learning objectives and outcomes, but its delivery should be planned according to its inherent features, the needs and interests of your learners, and the resources you have at your disposal (time, space, money, etc.). Organise the content for the optimal consolidation of knowledge: it should allow for a transfer of learning, but not be confused with previous topics or topics you have lined up next. If you have time, research or test different strategies before putting them into practice.	Time is a resource especially delicate to handle here because lesson delivery has its limitations (shorter lessons, more breaks, etc.). To keep your synchronous lessons efficient, the strategies for delivering content should also rely on the learners' individual work (self-directed learning). Make sure you cover only one or two key concepts per lesson and explore how you can teach them more efficiently in e-learning (e.g., here). If you cover an issue that can impact people, evoke strong emotions, or affect their mood, include more activities that will help people process them.	The most important thing in asynchronous education is to deliver content in a way that will allow for the consolidation of knowledge, feel intuitive, and not be overwhelming. You should create a clear pathway through the course content that your learners can easily follow and access. Choose your content delivery tools according to your chosen strategy. To test if the content is adequately presented, you can do a test run, organize a focus group, or hire an external evaluator. You can also include surveys that will allow your learners to rate the usefulness of the topics and their order and flow.

The choice of **instructional strategies, or methods, and activities**, stems from the intersection between the course objectives and learning outcomes, the content, and the educator’s knowledge and understanding of the characteristics, needs and expectations of their learners. Again, on the course design level, you don’t have to be too specific about every method you will use for each lesson, but you should have a clear vision of how certain content would be best conveyed or which experiences you want your learners to go through to attain the learning outcomes. This means you need to decide on the types of learning you want to stimulate in advance: active learning, observational learning, rote learning, meaningful learning, cooperative learning, e-learning, etc. Depending on your focus, there is an abundance of methods available to educators today that can fit their vision for the course. Some of them are also discussed in this handbook, along with different strategies and techniques related to their application in the online setting.

Application in different settings (methods):

Face-to-face	Synchronous	Asynchronous
<p>In a face-to-face environment, it is easier to determine, deliver, and adjust methods that were originally created for such settings. You should choose methods that reflect the path you want your learners to take to reach the learning outcomes and their own personal objectives, needs and interests. While choosing the methods, make sure you align them with the time, space and learning materials you have at your disposal. The biggest asset of face-to-face education is the possibility to create settings for meaningful in-person interaction that can enhance the learning experience. Here you can be more flexible and engage your learners in different experiential and collaborative learning activities. You can include creative methods and methods that can efficiently engage all senses. You can enhance them with real-life objects and interaction with the environment. Make sure you model and cultivate reflection and self-reflection throughout the course (e.g., oral reflection, journals, freewriting, think-pair-share, storyboards, concept maps...).</p>	<p>Thinking about methods for synchronous education will inadvertently lead to methods that use text, sound, and camera. Be aware that some learners won't be able to use the camera and think about possible variations. Try thinking about methods that will occasionally engage the body to keep the energy levels up and remedy long sitting hours. Plan for activities that will get you and your learners away from the camera. Have them use everyday objects in their surroundings. When sharing your screen, be aware that the materials you use have to do a lot of the work because your learners won't be able to see you in full, so make sure you plan the methods and the materials in parallel. Do not use too many different methods and activities in a short period, as your learners might be overwhelmed. You might be tempted to transfer activities from the face-to-face setting to online. Some might work with or without modifications, but a lot of them will need a careful examination before being put into practice. Make sure you test them and look into possible challenges.</p>	<p>The methods used in asynchronous education are substantially different from other educational settings. Asynchronous education heavily relies on study materials, visuals, videos, and automatized content (for example, quizzes). It is essential to let your learners know how much time per week they need to dedicate to the course at the beginning, and for each module separately. The materials are the main channel through which you communicate the methods and activities, so make sure you give clear instructions and include interactive and collaborative tools. Apart from the content delivery tools you will use in your course, explore other areas you will need: communication tools and collaborative tools and platforms, individual or group assignment tools, meaningful assessment tools, and feedback tools. Include a “Frequently Asked Questions” section on your platform. You can also set up office hours when your learners can reach you if they have any questions (in person or via email).</p>

5. Differentiation in learning

One size does not fit all! Your learners differ in various ways: their personal traits, motivation, abilities, gender, cultural backgrounds, socio-economic status... In addition, every one of them experiences the same educational process differently so their level of motivation and engagement can vary during the process. Needs assessments and baseline assessments serve as a basis for offering different paths – different aspects of the educational process which need to be adapted to fit the specific needs of the learners and to optimize their learning experience. The table below shows examples of areas in which differentiation can take place and their features.

Aspects we can adapt	Description, advantages, and disadvantages
Outcomes	<ul style="list-style-type: none">- Same task, different outcome for every learner- Supports developmental paths on a more personal level- Can cause a feeling of inadequacy if the outcomes are not set properly
Tasks	<ul style="list-style-type: none">- Different tasks developed according to the baseline assessment- Highly likely that the tasks will be achievable, and therefore motivate the learners- Heavily depend on the educator's judgement
Support	<ul style="list-style-type: none">- Different levels, different resources for supporting different learners- Can be used with peer-to-peer support, empowering- May take a lot of time for monitoring and facilitating

Adapted from Haynes, 2010

Most often differentiation is done by setting up a task and then defining how it could be done on a spectrum “from most to least able”. This can pose a challenge because the abilities of one learner can vary across different tasks, and because ability is often mixed with attainment (how much someone can remember at a certain point in time).

Should you then always make individual plans for each person in a group? While the answer again depends on the context of your work and the number of learners in your group, this process would most likely be too time-consuming and could pose a challenge to monitoring your learners’ progress. Therefore, while planning differentiation you should try to⁷:

- Aim for clear and effective ways for differentiation, not perfect and detailed plans for each learner,
- Be creative and flexible, think back and forth throughout your plans and explore different ways you can reach the objectives and learning outcomes.

⁷ Haynes (2010), *The Complete Guide to Lesson Planning and Preparation*.

Application in different settings:

Face-to-face	Synchronous	Asynchronous
Apart from the outcomes, tasks, and support, differentiation can be done through modifying content (every learner chooses a different topic to work on, but the outcomes should be the same for everyone) and the environment (Tomlinson, 1999). Although it might seem that the environment can be easily controlled in face-to-face settings, it is often more challenging to monitor and manage differentiation when working with a group (e.g., you might not have space for learners to work independently). Here your biggest asset is the possibility to give timely support to your learners. Keep their needs and interests in mind, ask for feedback regularly, and plan time for observation. Differentiation should be included in every aspect of your course design (from planning outcomes to assessment).	In designing courses in which most lessons are delivered synchronously, you can make certain modifications at the beginning to ensure everyone has a good starting position: plan for shorter sessions, more frequent breaks, and include methods and activities that will encourage your learners to use their body and surroundings. Offering immediate support might not be always possible (especially if it concerns technical difficulties), so make sure you establish support mechanisms for different scenarios and create a safe space in which your learners can openly ask for support (from you or other learners). Plan for various engaging methods and materials, so that you include different types of learning preferences. This also applies to the self-study materials and activities you will plan between lessons or modules.	The asynchronous setting gives space to the learners to modify their environment according to their needs and preferences. This might be inspiring to some learners, but gives you fewer opportunities to support them in real time. Use as many digital tools and options on your platform as you can to offer variations to your learners: use assistive technology, let them choose topics or tools they will work with, and set up different levels for completing the course or more complex topics, etc. Celebrate diversity, and use various and engaging materials, methods, and tasks to include different needs and abilities. The asynchronous setting offers a lot of possibilities, but take into consideration the time you'll need to explore, create, and incorporate all the adjustments you wish to include.

6. Resources: time, space, instructional materials

A careful examination of the most important resources you are going to use is crucial for the achievement of objectives and outcomes. They strongly intertwine with the methods and activities, so it would be wise to plan them simultaneously.

Time is one of the hardest resources to grasp, but one that gets easier to handle with experience. **Course design is defined as long-term planning**, which means that it requires you to look at the big picture and envision the whole journey your learners will take with you. At this point, you might benefit from paying attention to **medium-term planning** as well. This refers to the “scheme of work”, or a series of connected lessons that comprise a logical thematic unit with specific outcomes. **Consider setting (and celebrating) milestones after a thematic unit is finished**, as this will help your learners have a clear understanding of the course timeline and give them a sense of achievement. Make sure you **present the full schedule to your learners** at the beginning of the course. Related to the time span of the course, you should also plan **the dynamic, the rhythm, and the pace** of the thematic units. Try to keep a good balance and adjust your expectations from the learners: the course should be motivating and engaging, but not overwhelm your learners with too many resources and assignments in short periods. To find out more about other important aspects regarding time as a resource in education, read our chapter on Time management.

Space can refer to physical and online spaces where learning activities are taking place. On the course design level, it is important to map the features of the spaces you need to be able to decide on the use of appropriate methods. Often these processes intertwine in planning and influence each other. When you start planning, you might already know which room or venue you will use to deliver your course or training, and this information will shape your choice of methods and activities. On the other hand, you might have ideas about online activities, but you are still not sure which online tool or platform to use. Either way, while choosing and planning the use of spaces, make sure you compare their features and take advantage of all the possibilities they offer.

Application in different settings (space and time of delivery):

Face-to-face	Synchronous	Asynchronous
<p>In terms of time as a resource, some things might be easier to manage and more flexible in face-to-face education (e.g., you can have longer lessons/sessions, and therefore take more time for certain activities). However, physical presence requires additional preparation time (e.g., travelling or preparing the space according to your plan). Take all that into account while planning the content and the methods. Always plan an introductory session in which you will lay out the course timeline, deadlines, etc. Where possible, include your learners in timeline adjustments – maybe they need more time for certain activities, less time for others, etc. Face-to-face lessons can last longer if you include more variety in the methods and ensure that the learners’ basic needs are met (breaks and refreshment).</p> <p>Physical spaces in face-to-face education allow for proper nonverbal communication. Here, it is vital to develop spatial awareness. As an educator, you have to be conscious of your own body, your body’s position in the room, and the positions of your learners.</p>	<p>In an online synchronous setting, you will most likely spend more time preparing materials and activities than delivering lessons. Within the lessons, you might spend more time adjusting to everyone’s technical issues. Be aware of this while planning the course timeline, content, and methods. Keep in mind that lessons in online synchronous courses have to be shorter (e.g., no more than 2 hours per session if you meet 2 or more times per week) and include more frequent and/or longer breaks.</p> <p>The online spaces you use here refer to your main platform, and all the other apps you use. In video conferencing, everyone’s faces are much closer than in real life, so it might seem that they are in our personal space. This can get really intense, so make the window smaller, move the camera farther away, and plan for periods when your learners can shut the camera off or minimize its usage (for example, while you are sharing the screen). Keep your working area clean and practical – it provides a setting for your session, and get creative with your background, depending on the topic.</p>	<p>The time frame – the timeline, time span and workload of your course should be known to your learners even before they enrol in your course (sometimes this can be a decisive factor). Make sure you prepare an introduction in which you will include more information on the time and how to use the space(s) of your course. Since the learners will be going through the course at their own pace (at least to some extent because every course includes deadlines), set a specific time or channel where they can reach you if they need support, and make sure you react promptly.</p> <p>Asynchronous education heavily depends on its learning environment. It is essential to make the space easy to use regardless of the platform you are using – Moodle, Udemy, Google Classroom, or others. Organise the material based on your preferred strategies, but make it easy to find and navigate, and don't be afraid to reiterate guidelines. Explore the options to set up a space for informal exchanges between the learners to build a sense of community (e.g., a Facebook group).</p>

Instructional materials are the collection of resources you and your learners use during the course (teaching and learning materials). Different types of materials, as well as their advantages and disadvantages are presented below⁸:

TYPE	ADVANTAGES	DISADVANTAGES
READY-MADE MATERIALS (done by other educators, institutions, publishing companies, etc.)	<ul style="list-style-type: none"> - Most likely have a high production level, especially the ones made by professionals in the field - Can be made for specific courses, which can save a lot of time for the educators 	<ul style="list-style-type: none"> - Mass production usually cannot be connected to the specific needs of each educator - Can be biased - May be expensive
SELF-CREATED MATERIALS (include not only the materials that the educators have designed and created themselves but also the ones that were not initially intended to be used for educational purposes, for example, empty bottles used for crafts or adapted game mechanisms – e.g., Dixit cards for reflection activities)	<ul style="list-style-type: none"> - Easier to adapt to a particular group or setting - Support the educator's autonomy and creativity - Usually cheaper 	<ul style="list-style-type: none"> - Time-consuming (the ones you create from zero) - Harder to transfer to a different learning context because they're so specific - May have undetected mistakes

At the level of course design, you should prepare and compile a list of the main materials that should be included in the course overview or syllabus. As you go further to unit or lesson planning, the number of materials will most likely grow, as the content in lower-level planning units (lessons) is usually broken down to smaller tasks. Your choice of instructional materials is always intertwined with the choice of methods.

Application in different settings (instructional materials):

Face-to-face	Synchronous	Asynchronous
Collecting or creating materials for face-to-face education can pertain to printed materials or self-study materials (learn more about them in Chapter 5). The media you will use will depend on the technical conditions of the physical space in which your course is taking place, so take that into account while planning. Include various materials to cover for different needs and preferences. The use of materials can be explained on the spot, and you can guide your learners in their use. Think about how you can encourage your learners to make the materials themselves. Make it a part of group work!	The choice of materials for synchronous online education heavily depends on the features of the platform(s) you are using. They can be similar to materials used in face-to-face education (although they obviously cannot come in printed form). Apps like Canva or PicMonkey can help you with templates and ideas. If you want to create interactive materials, you can use e.g., Google Forms or Slides , or other platforms in which your learners can communicate with each other or interact with the materials (comment, like, etc.). For instant feedback and gamification, you can use Kahoot or Mentimeter .	The instructional materials are crucial here because they also act as course instructors in a way (they are “your voice”). Make sure they are clear and accessible (language, presentation) and follow your personal style. Think about a way the learners can track their progress: create a checklist, a progress bar, a different colour for completed tasks, or introduce badges with Canva or Badgelist . Organise the material in chunks corresponding to the content and learning outcomes, and mark the time they will need to complete a task, topic, or module.

⁸ Haynes (2010), *The Complete Guide to Lesson Planning and Preparation*.

7. Monitoring progression, assessment, and evaluation

While assessment and evaluation might at first seem to be on the opposite side of planning, it is of utmost importance to carefully plan them in advance. Mechanisms for monitoring, assessment and evaluation should be integrated into the learning process before it ends, as this will help both learners and educators to have a clear overview of the process, be able to reflect on it, make timely adjustments along the way, and map the aspects that should be improved in the next cycle.

On the course design level, it is important to first decide on the intervals and the pace of all three mechanisms. **Monitoring progress and assessment** will probably occur more frequently, and they can be done through shorter or more elaborate activities like [revision](#), [entry and exit tickets](#), [summary stories](#), and [others](#). Before their implementation, make sure you communicate their purpose to your learners, and choose questions or tasks that reflect the learning outcomes. **Evaluation** is done to determine the quality, value, effectiveness, and importance of different aspects of the learning process and can be done through similar tools as monitoring and assessment, but with a different purpose. Cultivating and modelling reflection and self-reflection is an important base for gathering information for all three mechanisms, as well as for giving and receiving feedback, so choose and incorporate your strategy wisely.

Application in different settings:

Face-to-face	Synchronous	Asynchronous
<p>As mentioned, monitoring and assessment have to be implemented at a regular pace. There are numerous longer and shorter activities you can easily implement in your lessons or between them in face-to-face settings (in written or oral form). Categorising evaluation can be done through answering a few key questions: when, what, and who. <i>When</i> is a matter of timing. You can evaluate different aspects during the lessons, at the end of a module or at the end of the course. <i>What</i> refers to the data you want to collect. You can ask the participants to evaluate the structure or the content, the communication within the group, etc. The effectiveness of the course on your learners' knowledge or skills can be evaluated through a "before" and "after" assessment. <i>Who</i> evaluates what is also important: your learners can evaluate your work, but self-evaluation is also very important for both of you.</p>	<p>Monitoring and assessment can be implemented in a similar way to face-to-face settings, in written or oral forms, individually or in a group, but with the use of digital tools. Plan for meaningful assessment that is in line with the learning outcomes and that fosters consolidation and further learning!</p> <p>To implement evaluation and self-evaluation strategies, you can follow the same guidelines as in the face-to-face context. However, here you can make more use of the time in between the lessons or modules (like individual or group tasks that can be completed asynchronously) to save time during your lessons, and to encourage reflection and self-reflection.</p> <p>For all three mechanisms, you can use apps like Mentimeter, Jamboard and Ideaboardz. For a quick and easy feedback, use the tools you already have on your platform(s), like emojis, chat, polls, etc.</p>	<p>Since monitoring and assessment cannot be done in real time, you need to plan for more frequent and shorter activities during the lessons and at the end of each module. Your learners will benefit from self-monitoring: include checklists, progress bars, and badges to celebrate achievements. Be creative and try not to repeat activities: set up different tasks that will require your learners to produce and post content (like videos, audio recordings, visuals, etc.) and engage them in peer monitoring and assessment.</p> <p>Evaluation can be done through similar activities and tools as in other settings. In using online survey tools such as Google Forms or Lime Survey, keep the evaluation form concise and straightforward. Use fewer open-ended questions – save them for different types of tasks in which deeper insights will be the focus.</p>

8. Questions for reflection

1. Think of all the steps and tasks you need to do to design a course. Which tools and mechanisms can you use to make this complex work easier and more efficient?
2. How would you describe a good planner? Which key attitudes, traits and behaviours can you identify? How do your personal traits and style of work match this image?
3. Which step in course design seems to be the most challenging to you in face-to-face, online synchronous, and online asynchronous settings and why? Pick one step for each setting, but remember that we are talking about designing and planning, not implementation!

9. References and resources

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