THE-GLOW

Transdisciplinary Higher Education for Global Wellbeing

Development of Transdisciplinary and Active Education: A Guide

December 2025

About this guide

This guide is intended as an accessible resource to those interested in exploring the development of transdisciplinary and active education. It outlines key concepts and elements of this approach to education and provides practical examples as a source of inspiration.

This guide is complemented by brief video clips on: the need for active learning in transdisciplinary education; constructive alignment; building a course narrative; active learning methods; and assessment in active learning.

What is transdisciplinarity?

There are many different definitions of transdisciplinarity. Some key aspects common to many of them are:

- Goes beyond traditional disciplinary boundaries
- Involves cooperation between academics, practitioners and other societal actors
- Society-oriented and seeks to address complex real-world challenges
- Complementary to other forms of research and practice
- Emphasizes active participation and participatory approaches

Why transdisciplinary education?

The contemporary and emerging challenges we face are increasingly complex and dynamic in a globalized world. Although each discipline can make an invaluable contribution to addressing these challenges, it is not possible to address them through single disciplinary silos alone. Therefore, it is necessary for students to learn to collaborate actively across and beyond diverse disciplines, and with practice-based experts in seeking solutions to these complex real-world challenges. Therefore, transdisciplinary education - i.e. education that deliberately focuses on transdisciplinarity - is necessary to equip students with the knowledge and competencies they need to work in a transdisciplinary way.

Why active and student-centred learning for transdisciplinary education?

Real life is complex, dynamic and messy, with contemporary challenges requiring a transdisciplinary approach.

For students, the gaps between abstract knowledge and real-life are often difficult to bridge, and mobilizing and applying abstract knowledge to real-life problems can be difficult.

However, what we have learned is connected with how and where we have learned it - knowledge is best mobilized under familiar conditions, where students are better able to recall and apply it.

At the same time, professionals need to be able to respond to changing and emerging situations. They need to be able to think holistically, creatively, critically and analytically, and

have the ability to solve or address complex problems that they may not have encountered before.

Therefore, it is important that students are able to grapple with complex tasks and problems, and work through moments of uncertainty and confusion. Feeling puzzled or experiencing such cognitive conflict forces us to assess a situation, organize and re-organize what we know, and figure out how to respond. This process is often an important stimulus and vehicle for enhancing analytical capacity and life-long learning skills. Such an approach is crucial to transdisciplinary education.

Through active learning, students are not passive recipients of knowledge, but rather actively engage with, and take ownership of, their education. They are encouraged and stimulated to develop and utilise the competencies they gain to actively seek, collect, analyse, synthesize, integrate and apply the various elements they need to address existing and emerging real-life challenges. Educators facilitate this process.

Glossary

Program	Refers to an entire curriculum leading to a degree
Course	Refers to a single stand-alone teaching-learning component within a program curriculum.
Course learning objectives	The higher level and overarching course learning objectives. Although traditionally these are framed from the perspective of the instructor perspective, in student centred learning, these can be framed with a focus on students. However, they refer to the broader objectives of the course.
Course learning outcomes	The course learning objectives can be further detailed into more specific learning outcomes.
Unit	These refer to the constituent sub-components of a course, each dealing with a particular topic or focus.
Learning goals	The specific questions students will seek to address, or the specific sub-topics students seek to learn about, within a particular unit.
Assessment	Measuring student performance, demonstrating student achievement of expected learning outcomes.

What is constructive alignment?

In short, constructive alignment emphasizes two aspects: that all educational elements are aligned with one-another and the context; and that they build on one-another. While this may seem quite self-evident, it is something we have to pay particular attention to as we move through the process of developing transdisciplinary and active education. For example, we can start by identifying the competencies our students need to gain, and that we would like them to develop through a particular course. These competencies can then be used to develop specific learning outcomes for the course, as well as the learning goals of a particular unit. These will guide and inform the development of teaching activities, assessments and other elements. However, when we deliver education, students will experience the teaching activities and content one unit at a time, reaching the learning goals of each unit, and then the learning outcomes of the course, having developed the identified competencies by the end of the course.

A simple way of thinking about this is: design backwards and deliver forwards, as indicated in the figure below.

Design backwards

Learning goals of the unit

Course learning outcomes

Competencies and intended course learning objectives

Deliver forward
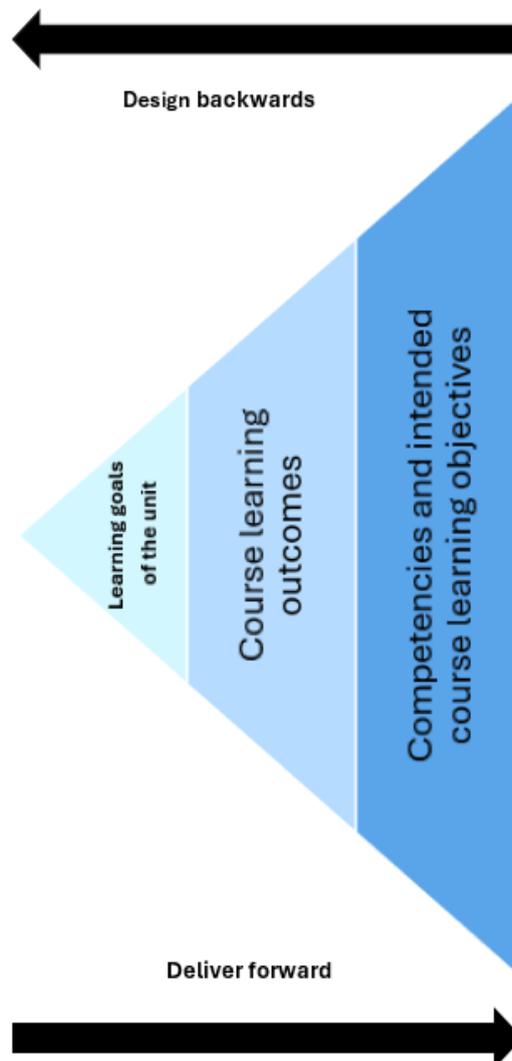
Adapted from Buehl (2000)

Competency-based outcomes

Identifying the competencies you want your students to gain through a particular course or educational activity is a key first step.

When thinking about competencies, start with the question: What would you want your students to be able to do?

Example competencies for a transdisciplinary professional may include (following list is not exhaustive):

- *Cognitive competencies.* Be able to think across different disciplines to understand the complexity of real-world problems. This also includes systems thinking, requiring the capacity to adopt a holistic and dynamic approach.
- *Attitude/mindset.* Curiosity and listening, an openness and keen interest in the development of the project and research through empathic listening, self-reflection and inquiry. Adaptability and flexibility are necessary to handle uncertainty.
- *Communication.* This includes finding common vocabulary to be able to communicate to and across experts from different academic disciplines as well as communities and professional experts, as well as translate complex ideas into accessible descriptions.
- *Networking.* Networking is crucial for transdisciplinary approaches as it facilitates collaboration and knowledge exchange between diverse stakeholders and disciplines. This involves bridging disciplines and sectors: boundary spanning capacity to connect across disciplines and different stakeholder groups.
- *Advocacy.* Advocacy involves actively promoting the inclusion of various voices, particularly those often marginalized, and advocating for the integration of knowledge systems to address complex societal problems. This includes facilitating dialogue, navigating power dynamics, and ensuring that the research or intervention process is both inclusive and transformative.
- *Presenting.* Transdisciplinary professionals should be able to communicate complex ideas clearly and engage diverse audiences. Transdisciplinary work necessitates engaging stakeholders with varying backgrounds. This involves adapting communication styles, using accessible language in clear presentations.
- *Writing.* As with presenting skills, transdisciplinary professionals should be able to translate complex ideas in easily accessible writing, tailored and adapted to the specific audience.

These competencies form the basis for developing learning objectives for your course.

Learning outcomes

These are the outcomes you would like your students to achieve, having completed the course. They will depend on the focus of your course and the competencies you have identified. However, the following phrases are a few examples of how you might frame the learning outcomes for your course:

Having completed the course, students:

- are aware of....
- can understand...

- can identify…
- can unpack…
- can analyse…
- can apply…
- can demonstrate…
- are able to…
- can develop a plan…
- can critically assess…
- communicate…

Course narrative

The course narrative is the story of the course. It can help students, teachers/facilitators and others to understand the rationale and logic of the course and its relevance. It can also provide a roadmap about how students will navigate a particular topic within the course. If your course uses active learning approaches, it is good to emphasize this in the narrative as well.

The course can help students and others to understand the scope of the course from the outset, and thereby, to take greater ownership over what they will learn. It can also help guest lecturers, panellists and other (practice-based) experts and invitees to understand what the course is about.

The narrative is usually included in the introduction of a course syllabus. It may also be apparent in the flowchart visualising the different elements of the course and their links, and reflected in the set-up and structure of the course and its sessions. The narrative needs to be consistent with, and reflect, the competencies and learning outcomes identified for the course.

Make sure that your course narrative emphasizes and reflects the transdisciplinarity nature of the course explicitly!

Flowchart and building blocks

The flowchart depicts both the building blocks of the course, as well as a road map towards the competencies and learning outcomes. It helps to visualize the alignment between the competencies, learning outcomes, units and other elements.

The building blocks of your course are the key elements/components within it. These building blocks represent a breakdown of the course into practical units, and need to reflect the competencies and learning outcomes identified.

Visits to the field, panel discussions and other key activities can also be depicted within the flowchart.

An example of a flowchart is indicated in the figure below. You can develop your own flowchart according to the nature and requirements of your course. Visualizing the course in this way can also help you to reflect on the constructive alignment within your course.

Course learning objective	Course learning outcomes	Units	Skills & Competences
Analysing interactions between gender climate change and health	1.Understand the interplay between climate change, gender, environment, agriculture, and health 2.Apply transdisciplinary gender analysis approaches (concepts, frameworks) to climate change at the intersection of environment, agriculture and health using real world case studies 3.Critically assess & rethink current disciplinary paradigms concerning gender and climate change, and be an effective agent of (transformative) change 4.Develop and communicate recommendations for transdisciplinary interventions/strategies based on the outcomes of the analysis	**Part 1**: Introduction to the course; Gender and climate change intersections; Gender and climate change analytical frameworks; Case study presentations **Part 2**: Field trip instructions; Field trip **Part 3**: Field trip analysis; Field trip presentation preparation **Part 4**: Field trip presentations and feedback; Course evaluation	• Understanding of gender-climate change intersections • Understanding frameworks for analysis • Applying frameworks for analysis • Presentation skills • Communication skills • Reflection skills

Active learning activities: What is it about?

Active learning is about students exploring and co-organising their own study process, making them co-owner of their learning trajectory. By doing so, they are more actively involved, and more active processing of study materials and experiences helps build those competencies. Active involvement can occur on different levels: students themselves, in groups or individually, may define knowledge or competency gaps, identify and collect information, process and organise that information, and discuss that with their peers to compare and contrast different findings.

Active learning is not always simple. It requires us as educators to shift our role to that of a facilitator. We have to take a "leap of faith" in allowing our students the freedom to search for answers and solutions themselves. However, we also need to provide the necessary conditions, stimuli, platforms and guidance to our students to facilitate this process.

Active learning takes time. Students need the time and space to be able to engage with materials and content, and to prepare for and perform the tasks identified.

Active learning also requires careful planning around required resources and materials. It may also require specific access and logistic arrangements (e.g. for field visits).

Examples of active learning

Below a number of active learning strategies are listed. This list is by no means exhaustive.

Brainwriting

Brainwriting is a brainstorming method that encourages students to write out their ideas before sharing them with team members. Brainwriting is a collaborative process that begins with individual reflection. This works well in larger groups. The facilitator gives each student a set amount of time to get their ideas down in real-time. Then, when the time is up, everyone turns in their ideas to the facilitator, who then facilitates an open discussion based on the ideas provided. Brainwriting can be done on paper or an online tool that supports the process.

Group concept mapping

Group concept mapping is a structured methodology for organizing the ideas of a group on any topic of interest and representing those ideas visually in a map or a series of related maps. Group concept mapping is participatory in nature, allowing participants to have an equal voice and to contribute through various methods. A group concept map visually represents all the ideas of a group and how they relate to each other, and depending on the scale, which ideas are more relevant, important, or feasible.

Jig saw

The jigsaw technique involves dividing up parts of the topic or problem (like puzzle pieces). Subsequently, groups of students are assigned topics to become "experts" in one area of the problem and afterward teach the knowledge they have learned to peers in their group. Jigsaw method is a form of cooperative learning that enables students to develop critical-thinking and ability for effective communication and promotes positive student attitudes toward their own learning.

Fishbowl

The fishbowl method is a strategy for organizing medium- to large-group discussions. Students are separated into two groups with an inner and outer circle. The inner circle represents the fish bowl, within which the students have a discussion. In the outer circle students are observing the discussion and taking notes. This approach fosters group discussion skills. Within the "fishbowl," students practice responding to multiple viewpoints. Observations from students in the outer circle provide insight into what makes for effective small-group discussions. As a teacher/facilitator your purpose is to moderate and facilitate the discussion.

World Cafe

The World Café methodology is a simple, effective, and flexible format for hosting large group dialogue. The following five components comprise the basic approach, which can be adapted to specific needs, purposes and contexts.

1) Setting: Create a "special" environment, most often modelled after a café, i.e. small round tables covered with a checkered or white linen tablecloth, butcher block paper, coloured pens, a vase of flowers, and optional "talking stick" item. There should be four chairs at each table (optimally) – and no more than five.

2) Welcome and introduction: The host begins with a warm welcome and an introduction to the World Café process, setting the context, sharing the Cafe Etiquette, and putting participants at ease.

3) Small-group rounds: The process begins with the first of three or more twenty-minute rounds of conversation for small groups of four (five maximum) people seated around a table. At the end of the twenty minutes, each member of the group moves to a different new table. They may or may not choose to leave one person as the "table host" or "anchor" for the next round, who welcomes the next group and briefly fills them in on what happened in the previous round.

4) Questions: each round is prefaced with a question specially crafted for the specific context and desired purpose of the World Café. The same questions can be used for more than one round, or they may build upon each other to focus the conversation or guide its direction.

5) Harvest: After the small groups (and/or in between rounds, as needed), individuals are invited to share insights or other results from their conversations with the rest of the large group. These results are reflected visually in a variety of ways, most often using graphic recording in the front of the room.

Construction quiz for peers

This involves students developing 'exam' questions for peers. This can be done after completion of (an element of) the course to exam students' understanding. Learners can demonstrate their comprehension by formulating one or more well-rounded questions including an answer key on the materials they studied.

One-minute-paper

The one-minute paper is an instructional strategy that uses a short writing task to assess learner understanding of course material. Although the one-minute paper can be done at any time in a class period, it is typically assigned at the end of a class. Students can complete the task individually, in pairs or in small groups. The method requires each student/pair/group to briefly write down answers to a question. Questions can be: 'What was the most important thing you learned in class today?', What were the key themes addressed in the lecture?', 'What question is unanswered?' or variations to the theme Students are then given a minute to complete the exercise. After that the answers can be discussed in class, by for instance, asking

a few students to read their answers aloud, let students read each other's answers or provide feedback on their answers.

Chain notes

Chain notes begin with a response by one student that is added to by others, one at a time, either individually or in small groups. Chain notes can be used at the start of a class to identify how much students already know about a topic, or at the end of a class to identify their understanding after a class discussion or other learning activity. At the end of the chain, the facilitator may collect the chain and may use it as an input for further instructions or for a group discussion.

Passing on a ball/light object

This method can be used when you want to activate students who are normally less proactive in class, or when you want spontaneous responses to questions. Students and facilitators stand in a circle. Facilitators can prepare questions, and throw a ball to one student who then needs to answer. After having answered, they can throw the ball to a new student to add to the answer, or back to the facilitator who will pose a new question.

Simulations and gamification

Simulations recreate real-life scenarios, allowing learners to practice skills and make decisions in a safe environment. Example simulations are a Mock World Health Assembly, or negotiations (in which students represent parties with different interests). Gamification can be defined as using game-design elements in non-game contexts. Example tools that can be used are Kahoot (https://kahoot.it/) or Mentimeter (https://www.mentimeter.com/).

Debates

Debates can stimulate students to become familiar with a topic and a particular position/perspective within it, and to develop the ability to construct and articulate compelling arguments on this basis. To make things interesting, you can ask students which position (e.g. for or against) they align with at the start of the activity, and then ask them to argue for the opposite position (e.g. if a student mentions that they are for privatization of a certain utility, you can ask them to argue against it). That way, they will also gain insight into other perspectives.

Role play

Role play can allow students to try to put themselves in the shoes of a particular actor. For instance, they can take the position of local government, a policy-maker, a journalist, or another role that can help them to explore the implications of a certain action on various

stakeholders. In addition to being a thinking exercise, it can help them to get insight into the interactions between different actors, and develop competencies relating to articulating and tailoring their arguments to different audiences.

Panel discussion

A panel discussion can be an engaging way to involve relevant stakeholders within and beyond academia (e.g. policy-makers, private-sector actors, practice-based experts and local communities) - a key aspect of transdisciplinarity. In addition to providing a platform for students to hear the perspectives of a diverse range of actors, a panel discussion can be an opportunity for active engagement and development of a range of competencies (e.g. relating to communication, engagement with diverse stakeholders etc). Students can prepare questions they would like to ask the panel of experts, as well as present, and get the inputs of various stakeholders on, their work and ideas (e.g. if students are working on preparing an action plan, these (practice-based) experts can comment on its feasibility, unintended consequences etc. Elements such as the interview guide/questions to panellists and presentations made can be part of the assessment as well.

The classroom in the hands of the students

One way of facilitating active ownership of education among students is to give them the power to decide how they would like to engage with the learning materials and resources provided. Students (e.g. in pairs) can be tasked with making a lesson plan for their peers, centred around a core description of the topic and key learning resources provided by the instructor/facilitator. The students will have to be creative and take the initiative in developing an engaging way in which to cover the content within their class/cohort. They will receive feedback and guidance on their plan from the facilitator, ensuring that essential content and elements are covered. The students will then take the lead in facilitating the learning session. This gives students a sense of ownership over their learning. It allows them to be creative and use learning approaches that are tailored to them, and their peers. It also provides space for them to develop competencies relating to leadership, organization and facilitation. This is often suited to more advanced learners (e.g. at postgraduate level).

Next generation task

The last unit of a particular course can be left open for students, allowing them to put something on the agenda that may not have otherwise been covered on the course. This allows students to be forward thinking, draw from their backgrounds/experiences, explore their own ideas and interests, and communicate these with others. While this can constitute an activity in the classroom, the output can also be assessed (e.g. a concept note or presentation about the unit they propose).

Examples from previously designed courses

Examples of active learning strategies in previously designed courses include amongst others:

- Group discussions
- Flipped classroom approaches
- Field work/field visit
- Conducting interviews
- Observations
- Panel discussions

Assessment in active learning: why do we assess?

There can be different reasons for assessment. This may include knowing the impact of our teaching or measure students' understanding. Also, assessment can be used for decision making (for instance for passing a grade or completing a course/graduate). You may also want to compare across students to measure variety in a group or cohort. Yet another goal may be to drive learning, if we use assessment as a learning activity.

Types of assessment: formative and summative assessment

Formative and summative assessment are two different types of assessment. Formative assessment provides feedback and information during the instructional process, while learning is taking place. A primary focus of formative assessment is to identify areas that may need improvement. These assessments typically are not graded and act as a gauge to students' learning progress. Examples of formative assessment can be: Observations of students non-verbal feedback during lecture, reflection journals that are reviewed periodically, conferences between the instructor and student at various points in time, and student self-evaluation of performance and progress. Whereas formative assessment focuses on the process, summative assessment assesses the final product. Summative assessment takes place after the learning has been completed and provides information and feedback that sums up the teaching and learning process. Rubrics, often developed around a set of standards or expectations, can be used for summative assessment. Rubrics can be given to students before they begin working on a particular project so they know what is expected of them for each of the criteria. Rubrics also can help you to be more objective when deriving a final, summative grade by following the same criteria students used to complete the project. Summative assessment is often used for decision-making — is the student able to effectively progress to the next part of the class? To the next course in the curriculum? To the next level of academic standing? Examples of summative assessment may be final examination, term papers (drafts submitted throughout the semester would be a formative assessment), or project deliverables (project phases submitted at various completion points could be formatively assessed).

Assessment *of*, *for* and *as* learning

Assessment in active learning means that the competencies you have objectified in the intended learning outcomes, also need to be reflected in your assessment. More concretely, if

you have formulated learning outcomes around critical analysis or communication skills, assessment should cover more than just knowledge testing. Further, different approaches to assessment match with active learning to different extents. The extent to which assessment drives and stimulates learning depends on the approach. We can distinguish assessment **of** learning, assessment **for** learning and assessment **as** learning.

- *Assessment **of** learning:* This is the dominant form of assessment, and a widely accepted form. Typically this occurs at the end of a course or educational component, to examine the extent to which the students have achieved the expected learning outcomes of the course. The assessment is designed by the teacher, and the results are used for decision making (passing a course or graduating), for ranking the students (score distribution) and for reporting (e.g. in course evaluations). However, with this form of assessment questions can be raised on how the results reflect learning processes (i.e. not reflecting learning curves), whether the scoring represents the broad range of competences included in learning outcomes (focus on cognitive competences covered), and whether the way of assessment really drives learning or motivates the students (students cramming for a test and afterwards forgetting what they have learned).

- *Assessment **for** learning* is an approach more adapted to the learning needs of the students, involving the students more in their learning process. Assessment here is designed by both teacher/facilitator and student, it is often *formative* (i.e. not used for decision making in terms of passing/failing) and serves to progress the students in their learning and help them to achieve the next stage in their learning process. Students and teachers/facilitators together identify particular learning needs based on what students know and can do. Frequently during a course they together can evaluate whether learning needs have been met, learning goals achieved and new learning goals can be set. In this way, this approach traces progression of students along a learning continuum, assessing progress more than once. This approach motivates students' learning more than assessment **of** learning.

- *Assessment **as** learning.* This is the most active and student-centered approach to assessment. Ownership is with the students as active, engaged and critical assessors of their own learning process. As in assessment **for** learning, the approach is predominantly *formative*. Students personally monitor what they are learning, evaluate their performance themselves, and use feedback to make adjustments, adaptations and changes in what they understand. This approach to assessment stimulates metacognition, empowers learners and enhances ownership over their learning process. Facilitators can then review these to gauge the extent to which students have met the identified competencies and learning outcomes.

How to assess?

In practice, the above means that assessment in active learning should always be competency based, reflecting competencies as captured by the learning outcomes, through authentic tasks (see examples of assessment in active learning). Preferably, assessment should be a combination of *formative* (for and as learning, involving self-evaluation, peer and facilitator feedback) and *summative* tasks (by the facilitator, for decision making). Transdisciplinary

professionals should be able to work in a team, as well as independently, therefore assignments could include both individual and group assignments. Assessing multiple times during a course and across courses (=multiple data points) helps student learning (feedback!) and back up decision making more comprehensively. The diversity in assignments should relate to the intended learning outcomes as well as reflect different learners' strengths. Well-designed assignments provide opportunities for pursuing learners' own interests while demonstrating the competencies objectified in advance.

Some assessment examples

- Make an action plan
- Draw a concept map
- Draw a system map
- Develop a concept note
- Prepare an elevator pitch
- Write a reflection on your contribution to group work
- Write a research report or review an existing report
- Make a (group) presentation
- Write a blogpost
- Create a vlog
- Write a newspaper article
- Develop a new learning activity/assessment for the course
- Evaluate course and formulate points for improvement
- Make observations and report on them
- Write an essay
- Comment on and critically analyse an AI generated text
- Make a poster presentation
- Provide peer feedback

Example assessments in previously designed courses

Examples of assessment elements in previously designed courses include, amongst others:

- Field visit presentations
- Reflection reports
- Developing an interview guide
- Case presentations
- Take home exam
- Peer feedback
- Active engagements with practice-based experts
- Active attendance

Assessment plan

How we will assess a course should be described in a so-called assessment plan. An assessment plan details what you will be assessing (which competences), when you will

assess that (points in time, deadlines), how you will assess that (formative and/or summative), what type of assessment (e.g. reflection paper, self-evaluation, take home essay) will be used and how that informs decision making (pass the course/year grade) and how all assessment components compose the final grade (e.g. group paper 30%, and individual exam 70%).

What are the different paths I can take?

Develop transdisciplinary and active learning-based courses from scratch

You have the opportunity to build a transdisciplinary and active learning-based course from scratch!

You can start by identifying the competencies you hope your students will develop once they have completed the course. (Note: they don't have to develop all competencies necessary for their role in one course, and don't have to master a certain competency in one go – keep in mind that this may happen across multiple courses within a study programme. You can also think about how these fits with competencies they will gain elsewhere).

You can translate these identified competencies into an overarching learning outcome for the course, as well as more specific learning objectives. Make sure these reflect transdisciplinarity!

Think about the logic of the course, and build a course narrative that can help students and others understand it.

Identify the building blocks and key elements of your course, and visualize how they align with the learning outcomes and competencies identified through a flowchart.

You will then have an idea of each session, and can begin to brainstorm about how you will deliver and facilitate these sessions. Consider how you can include a variety of activities and opportunities for active engagement, while considering practical aspects, such as time available for students for these activities and preparations, and required resources. Think about how transdisciplinarity is embedded within these activities. Do the activities allow students to reach the learning outcomes and competencies identified?

Think about the assessment - is it in alignment with the competencies, learning outcomes, teaching activities identified? Is it active (allowing students to practice their competencies and apply what they have learned)? Does it lend itself to transdisciplinarity?

Revise an existing course to make it (more) transdisciplinary and active

Look at the existing course carefully. Is there already a syllabus and faculty manual available? Are learning outcomes already articulated?

Think about the competencies students need, and those you want students to develop through this particular course. Are they reflected in the learning outcomes? Do you need to make new learning outcomes? Do you need to revise existing learning outcomes? How can these reflect transdisciplinarity more? How do these align with the building blocks, teaching and facilitating approaches and assessment strategies?

Does the assessment align with the other elements of the course (e.g. competencies, learning

outcomes and teaching activities)? Is it active? Does it reflect transdisciplinarity? What adjustments are needed to make the course more transdisciplinary and active?

Introduce more transdisciplinary and active learning elements into existing courses

If you don't have a lot of space to add elements to the course, you can pose questions that can help students to realise that they have been approaching a particular topic or issue from a particular disciplinary perspective, and can make them aware that there may be other perspectives, and that it can also be approached in a transdisciplinary way. For example, you can ask: what is another way to look at this? What kinds of views and voices may not be reflected in the way we have approached it? How might you address this?

Onsite versus online course design

When designing a course or course elements, whether for online or onsite delivery, the core principles of transdisciplinary active learning course design remain the same: defining learning outcomes, selecting appropriate content, and choosing effective teaching strategies/activities. However, the specific methods and tools used will differ depending on whether the course is delivered in a physical classroom or a virtual environment, and the extent to which you will include synchronous or asynchronous elements. Group work or group assignments will work better in synchronous course design, designing an online asynchronous course does not really allow for group work (such as fishbowl, world cafe or passing a ball) or for group assignments (such as a group poster presentation or providing peer feedback). However, recent digital developments can substitute group interactions by using avatars. To stimulate online transdisciplinary active learning you can think about more individual assignments, such as having the student do observations in a distinct setting, interview stakeholders of choice, write a reflection report etc to incorporate the 'active learning' element. Similarly, assessments can be chosen that relate to the learning outcomes, and learning progress can be tracked by the student by building on and receiving feedback on self-defined learning goals.

Navigating fieldwork when classes are delivered online

If your course is designed to run online, you will have to be extra creative in keeping students engaged with active learning and real-world experiences. While a class-based field trip may not be feasible in such a scenario, you can design an activity whereby students are asked to explore their own surroundings to complete a particular field-based task (e.g. make observations at a local market, interview a farmer in their town/village, map the health system in their locality). In this way they can apply their learning directly in their own context, and report back to the class to give others insight into a particular case or example. Alternatives could be to observe a pre-prepared video of: a real-world setting, a media clip, and/or a role play.