

Next FOOD

EDUCATING THE NEXT GENERATION
OF PROFESSIONALS IN THE AGRIFOOD SYSTEM

D2.2: Master manual draft 1

WP2 – Action research facilitation



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 771738

The present Deliverable reflects only the author's view and the Research Executive Agency is not responsible for any use that may be made of the information it contains

Document Information

Grant Agreement	771738	Acronym	Nextfood	
Full Project Title	Educating the next generation of professionals in the agrifood system			
Start Date	15/03/2018	Duration	48	
Project URL	TBD			
Deliverable	D2.2: Master Manual draft 1			
Working Package	WP2 – Action Research Facilitation			
Date of Delivery	Contractual	30/06/2018	Actual	30/06/2019
Nature	R – Report etc.	Dissemination Level	P - Public	
WP Leader	NMBU			
Authors	Åsmund Lægreid Steiro, Lutgart Lenaerts, Anna Marie Nicolaysen, Geir Lieblein, Tor Arvid Breland			
Contributors	Martin Melin, case leaders			

Document History

Version	Issue Date	Stage	Changes	Contributor
0.1	30/06/2019	Draft		
0.2		Draft		
1.0		Final	Review	

Table of Contents

Executive summary.....	5
1 Introduction	6
2 Instructions for transformation	9
2.1 Initial planning	9
Step 1: Exploring the present situation.....	10
Step 2: Envisioning the case after the implementation of the Nexfood approach	11
Step 3: Determining what it would require to implement the Nextfood approach	12
Step 4: Planning of implementation, particularly the immediate next steps	12
2.2 Implementation	13
Step 1: Writing reflection documents.....	13
Step 2: Evaluating the educational activity contents and activities.....	14
Step 3: Self-assessing competences and skills	14
Step 4: Interviewing students to map their learning goals and competence development.....	15
Step 5: Reflection.....	16
2.3 Reflection and planning again.....	17
Step 1: Recapitulating the case activities.....	18
Step 2: Assessing the shifts	18
Step 4: Determining the supporting and hindering forces.....	18
Step 5: Planning of how to build on the supporting forces and how to overcome the hindering forces	19
Step 6: Planning the next steps.....	19
3 List of References	19
4 Appendices	21
Appendix 1 Initial planning workshop facilitation guidelines	21
Appendix 2 Reflection workshop facilitation guidelines	25
Appendix 3 Exercise to create a shared vision	32
Appendix 4 NMBU educational activity wheel	32



Table of Figures

Figure 1: The Nextfood approach	7
Figure 2: The iterative process of planning, implementation and reflection	7
Figure 3: Outline of the process for planning the transition from the current state to education according to the Nextfood approach.....	9



Executive summary

In this document, the case leaders will find specific instructions on how to develop their case towards the transformational goals described in the Review Report of Educational Approaches (D3.1, to be submitted by 31/10/2019). Primarily, this document will describe the iterative process of planning, implementing and reflecting, which is to be followed by each case. Specific instructions are given to each of the three phases and appendices contain templates in relation to those specific instructions as well as examples from the past cycle of project activities.

1 Introduction

A new educational approach will be needed to cultivate the competences required to improve sustainability in agrifood and forestry systems. This new approach (the 'Nextfood approach') is characterized by 1) a shift from theory to phenomenon as the starting point for the learning process (experiential learning) and 2) a shift in focus from knowledge to competences needed to take informed and responsible action as the ultimate goal of learning. Sustainability challenges are complex, and the gap between knowing and doing is often larger than between ignorance and knowledge. Therefore, such a transition in education requires emphasis on a systemic approach and on facilitation of change. Further, the core competences—the integration of knowledge, skills and attitudes—required for involving in such inherently participatory and transdisciplinary processes, must be fostered (e.g., observation, participation, dialogue, visioning and reflection).

The transition to a radically different approach in education implies a paradigm shift that is likely to pose new challenges to all actors involved (students, teachers and institutions). These may pertain to the mindset, habits and competences of both teachers and students, which are often rooted in specific disciplines and a tradition of theory as starting point for learning. Institutions with education usually organised according to disciplines sub-divided into topics and with a dominance of assessment methods that reward only theoretical knowledge, may be reluctant to support new education that needs to be transdisciplinary, involve various extra-university stakeholders, and include other assessment methods than written exams. Within this context, there is a need for more knowledge about how to effectively plan, implement and further improve the new approach.

The aim of the Nextfood project is to produce new knowledge needed to drive a transition from traditional, lecture-based teaching to action learning in agrifood and forestry education (Figure 1). For the rest of this document, the traditional terms 'teacher' and 'student' are still used, even though the new educational approach implies that 'learning facilitator' and 'learner' are often more covering terms.

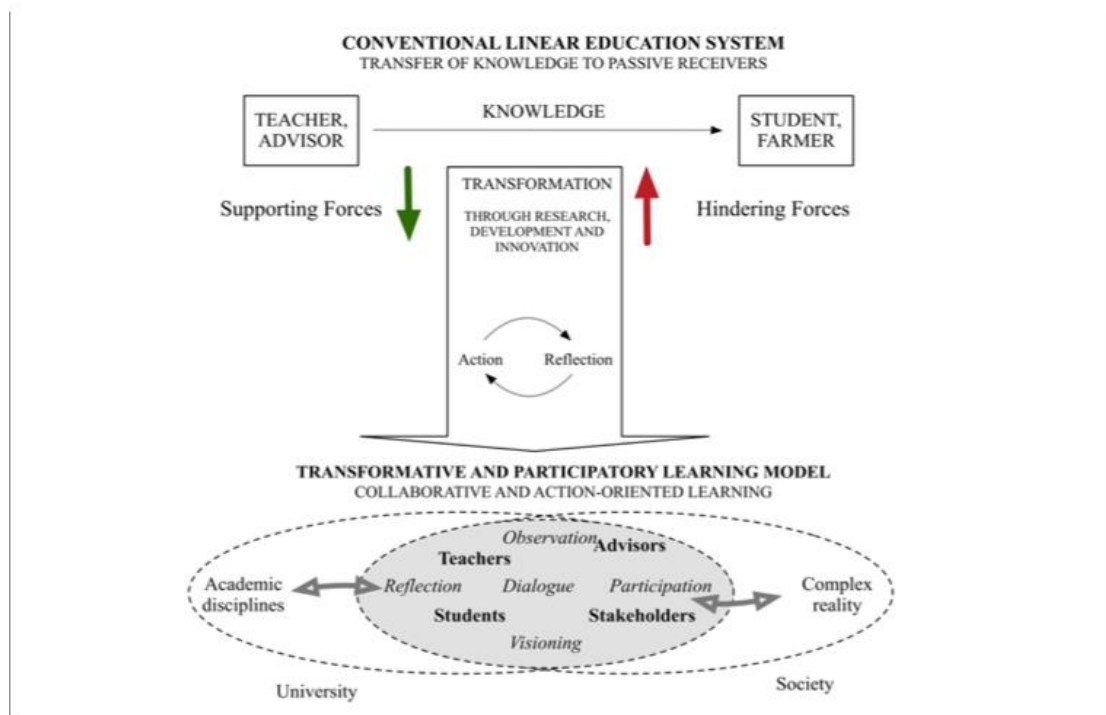


Figure 1: The Nextfood approach

To accomplish this, action research (Levin and Ravn, 2007) will be conducted in 12 selected educational activities. This means that simultaneous to taking action for developing a case (described in this document, D2.2), research will be done on the development process (as described in the Action Research Protocol (D2.1)). Each Nextfood case will during the project go through several cycles, of which each contains three major phases: **planning – implementation – reflection** (Fig. 2).

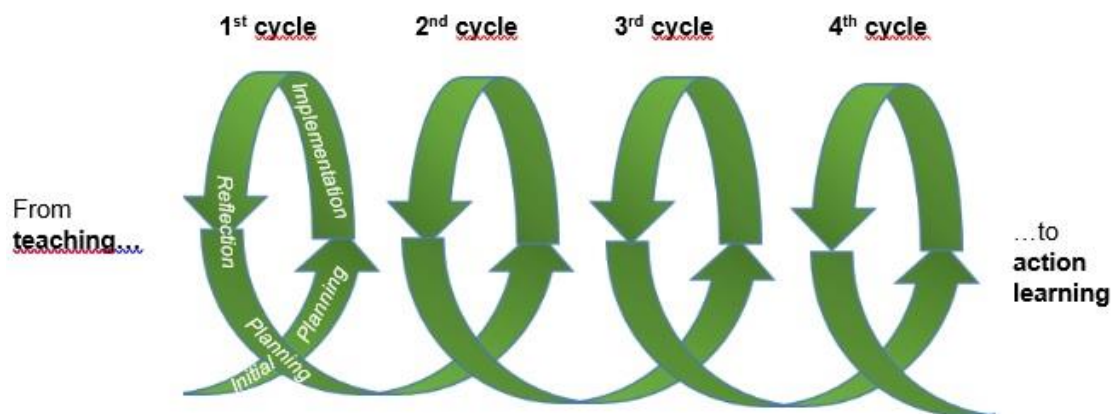



Figure 2: The iterative process of planning, implementation and reflection

The purpose of this document is to guide the transition to action learning in the 12 Nextfood cases. The content is based on knowledge from literature on action learning



and research, on our experience from establishing and conducting action-oriented education prior to this project, and on new insights obtained from the Nextfood cases. The document will provide general instructions for the transformation process and specific examples of how to take each step. With each case following these instructions, cross-case learning will become easier over time, and streamlined data collection (explained in the Action Research Protocol (D2.1)) will enable cross-case analysis and publishing of the results. This document might also have an additional value as a guide for anyone interested in developing a educational activity or programme in line with the Nextfood approach.

2 Instructions for transformation

In order to transform educational programmes to phenomenon-based and action-oriented learning, the steps outlined in this manual could be used as a guideline. The recurring phases of *planning, implementing, reflecting and planning again* (Figure 2) are paramount for ensuring a continual improvement towards the desired future state of an educational programme. We urge everyone to follow the same model which will increase the quality of our cross-case analysis and interpretation.

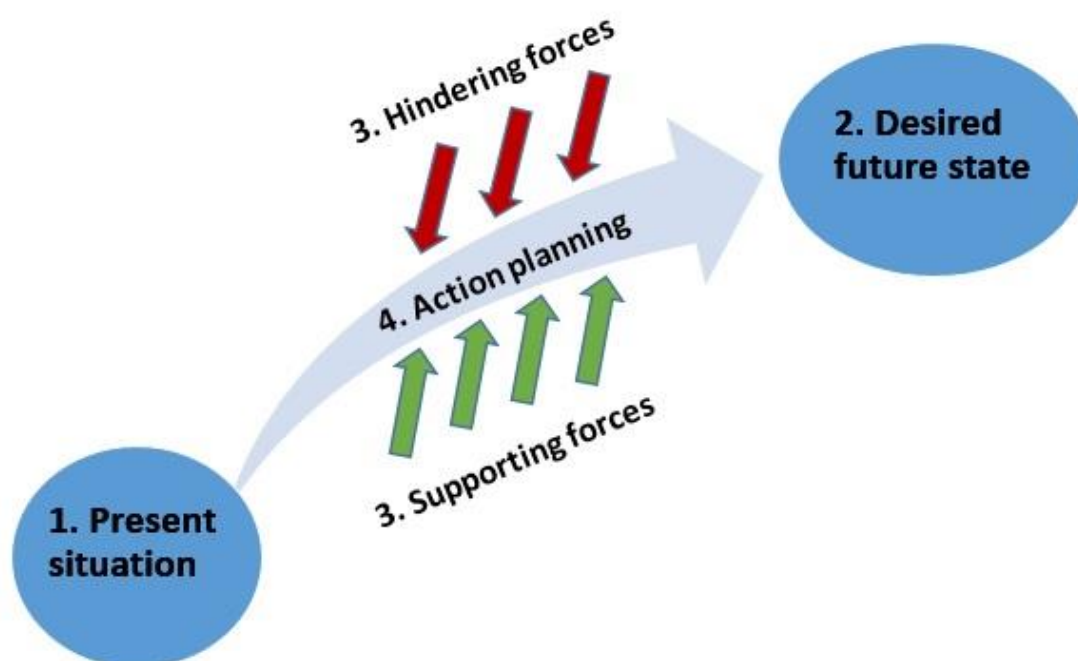


Figure 3: Outline of the process for planning the transition from the current state to education according to the Nextfood approach

The *planning* phase encompasses four distinct activities: describe and reflect on the present situation, envision a desired future state, determine the supporting and hindering forces and make a plan of action to get there (Figure 3). During the *implementation* phase, planned actions have to be taken while simultaneously recording the process. After the implementation, there is a phase of *reflection* upon the results of conducting the educational activity. This reflection forms the basis for yet another cycle of planning, implementation and reflection. Throughout the document, instructions for how to conduct each phase will be given.

2.1 Initial planning

The first phase in developing the case is *planning* (Figure 1), which should start with an initial planning workshop to explore the shifts needed in order to transition to

participatory action learning as defined by the Nextfood approach. This approach is described in the “Excellence” section of the grant application, in section “1 Introduction” above, and in “Step 2: Envisioning the case after implementation of the Nextfood approach. It will be further elaborated in the “Review of educational approaches” (D3.1 with deadline 31.10.2019 D3.1). The goal of the workshop is to create a shared understanding of the shift that we are aiming to achieve and the necessary steps that should be taken to achieve this transformation. This workshop should include not only the educational activity teachers, but also students and other key stakeholders (e.g., researchers, resource persons from ‘the field’, representatives from school or university administration, and stakeholders with an interest in the education or the competence of the candidates). The process should be similar to that of previous Nextfood workshops (cf. Nextfood kick-off meeting in Malmö and WP2 workshop in Pollenzo) with a focus on involving all actors present through individual reflection, group reflection and plenary dialogue around the central topics. In Appendix A is a template script that is to be used as a starting point for designing and scheduling a planning workshop according to the needs of each specific case. Additionally, we encourage case leaders to access on the Nextfood project’s Platform presentations (pptx-files) that can be used in these workshops. Our ambition is to make this reference material public in the future (through technical publications to reach a wider audience), so that teachers outside the Nextfood Consortium can also the materials and approach.

Briefly summarised, the workshop and immediate follow-up activities ideally should include the following steps:

1. Exploring the present situation in the case
2. Envisioning the case after the implementation of the Nextfood approach
3. Determining what it would require to make the implementation of the Nextfood approach
4. Planning of implementation, particularly the immediate next steps

Step 1: Exploring the present situation

The objective of the initial step is to establish the best possible understanding of the current situation, before creating a shared understanding of the desired future situation and deciding on the actions to transition. A shared understanding should be established by participation of key stakeholders to include all relevant perspectives and create ownership and commitment. This means that all participants in the exploration of the present situation should be informed about both the state-of-the-art knowledge that informs the content of the educational activity (topics, training activities, desirable

Practical tip!

Getting an overview of the present situation can pose a great challenge. The technique of drawing rich pictures, described in Rosalind Armson’s book, *Growing Wings on the Way: Systems Thinking for Messy Situations* (2011) is suggested for getting a shared overview of the present situation. You can also read more about it on this Wikipedia page: https://en.wikipedia.org/wiki/Rich_picture

knowledge and skills etc.) and the conceptual base of the Nextfood approach (see section “1 Introduction” above). The NMBU team will assist, if needed, in clarifying what the NextFood approach may entail in each case.

Step 2: Envisioning the case after the implementation of the Nexfood approach

After having obtained a shared understanding of the present situation, the focus should now turn to obtaining a shared vision of the educational activity in agreement with the Nextfood mission (what), approach (how) and vision (why):

What: educating the next generation of professionals

How: by facilitating a transition to action learning

Why: to improve the sustainability of agri-food and forestry systems

This “root definition” (Checkland and Poulter, 2006, pp. 37–47) of the Nextfood project must guide all thinking about the future state of the educational activity. Ideally, answers to the following questions should also be given before starting thinking about the future:

What is **the educational activity** (e.g., a bachelor or master’s course, or an entire programme)?

What is **the situation** in which the students will involve (e.g., farm, forest or food-related activity)?


What is **the action** the students are supposed to take in their main learning arena (e.g., a farming, forestry or food system inquiry to facilitate a sustainability improvement)?

Educating professionals that can contribute to the improvement of sustainability in agrifood and forestry systems requires the inclusion of knowledge and competence goals, experience and theory regarding multi-perspective, transdisciplinary approaches and systems thinking about the content of the agrifood or forestry educational activity.

Pool and Parker (2017: pp.3) describe “visionary thinking” as “the process whereby we activate our insight and imagination, connect with our values and sense of purpose, and create mental images of a desired future state relevant to the challenge that is in focus”. An introduction to visionary thinking and an example of an exercise in visionary thinking and action planning conducted with all case leaders in September 2018, Pollenzo, Italy can be found in Appendices 3, 4 and 5.

When it comes to practical pedagogy, the implementation of the Nextfood approach should focus on the following shifts (Østergaard, 2018, pers. comm.):

From: The traditional situation	To: The NextFood approach
Lecture hall	A diversity of learning arenas
Lecturing (‘Vorlesung’)	Flipped classroom (‘Nachlesung’) and co-learning
Syllabus	Supporting literature
Textbook	A diversity of teaching aids and learning sources
Written exam	A variety of assessment methods
Lecturer	Learning facilitator



Hence, the visioning can focus on the right-hand column of the table above in the sense that the educational activities are expected to shift over time to using a diversity of learning arenas rather than lecture halls only, applying a flipped classroom approach and co-learning principles rather than lectures only, drawing on literature supporting the learning process rather than predefining what the learning process should cover, using a diversity of teaching aids and learning sources rather than a textbook that draws the boundary of what is to be learned, assessing learning through a variety of assessment methods rather than a written exam only, and facilitating learning rather than lecturing only. Likewise, it is important to emphasize the multi-stakeholder approach in education already at this stage, where practitioners (e.g., food producers and advisers) actively contribute with their interest and knowledge to several phases in the learning process (Posch and Steiner, 2016). Already at the visioning stage, the following principle must be kept in mind: educational activities and theory should be included and timed according to needs as they are expected to emerge in the action learning process (also known as “just-in-time education” (Salomonsson et al. 2005). This process is often not tidy and sequential in reality, but description of the ideal sequence of typical key phases can be found, e.g., in Kolb (2015) and Checkland and Poulter (2006).

Step 3: Determining what it would require to implement the Nextfood approach

With a shared understanding of what the Nextfood approach is about, basic elements in action learning and, ideally, a vision of the future education developed, it is now time to explore what it would require to implement the Nextfood approach. In essence, this revolves around figuring out which supporting forces to build on and which hindering forces to deal with. A comparison of the vision and the current situation serves to focus on themes associated with a transition to action learning, and on forces supporting and hindering the transition. These analyses provide important background for working out action plans. In this step, we especially recommend bringing in the views of stakeholders in the case outside the core groups of teachers.

Step 4: Planning of implementation, particularly the immediate next steps

Having established both the direction of the implementation of the Nextfood approach and what it would require to get there, it is now time to decide what implementing these changes would mean in practice.

To pursue the agreed-upon vision, it is necessary to work out a set of interconnected plans for *what* must be done *how*, by *whom* and *when*. To ensure consistency of means and ends, it should also be explicitly stated *why* things will be done (cf. the “root definition” above of the entire NextFood project). Important questions during the action planning are: how to make use of supporting forces and how to handle the challenges of the hindering forces?

The result of the planning phase is two-fold. First, one should have an overview of what needs to be done to establish or further develop a educational activity based on the NextFood approach. Second, one should have a concrete plan for the educational activity.

Each stakeholder with responsibilities to run the case should leave the initial planning phase with at least one, preferably several immediate next steps to be taken. These steps should be formulated as concrete, straight-forward and not too large tasks. This could, for instance, be “On the upcoming Wednesday, [case responsible] will read the Action Research Protocol (D2.1) in order to be able to plan for data collection during the implementation of our plan.” Or “By the end of the week, [case responsible] will have contacted at least three suitable local businesses in order to explore possible collaborations in line with our vision to move out of the lecture halls.” An obvious early major task is concrete planning of the educational activities and their scheduling according to the principles outlined above in Step 2. Resources and tips such as examples of schedules, reading lists and educational activities will be provided in the “Review of educational approaches (D3.1) to be delivered by 31.10.2019. **In the meantime, the main case responsible persons are requested to work out a draft schedule and send it to the NMBU team for review and feedback no later than three weeks before educational activity start.**

2.2 Implementation

During the implementation phase of the process, the plans made in the previous phase are to be conducted. The primary task is, of educational activity, running the educational activity, and setting the stage for the students to reach the desired learning goals. Additionally, as a facilitator, one should consider what it takes from both the teachers and the students to successfully move towards the desired future state of the educational activity. In essence, this means following the action plans determined in the initial planning phase. We suggest implementing the steps below to aid the transition process. Note that these steps are simultaneously part of the data collection required to perform according to the Action Research Protocol (D2.1). Therefore, in addition to the educational activities (e.g., field trips, lectures, group work, presentations, evaluations) based on a detailed educational activity plan and a script for what needs to be considered during the educational activity, the following five activities should be included:

1. Writing reflection documents (by teachers and students)
2. Evaluating the educational activity contents and activities (by students, preferably weekly or bi-weekly and then at the end of the educational activity).
3. Self-assessing competences and skills (by students, at the beginning, mid-term (optional), and the end of the educational activity).
4. Interviewing students to map their learning goals and competence development (at the beginning and the end of the educational activity).
5. Reflecting (e.g., weekly).

Step 1: Writing reflection documents

Structured reflection throughout the duration of the educational activity is essential both for documenting the transformation process and for learning from it. The students' reflection documents should be structured such that it allows them to explore and express what their learning outcomes have been in relation to the learning goals. These documents are well suited to be part of the evaluation of the students' performance according to the learning goals.

Reflecting on our experiences, exploring ideas and linking experiences to existing and new knowledge and skills help us focus on what we need to work on in the future.

The teachers of the educational activity should also reflect upon their experiences during the educational activity, both to document the process from their side and to aid the improvement of the educational activity.

Step 2: Evaluating the educational activity contents and activities

Practical tip!

Two important questions for individual evaluation are:

Looking back at the course, what have you found useful, inspiring, interesting?

Imagine that you were the one to be completely in charge of the next course! What three things would you do differently in the pursuit of its key learning goals?

A frequent and formal individual evaluation will enable the students to express their views on the educational activity and to share their experiences in a format that is different from the informal sharing that might occur during the educational activity. For a learning facilitator it is important to know to what extent the goals have been reached and to make improvements in the upcoming parts of the educational activity. And for the student, doing this evaluation provides information to individual reflections about the educational activity.


This individual feedback gives a unique insight into the students' experiences and combined with other considerations enables the teachers to further develop the educational activity.

Another important step in the implementation is getting feedback from key stakeholders with whom the students will have interacted throughout the educational activity.

During the educational activity, we suggest weekly or bi-weekly individual evaluations. We suggest leaving space for comments.

Step 3: Self-assessing competences and skills

In the transition from a traditional focus on providing knowledge to be consumed by the students, to developing the necessary competences and skills, a tool to evaluate the degree of this development is needed. We suggest asking the students to self-assess their own competences at the beginning and end of the educational activity to measure their progress.



Competence self-assessments can serve several purposes. On one hand, it helps teachers to see how the educational activity functioned: How much competence development happened during the educational activity? On the other hand, students' self-assessment can serve as an aid to help them become clearer about their own learning goals and style of learning. In addition, the ability of assessing oneself is an important skill to develop for the future generation working in sustainable agrifood and forestry systems. Doing this self-evaluation will help students to structure their own reflection about the educational activity and their overall learning experience.

In appendices 6 and 11 to the Action Research Protocol (D2.1) you will find a template for a proposed competence self-assessment tool that describes an individual's progression through a series of five levels: *novice*, *advanced beginner*, *competent*, *proficient*, and *expert*.

Step 4: Interviewing students to map their learning goals and competence development

At the beginning of the educational activity, the students might both expect and desire varying learning goals to be met. Even though the educational activity has specific learning goals, the students might also have additional desired outcomes or questions that they want to find the answers to. Similarly, the students have a varied degree of competence mastery and understanding. Addressing these differences by asking the students to describe them at the beginning of the educational activity is beneficial as it allows the teachers to gain insight into the student group and adjust the educational activity structure if necessary. Additionally, the students get the opportunity to put their expectations and experiences into words. Asking the students these questions should either be done by handing them out as exercise questions to be responded to in a written format, or by conducting individual interviews with the learners. At the end of the educational activity, these questions should then be readdressed to assist the students in reflecting upon their experiences and learning outcomes. A minimum required list of questions is described in chapter 3 of the Action Research Protocol (D2.1).

Practical tip! - List of questions that was used in the Norwegian case at the beginning and end of the first cycle:

At the beginning of the course	At the end of the course
What would I like to learn in this course?	What did I learn during this course?
What experiences and competences do I bring to the course to make it a success?	What experiences and competences did I find particularly useful when taking this course?
What characterizes good observation?	What characterizes good observation?
What characterizes good reflection?	What characterizes good reflection?
What is the relationship between observation and reflection?	What is the relationship between observation and reflection?
What are the questions I'd like to find answers to in this course?	What are the questions I'm now asking myself?

Step 5: Reflection

To accommodate the students' competence, skill and knowledge development through the educational activities, it is important to set aside specific time for structured reflection upon the experiences in the educational activities. We suggest that this should be done on a regular basis throughout the educational activity led by a educational activity facilitator.

Reflection sessions in practice:

Reflection means the ability to link own experiences to theory in sustainable agrifood and forestry systems and to personal development. In order to do that, a structured reflection session works wonders. A suggested exercise is to focus the session on an experience that has taken place recently in the course. Thereafter, the process of individual reflection – sharing in small groups – plenary sum-up could be followed.

For instance, first ask the following:

“Looking back at the field visit last week,

- 1) What did you observe that made you want to look deeper into it, and why?
- 2) In what ways did the visit inspire you to improve your group work project?”

Instruct the students to think for ten minutes in silence.

Thereafter, arrange the class into groups of 3-5 students and ask them to share what they thought of during their individual reflection.

Lastly, ask the groups to share what they talked about and facilitate connections that the whole class can benefit from hearing. Also, encourage students to keep a log book with their reflections and regularly reflect individually. Reflection is a competence that, with practice, one can master.

2.3 Reflection and planning again

At the end of one cycle in the educational activity, it is time to reflect on the implementation of the plans and explore how it will affect the planning of the following cycle. This is best done in a workshop following the same basic principles as the planning workshop. Guidelines on how to conduct such a workshop can be found in Appendix 2.

Before the workshop can be conducted, the data gathered throughout the implementation phase need to be summarised. It is crucial for the success of the reflection workshop that each case responsible has read through the main findings from the cycle that will be reflected upon. In order to do that, the raw data needs to be processed in line with the data analysis methods described in the Action Research Protocol (D2.1).

The reflection workshop has three overarching goals. Firstly, there is a need for structured reflection upon the educational activities in order to learn from the experiences. Secondly, cognitive-emotional reflection upon the implementation of the educational activities will enrich the structured reflection. Thirdly, the outcome of the reflection should be used to develop a plan for how to improve the educational activities.

In order to reach these three goals, the workshop should include the following steps:

1. Recapitulating the educational activities
2. Assessing the shifts
3. Determining the supporting and hindering forces
4. Planning of how to build on the supporting forces and how to overcome the hindering forces
5. Planning the next steps

Step 1: Recapitulating the case activities

Throughout the implementation of the latest cycle, a lot of data that will have been generated. In order to be prepared to reflect upon the experiences, it is important to get a good overview of the data that encompasses not only the educational activity teachers' experiences, but also the students'. While it is not necessary to analyse the data fully yet at this stage, a first round of analysis (e.g., a first coding of text data) is necessary. When reflecting on the educational activity, identify the most important themes that come forth: "looking back at the educational activity, what is it a story about and what where the most important episodes"? Filling in the implementation section in the template for the Case development report (D2.5) is a good way of going about summarizing the main findings from the implementation phase as well.

Step 2: Assessing the shifts

After having achieved an overview of the previous cycle of case activities, in order to reflect on the activities, we suggest revisiting the shifts (see appendix 2 for instructions).

Assessments of the students' achievement of core learning goals also indicates to which extent the shift has been successful in terms of a new level of competency for improving the sustainability of agrifood and forestry systems, i.e., the "why" of the Nextfood project. These assessments include those made by the students themselves, teachers, external examiners and stakeholders involved in the educational activity. It may also involve a reflection on the direct impact and usefulness of the innovations and solutions to complex problems produced by the students during the educational activity. This step relates to the framework for assessing societal impact of research and education (D5.2). More specific instructions for this step will be added as this framework is developed further.

Step 4: Determining the supporting and hindering forces

The next step in reflecting upon the case activities is determining what hinders the case from developing towards implementing the Nextfood approach and what supports the development. It is important to spend time reflecting on this before moving into the planning of the next cycle.

Focus group interviews for supporting case development

In Kerala, India, Nextfood organised a focus group interview with 5 academic leaders and faculty members. This was performed as part of the reflection process, which is an important step for learning before initiating the next cycle. The topic for the discussion was institutional factors that either support or prohibit the transition to a more participatory and student-centered education. Institutional factors are connected to central values and attitudes of how higher education should function, and how these values are maintained. By identifying these factors we increased the understanding of the environment in which the case in Kerala operates, which is important for the forthcoming support of the case and for the overall research in Nextfood. The interview touched areas such as the structure and the organisation of higher education, leadership of education as well as gender equality and accessibility to education. The interview was facilitated by a researcher from Nextfood. It lasted for approximately 1.5 hours, was audio recorded and transcribed for later analysis.

Step 5: Planning of how to build on the supporting forces and how to overcome the hindering forces

Taking into account the reflections on the previous case cycle experiences, it is now time to start planning the next cycle. The first step in planning the next cycle is making a plan for how to build on the supporting forces and how to overcome the hindering ones. Although it might be tempting to wish for the hindering forces to disappear, but in the long run, it is much more fruitful to make a plan for how to overcome them.

Step 6: Planning the next steps

Having established an overview of the progress of implementing the Nextfood approach and how to deal with the supporting and hindering forces, it is now time to figure out what implementing these changes would mean in practice.

It is necessary to work out a set of interconnected plans for *what* must be done *how*, by *whom* and *when*. To ensure consistency of means and ends, it should also be explicitly stated *why* things will be done. Important questions during the action planning are: how to make use of supporting forces and how to handle the challenges of the hindering forces?

3 List of References

Armson R (2011) Growing wings on the way: systems thinking for messy situations. Triarchy Press, Devon, UK

Checkland P, Poulter J (2006) Learning for action: a short definitive account of soft systems methodology and its use for practitioners, teachers and students. John Wiley & Sons Ltd, Chichester, England



Kolb DA (2015) *Experiential learning : experience as the source of learning and development* (2nd Edition). Pearson Education, Inc., New Jersey, USA

Levin M, Ravn JE (2007) Involved in praxis and analytical at a distance *Systemic Practice and Action Research* 20:1-13 doi:Doi 10.1007/S11213-006-9045-1

Pool A, Parker M (eds) (2017) *Creating futures that matter today – Facilitating change through shared vision*. Executive Savvy, Durango, USA

Posh G, Steiner G (2006) Integrating research and teaching on innovation for sustainable development *International Journal of Sustainability in Higher Education* 7:276-292

Salomonsson L, Francis CA, Lieblein G, Furugren B (2005) Just in time education *National College Teachers of Agriculture (NACTA) Journal* 49:5-13

Østergaard, E. (2018) Studentaktiv læring og bærekraft: hva er sammenhengen? (Student-active learning and sustainability: what is the connection?) Presentation at the NMBU Learning Festival, January 30. NMBU, Ås, Norway.

4 Appendices

Appendix 1 Initial planning workshop facilitation guidelines

NEXTFOOD (WP2) INITIAL PLANNING WORKSHOP

Developing transformative education in the agrifood and forestry system

To be extended, shortened – adapted to local needs

One-day initial planning program

Desired outcomes of the workshop

- a) *A shared understanding of the Nextfood approach that we are aiming to achieve*
- b) *A plan of implementation: What, who, when, where*

Participants

Teachers/researchers

Students

Resource persons from ‘the field’

Representatives from institutional administration

Stakeholders with an interest in the education or the competence of the students

Facilitator(s)

Case responsible group (in collaboration with NMBU team)

08:30 – 08:50

Arrival and registration

08:50 – 09:00

Welcome and opening speech

09:00 – 09:30

Background for this workshop

1. The Nextfood Project

Aim of the workshop : to explore the shifts needed in order to transition to participatory, experiential and action oriented learning.

Desired outcome: a draft of a plan including which actions and decisions should be given priority for the next 6 months

2. The Case (7 minutes)

3. Plan for the day, feedback from participants (3 minutes)

Distribute print-outs of the participants programme.

09:30 – 10:00

Introduction of participants – Who are we?

Question: Where do you work or study?
What excites you about the work you are currently involved in?

Share in small groups (4-5 at each table, for example, depending on total group size)

Write down the information that you would like to share with the Case responsible group

The Nextfood approach and the intended shift

10:00-10:45

Part 1: Overview of the approach (15 minutes)

Short round of questions to the approach. (5 minutes)

What adaptations of the approach are necessary to meet local needs?

Exercise to address this question:

*Individual reflection (5 minutes),
followed by a dialogue in small groups (10 minutes) and
a discussion in plenary (10 minutes).*

*Write on provided sheets (groups) & on flip-over or whiteboard
(plenary)*

10:45-11:00

Coffee break

11:00-12:30
with the


Part 2: Overview of what needs to shift in order to comply

Nextfood approach and what typifies our current practice.

Presentation of the shifts in six areas (10 minutes)

The overall shift from teaching to learning and from knowledge to competence implies concrete shifts in the following six areas:

1. From lecture hall to a diversity of learning arenas
2. From lecturing ('vorlesung') to 'nachlesung' and peer learning
3. From syllabus to supporting literature/a variety of learning sources
4. From textbook to a diversity (variety) of teaching aids
5. From written exam to a variety of assessment methods
6. From lecturer to learning facilitator (which includes the introduction of and training in dialogue, visionary thinking, observation and reflection)



On a continuum of 1-10, where 1 signifies our current practice and 10 signifies practices consistent with the Nextfood ambitions, where do we stand today? Discussion in group as they try to place a “x” along the continuum for each of the six areas.

Exercise to address this task:

Dialogue in small groups (10 minutes) and a discussion in plenary (5-10 minutes).

Put slide with six shifts up, write on provided sheets (groups) & on flip-over or whiteboard (plenary)

Explain for the shifts that you rated below 5 why they are rated low and what can be improved

Exercise to address this task:

Dialogue in small groups (15 minutes) and a discussion in plenary (5 minutes).

Put slide with six shifts up, write on provided sheets (groups) & on flip-over or whiteboard (plenary)

Explain for the shifts that you rated above 5 why they are rated highly and what can be learned from these as well as how they can be maintained

Exercise to address this task:

Dialogue in small groups (15 minutes) and a discussion in plenary (5 minutes).

Put slide with six shifts up, write on provided sheets (groups) & on flip-over or whiteboard (plenary)

Come up with at least 2 suggestions for additional shifts.

Follow the guidelines for divergent thinking (brainstorming), stretch your thinking, don't evaluate each other's ideas, suspend judgement, focus on quantity, dare to think out of the box, allow for completely new ideas.

Exercise to address this task:

*Dialogue in small groups (10 minutes) and a **ranking** of suggestions in plenary (5 minutes).*

Put slide with six shifts up, write on provided sheets (groups) & on flip-

over or whiteboard (plenary)

Recapitulation and intro to programme after lunch (5 minutes)

12:30 – 14:00

Lunch

14:00-15:30

What would it require from students (students), teachers and institutions to succeed with the Agroecology programme at MU that is based on the Nextfood approach?

- Review of dialogue guidelines (15 minutes)

- Exercise to address the question

Individual reflection (5 minutes), followed by a dialogue in small groups (40 minutes) and a discussion in plenary (30 minutes).

Write on flip-over or whiteboard

15:30-15:45

Coffee break

15:45-16:30

Planning for implementation including the immediate next steps (what, when, who, where)

- What needs to be done when and by whom to implement the intended transition to action learning in the educational activity?

Who should meet and when?

What should be ready and when?

*(10 min individually, 30 min in small groups **to make a timeline***

Case responsible group members collect written output and will send a summary of that output to participants later). Write on sheets provided.

16:30 – 17:00

Wrap-up

- Reflection and small group discussion after each question below.

(2 min individually, 5 min in small groups. Case responsible group members collect written output and will send a summary of that output to participants later). Write on sheets provided.

1. Note down three things you liked about this meeting, that you found useful, inspiring, interesting!

2. If I were to be responsible for the next workshop, what would I do differently?

Appendix 2 Reflection workshop facilitation guidelines

NEXTFOOD (WP2) REFLECTION WORKSHOP

Developing transformative education in the agrifood and forestry system

To be extended, shortened – adapted to local needs

Two-day reflection/planning program

Day 1:

Desired outcomes of the workshop

- c) *Achieving a shared, comprehensive understanding of the implementation of the latest cycle of educational activities.*
- d) *Cognitive-emotional reflection on the implementation of the latest cycle of educational activities.*
- e) *Determining supporting and hindering forces to the implementation of the educational activities.*

Participants

Case responsible group

Facilitator(s)

One or two from the case responsible group

09:00 – 09:30

Introduction

Aim for the workshop: Reflecting upon the case activities in order to learn from the experiences.

Desired outcome: An understanding of the completed case cycle that can be used to improve the planning of the next cycle.

Remind the participants that they should try to take into account what is stated in the data as well as their own perspective.

“Rules of the game”, plan for the day, and feedback from participants.

Ask if everyone can be present the whole day.

Discuss whether “first cycle” should also include the past few

years.

09:30 – 11:30

Recapping the case activities

Presenting the data from the educational activity, mentioning the data sources that were analysed and how they were analysed. (30 min)

Question: In the data from the first cycle, what was most inspiring, and why?

Individual reflection 5 min. Plenary 10 minutes.

Write on provided sheets (groups) & on flip-over or whiteboard (plenary)

What did it require from students, teachers and institutions to implement the educational activity in line with the Nextfood approach?

- Review of dialogue instructions (15 minutes)
- Exercise to address the questions (30 minutes)

Individual reflection (5 minutes), followed by a dialogue in small groups (15 minutes) and a discussion in plenary (10 minutes).

Write on flip-over or whiteboard

11:30 – 13:00

Assessing the shifts

Presentation of the shifts in six areas (*15 minutes*)

The overall shift from teaching to learning and from knowledge to competence implies concrete shifts in the following six areas:

7. From lecture hall to a diversity of learning arenas
8. From lecturing ('vorlesung') to 'nachlesung' and peer learning
9. From syllabus to supporting literature/a variety of learning sources
10. From textbook to a diversity (variety) of teaching aids
11. From written exam to a variety of assessment methods
12. From lecturer to learning facilitator (which includes the introduction of and training in dialogue, visionary thinking, observation and reflection)

Part 1: Where do we stand today?

On a continuum of 1-10, where 1 signifies close-to-zero diversity

and 10 signifies full diversity, where do we stand today?
Discussion in whole group as they try to place a “x” along the continuum for each of the six areas.

Exercise to address this task:

Reflection individually (10 minutes) and a discussion in plenary (5-10 minutes). The plenary can be done with participants moving along an imaginary line through the room whereby their position along that line represent their ranking of the shift on the continuum of 1 to 10.

Put slide with six shifts up, write on provided sheets (groups) & on flip-over or whiteboard (plenary)

Explain for the shifts that you rated **below** 5 why they are rated low and what can be improved

Exercise to address this task:

Dialogue in small groups (15 minutes) and a discussion in plenary (5 minutes).

Put slide with six shifts up, write on provided sheets (groups) & on flip-over or whiteboard (plenary)

Explain for the shifts that you rated **above** 5 why they are rated highly.

Exercise to address this task:

Dialogue in small groups (15 minutes) and a discussion in plenary (5 minutes).

Put slide with six shifts up, write on provided sheets (groups) & on flip-over or whiteboard (plenary)

Part 2: Which additional shifts?

Come up with at least 2 suggestions for additional shifts.

Follow the guidelines for divergent thinking (brainstorming), stretch your thinking, don't evaluate each other's ideas, suspend judgement, focus on quantity, dare to think out of the box, allow for completely new ideas.

Exercise to address this task:

Reflection individually or dialogue in small groups (10 minutes) and

*a **ranking** of suggestions in plenary (5 minutes). The plenary can be done with participants moving along an imaginary line through the room whereby their position along that line represent their ranking of the shift on the continuum of 1 to 10. Put slide with six shifts up, write on provided sheets (groups) & on flip-over or whiteboard (plenary)*

13:00 – 14:00

Lunch

14:00 – 15:00

Supporting and hindering forces

Remind the participants that they should try to take into account what is stated in the data as well as their own perspective.

1. Note down three supporting forces for implementing the educational activity in line with the Nextfood approach.
(individual reflection, 5 minutes, then 10 minutes plenary)
2. Note down three hindering forces for implementing the educational activity in line with the Nextfood approach.
(individual reflection, 5 minutes, then 10 minutes plenary)

3. Ranking of the forces

Exercise to address this task:

Rank all supporting forces mentioned, with rank 1 for the most important that needs to be addressed first.

Rank all hindering forces mentioned, with rank 1 for the most important that needs to be addressed first

*Individual reflection for these last two tasks together: 10 minutes, than a **ranking** of suggestions in plenary (20 minutes).*

The plenary can be done with participants moving along an imaginary line through the room whereby their position along that line represent their ranking of forces with the left-hand side of the room being rank 1.

Put slide with six shifts up, write on provided sheets (groups) & on flip-over or whiteboard (plenary).

15:00 – 15:30

Wrap-up

- Reflection and group discussion after each question below.

(10 min individually, 10 min plenary)

Write on flip-over or whiteboard

1. Note down three things you liked about this meeting, that you found useful, inspiring, interesting!
2. If I were to be responsible for the next workshop, what would I do differently?



- Summary of the day, plan for the next day (*10 minutes*)

Day 2:

Desired outcomes of the workshop

- a) *Exploring what it takes to build on the supporting forces and how to overcome the hindering forces.*
- b) *A plan of implementation: What, who, when, where*

Participants

Teachers/researchers

Students

Resource persons from 'the field'

Representatives from school or university administration

Stakeholders with an interest in the education or the competence of the candidates

Facilitator(s)

One or two from the case responsible group

09:00 – 10:15

Introduction to/background for this workshop

Introduction by the facilitators:

Aim of the workshop: Developing a plan for how to improve the educational activities based on the experiences from the previous cycle.

Desired outcome: a draft of a plan including which actions and decisions should be given priority before the upcoming cycle of case activities.

Plan for the day, feedback from participants

Presentation of the outcomes from **Day 1** of the workshop.

Reflection exercise (*based on what I've heard so far, what are the questions I'm now asking myself?*)

10:15 – 10:30

Break

10:30 – 12:00

How should the supporting forces be built upon and how can the hindering forces be overcome?

- Review of dialogue instructions (15 minutes)

- Exercise to address the questions (75 minutes)

Individual reflection (15 minutes), followed by a dialogue in

small groups (20 minutes) and a discussion in plenary (40 minutes).

Write on flip-over or whiteboard

12:00 – 13:00

Lunch

13:00 – 14:00

Planning for implementation

- What needs to be done when and by whom to build on the supporting forces and overcome the hindering forces?

(10 min individually, 20 min in small groups, 30 min plenary)

Write on flip-over or whiteboard in plenary

14:00 – 14:15

Coffee break

14:15 – 15:15

The immediate next steps (What, when, who, where)

Who should meet and when?

What should be ready and when?

(10 min individually, 20 min in small groups, 30 min plenary)

(Plenary discussion to make a timeline)

15:15 – 16:00

Wrap-up

- Reflection and small group discussion after each question below.

(5 min individually, 5 min in small groups, 10 min plenary)

Write on flip-over or whiteboard

1. Note down three things you liked about this meeting, that you found useful, inspiring, interesting!
2. If I were to be responsible for the next workshop, what would I do differently?

Appendix 3 Introduction to visionary thinking (ppt)



NEXTFOOD WP2: Case meeting
September 17 – 19, 2018
University of Gastronomic Sciences
Pollenzo, Italy

Session 4 (cont.): Creating Shared Visions NMBU team

Nextfood: Co-creation of new knowledge



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 771738
The present Deliverable reflects only the author's view and the Research Executive Agency is not responsible for any use that may be made of the information it contains



«Every successful large-scale change that I have seen has, as a part of it, a change vision. What that means is a picture of after we have made the changes on whatever dimensions, this is what we're going to look like.»

John Kotter



Myths about vision

Escape from the real world
-daydreaming

Vision is an answer to the question:
What do we want to create?

Wishful thinking

A concrete image of
a desired future

For charismatic
leaders only

Every human being has
the capacity
to create visions

Unrealistic

Only if we believe that
causality is the only driving
force in the world

That it has to be stretched out
far into the future

Up to us to decide

What is a vision?

“A picture of the future one wants to create. It articulates a view of a realistic, credible and attractive future for the organization, a condition that is better in some important ways than what now exists. It provides a framework for our decisions and priorities.”

W. Bennis

What is a shared vision?

- Shared visions are expressions of what people have in common; of what they, as a whole, are committed to.
- They provide alignment around a picture of what the desired future outcome will look like.

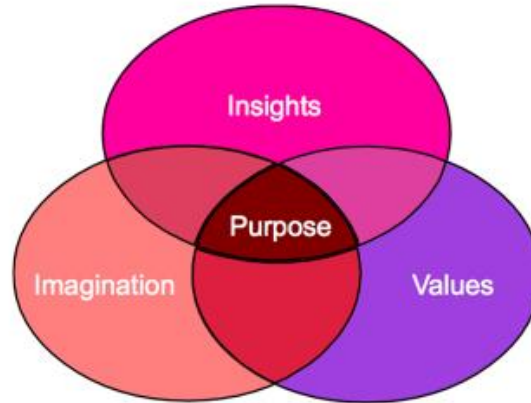


What is visionary thinking?

- The process whereby we activate our insight and imagination, connect with our values and sense of purpose, and create mental images of a desired future state relevant to the challenge that is in focus.



Where do visions come from?



Why vision?

“People who have the ability to welcome change, think in visions. Instead of planning in detail, they create an intensely alive picture of a desirable future state, and let their actions today be guided by their visions”.

R.Moss Kanter



Why vision?

“A learning organization is an organization that is continually expanding its capacity to create its future.

The shift from an authoritarian to a learning organization must start with learning how to create shared vision”.

P.Senge



2013



NORWEGIAN UNIVERSITY OF LIFE SCIENCES
MSC. IN AGRICULTURE



DEVELOPING A VISION
FOR EVA'S FARM







What can stand in the way of creating shared visions?

- Tendency to focus on limitations, what isn't working/what we want to get away from
- Focus on what's operational
- Short term orientation
- Eagerness for quick-fix solutions
- **Negative beliefs** - "Me? I'm not a visionary!"
- Reluctance to move into a relaxed state



Where could we in our work connected to NEXTFood benefit from having a shared vision?

- Designing a physical space
- Fostering cross-functional collaboration?
- A core value?
- An ambiguous opportunity?
- Bringing a critical concept or idea to life?



Relaxation

Being able to relax prior to envisioning a desired future state is a critical success factor.

In order to reach further into our intuitive, creative and imaginative capacities, our racing brain must take a break!

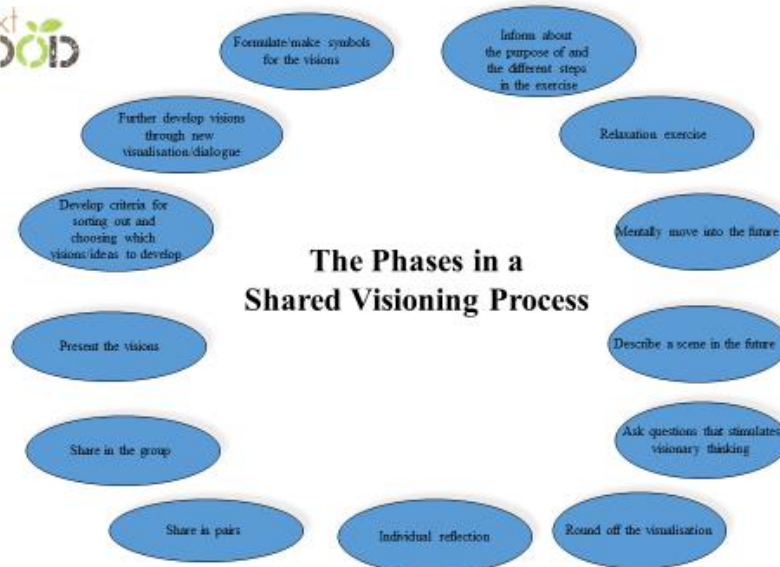


Mental imagery

- Imagery is the mental processes of creating sights, sounds, smells, tastes and sensations in the absence of any actual external stimuli.
- Imagery is a means of improving communication between the conscious and unconscious levels of the mind as it provides simultaneous access to both levels.
- Our images give us the power to span time.
- Images are a vehicle for profound intuitive insights.
- Imagery allows us to express ideas and feelings which are not usually easily accessible.
- Imagery is an especially useful tool when dealing with tasks which are complex, uncertain and novel, such as visioning.
- Guided imagery is the process of leading someone on an imagery journey. In our M.Sc. Program we have introduced the students to guided imagery and we feel this has made it much easier for the students to envision the outcomes of their projects.

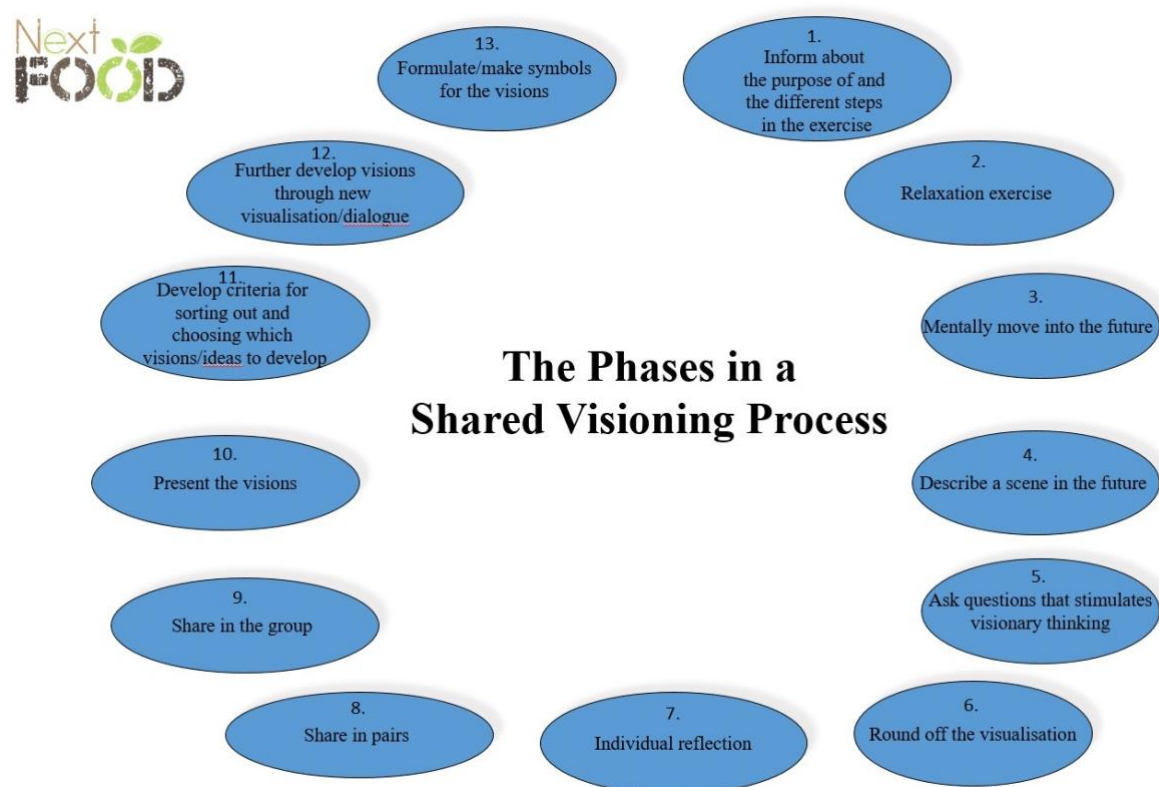
Let's create a shared vision of:

Co-creating new knowledge
in the NEXTFood project



Appendix 4 Exercise to create a shared vision

During the WP2/3 workshop held in Pollenzo in September 2018, all Nextfood cases were represented with the aim of practicing and getting a shared understanding of the Nextfood approach. One part of the workshop was an exercise where the participants were asked to develop a shared vision according to the phases in a shared visioning process as described in the figure below. The topic of the shared vision was the shared success of the consortium in implementing the Nextfood educational strategy.

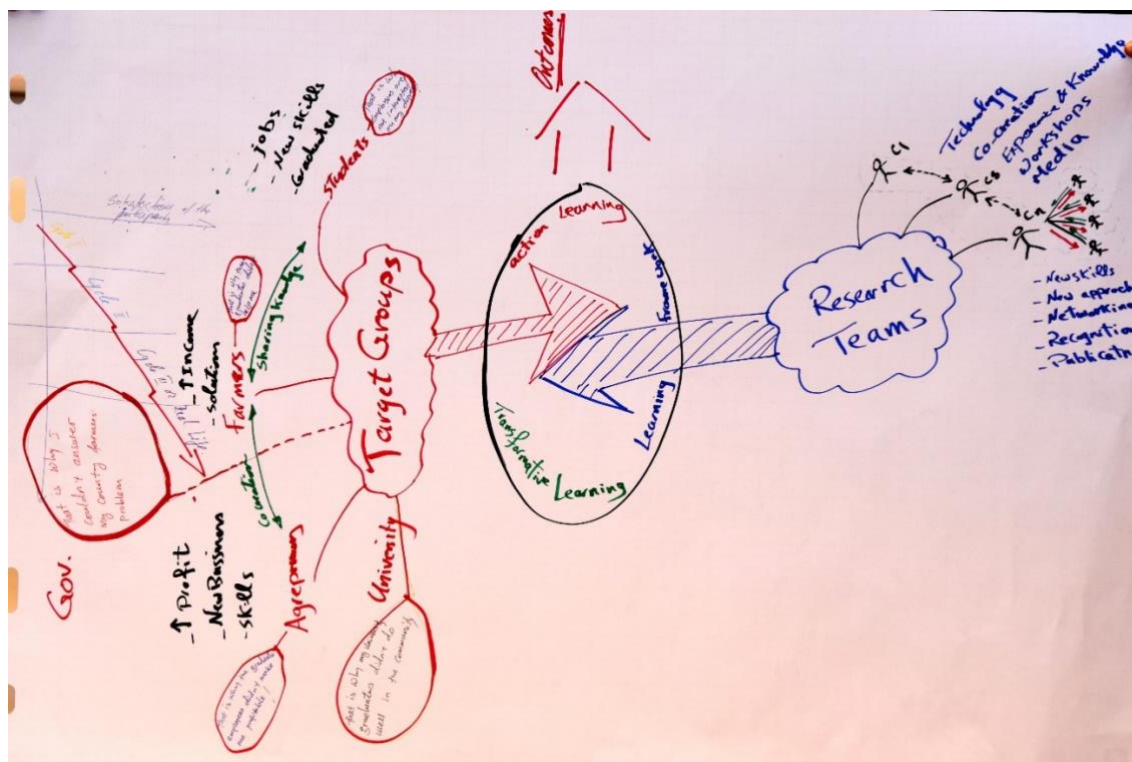


Cycle of visioning as presented by Geir Lieblein at the workshop.

First, the participants were informed about the process of visioning before a relaxation exercise was conducted. Thereafter, a script was read by the exercise facilitator where the participants were invited to mentally “move to the future” and form their individual representation of the vision. After the “individual reflection”-element of the cycle, the participants answered the following three questions:

1. *What are the mechanisms that are enabling the co-creation of new knowledge?*
2. *How is your own team contributing?*
2. *What are you especially proud of?*

The responses to the questions were shared in small groups in a dialogue-inspired manor. Following the sharing, the participants were instructed to transition towards developing a shared vision. The following day, the shared visions were presented. All of the groups drew rich pictures of their shared visions. Below follows a few examples of the rich pictures.



Appendix 5 Visioning exercise

”The successful start-up of NEXTFOOD” Meeting with program officer in Brussels

March 17, 2019

Ask Participants to take out a blank sheet of paper and write at the top of the page

March 17, 2019

1. Read short relaxation exercise

3) Description of future scene – 6 months ahead in time

Now that you are in a relaxed state, imagine that it is March 17, 2019, and you are in Brussels, Belgium. Pause ... You find yourself waiting outside of a meeting room in a EU-commission building. Pause ...

You alone have been selected by your EU program officer as a representative of the NEXTFOOD project to appear before a group of EU officials. Pause ... What are you wearing? Pause ... The program officer has heard rumours about the NEXTFOOD project where co-creation of new knowledge among different universities and across cultural boundaries is no longer just a buzz-word, but already an integral part of day-to-day activities in the project.

Pause ... You yourself are thrilled for having been selected, and are eager to share what's behind our success in being able to co-create new knowledge. Pause ...

The door to the meeting room opens, and the program officer comes out to greet you. You hear him/her say: "We are fortunate to have you here with us today to share what is going on in the NEXTFOOD project that enables the co-creation of new knowledge among the project partners.". Pause ...

You enter the meeting room together with the program officer, and are delighted to see that also several other EU officials are sitting around the table.

4) Questions to envision

Your program officer says: "You must feel enormous pride in knowing that your approaches are proving to be so effective"

1) **What are the mechanisms which are enabling the co-creation of new knowledge?**

Just listen quietly to how you respond. You do not need to censor anything. (Pause)

2) **How is your own team contributing?**

Again, listen to how you respond (pause)

3) **What are you especially proud of?**

Listen to yourself respond.

Now you hear the program officer concluding:

” Many thanks for your willingness to be with us today and share your insights”. Pause

Now listen to the EU officials applauding – they are obviously excited and inspired by all that you have said.

5) Closure

Now see yourself walking slowly down the corridor to the elevator. Now see yourself leaving the building, and walking out into the open air. Allow yourself to feel pride in having been asked to share the mazing achievements of the NEXTFOOD project.

6) Capturing images individually

On the lawn, not far from the building is a white painted bench. See yourself sitting down on the bench.

I will now ask you to open your eyes. Pick up a piece of paper and pen and write at the top of the page, “**Today is March 17, 2019** ” . This reminds them to write as if the future is now.

Remain silent and please do not speak with your neighbour. You will now have time to note your responses to the questions posed by the conference leader.

(Write questions on whiteboard or flip-over so the participants can take a look in case they have forgotten.)

Remember – it is still March 17, 2019, and your responses are describing what the achievements that are now manifesting in the year 2019. Write your responses in the present tense. For example: what are the mechanisms that are in place in the NEXTFOOD project is..... My own team is contributing in the following ways.....

If, in addition to words, it feels easier to illustrate your responses by making a drawing or sketch, feel free to do so. There are colored pens on the table. Feel free to use your non-

dominant hand to make the drawing. This approach sometimes makes it easier. It does not matter if the drawings are simple or rough sketches.

You have plenty of time to do this. If you complete the writing/drawing before the others, remain in your chair and be completely quiet.

NB! Give them **15-20 minutes** to do this and **then ask them to put a star** next to those ideas or images that are most central to their experience/ or perhaps are most excited about.

From Individual to Shared Vision

1) Small group sharing – deep listening 20-30 minutes

Encourage participants to be fully present in the *desired future state* when they begin to share what they experienced in the visualization.


Present some ground rules,- A symbolic red card will be given to anyone who:

Overhead: RED CARD to anyone who:

- Brings the discussion back to today's problems
- Begins to focus on the difficulties or barriers to achieving their own or the others' visions
- Underestimates their own or others' abilities to realize the vision
- Gets hung up on how this is all going to happen

Once you have covered the ground rules, invite them to get to share the descriptions or **images that they starred.**

Instruct them to share their visions in the present, as if the future they created in their minds already exists. For example: "It's March 17, 2019 and one of the the mechanisms which is enabling the co-creating of new knowledge is . . ."



When one person shares, the others should simply listen and appreciate the images and descriptions. The idea is to make sure that each person's images are fully heard.

Be sure to walk around the room and gently correct people's language if they are straying into today's time frame or focusing on how to make changes. You will also want to make sure that everyone is getting a chance to share his or her vision and that one or two people aren't dominating the group.

2) Dialogue in plenary - finding common themes

1) Explain that the purpose of this next section is to **explore the common themes** that arose in the small groups.

3) Ask each small group to share 3-4 elements of what they envisioned with the whole group. Write these on a flipchart or in a drawing.

4) Because of the natural tendency to look for faults or weaknesses in other peoples' ideas, it's extremely important that participants are asked to listen to one another's visions with an open mind and appreciative mindset. Ask some of those listening to share something they like about what they are hearing.


It can help if, as they listen, they ask themselves, for example:

- What I find most appealing is...
- The three most positive aspects of this vision are...
- What would be interesting to take a step further is...

5) When all the groups have reported in, **invite the whole group to identify the most common themes. Write these themes in words and/or drawings on a flip chart**

or whiteboard.

6) As you identify themes, begin to link them together, where appropriate. If someone can create pictures, symbols that illustrate the connections between them, great. **Having some kind of visual representation that everyone in the group can see is always useful.**



Take time to help the group work towards a shared understanding of each theme by clarifying the underlying assumptions of each one. This helps to move the group towards a shared vision. It also builds the team's level of ownership and commitment to implementing the vision.

3) Group discussion –establishing criteria/aligning around the shared vision

- Once the group has identified the common themes from their visions, it's useful to **generate criteria for evaluating which of the themes to include in the shared vision.**
- After creating a list of possible criteria, help them select the ones they feel are the most important. You can use voting, if need be, but often the group is able to come to a consensus without that.
- Ask the team to evaluate the various aspects of the vision against the final criteria. Using a rating system like 1-5 or “red, yellow, green” helps the group test their vision against the criteria. We have found that 6-7 final criteria usually work well.

Criteria may have to do with time frames, costs involved, groups affected, tangibles (like materials or resources needed), or moral or legal implications. As a final test, you might want the group to check whether the vision meets some overall general criteria by asking:

This process supports the group in modifying and refining the vision, identifying something that has been missing or expanding on something important.

- Often, there is a need for a deeper shared understanding of what some of the words or images mean. At the end of this process, the shared vision should feel even stronger, more compelling, realistic and engaging. Helping a group move from individual visions to shared vision is incredibly important and takes time.

The planning session: Making the vision real

(Identifying barriers and leverage - Force Field Analysis)

Force Field Analysis could be used here, but it might not be necessary.)

1) Small group discussion - identifying stakeholders – for support and acceptance

Taking time to think through and discuss which groups and stakeholders inside and outside the organization need to be informed, which ones you actively need to obtain acceptance from, who might be potential resisters – all this information is useful. It gives background for being able to tailor approaches to gaining acceptance and support depending on the situation and needs of different types of stakeholders. It will help your team create an informed, proactive and robust plan for reducing the gap between your vision and current reality.

The groups can be invited to go through the list of questions, note down their responses, and share in small group, ev. entire group. This increases the likelihood of identifying stakeholders which might not have come to mind initially.


OVERHEAD eller HANDOUT

- Who, among our stakeholders needs to hear and understand our vision?
- Which of these stakeholders need to be aligned with the vision?
- Who are the key players and supporters we believe can motivate others to buy into the vision?
- Who are the people we need to gain acceptance from?
- Who are the persons/groups who will likely support and can assist in making the vision a reality?
- Who are the individuals, groups, departments, etc. that might resist achieving our vision?

The next step is to create a shorter list of key people whose acceptance and support is critical.

2) Action planning – in plenary (first in small groups and then in plenum)

Select the questions below that are most relevant to your situation and/or write some new ones to cover areas these don't address.



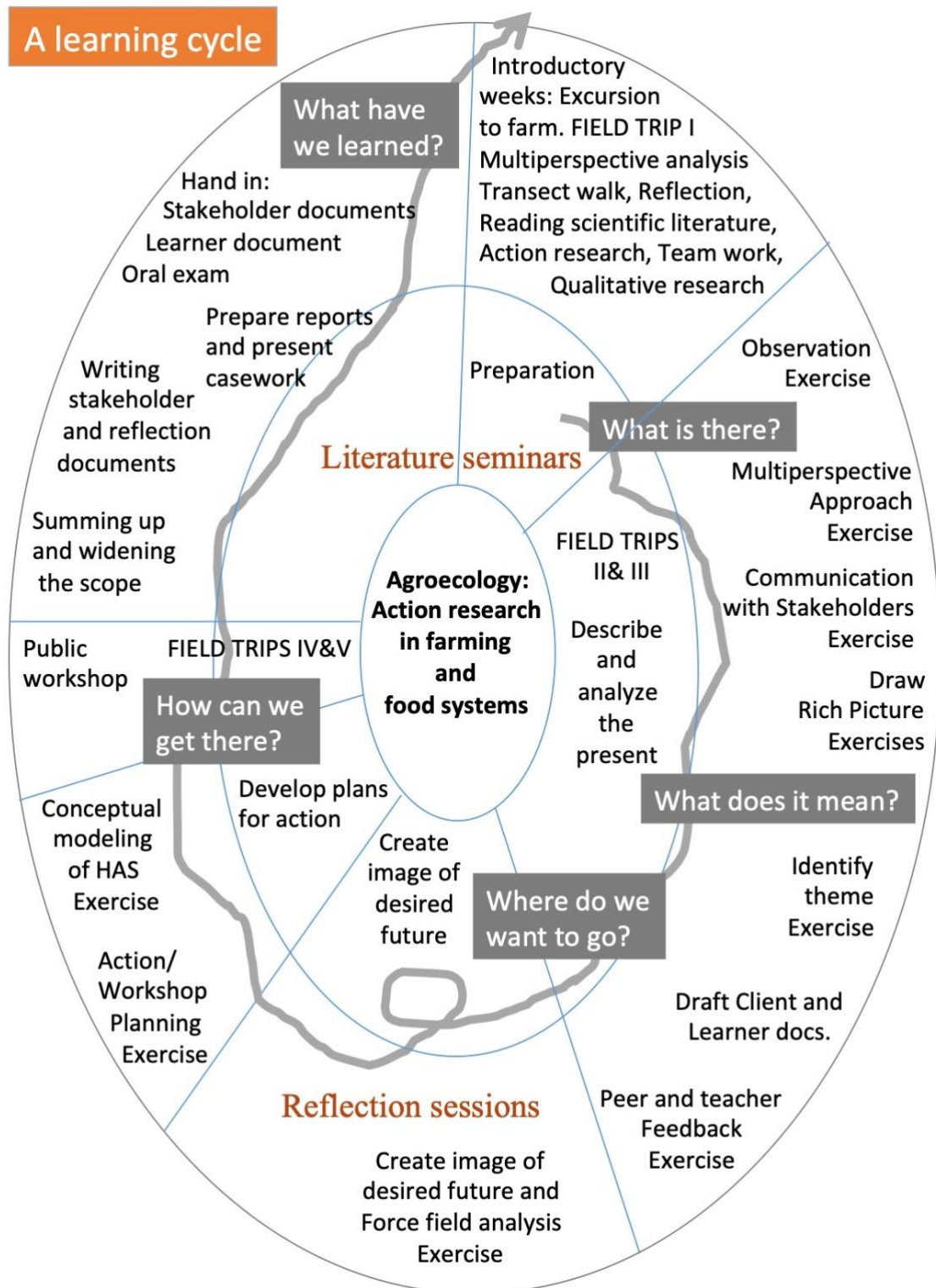
Ask participants to jot down their responses, and then invite them to share either in small groups, or in the large group. The ideas that emerge in relation to the questions will naturally funnel into additional action items for the plan.

Overhead eller Handout: Questions for action planning (Pick the relevant questions and align around first steps, etc.

- What first steps might we take to initiate action? How? When? Why?
- What next steps might follow? How? When? Where? Why?
- What deadlines or schedules might we follow?
- What resources could be of assistance? How might we best put them to use?
- What follow-up might we need to deal with unexpected repercussions?
- What important obstacles must be considered in implementing the plan?
- What new skills might be critical for achieving our vision?
- In what ways can we ensure that employees can ask questions and offer feedback to our change vision?
- In what ways can we test people's understanding of our vision and its implications in their area of responsibility?
- In what ways can we ensure that decisions support the achievement of the change vision?

Sum up the action steps, so that everyone is aware of what will happen with regards to introducing mechanisms to ensure co-creating new knowledge and how their group is going to contribute. Who shall do what, when, how.

Appendix 6 NMBU educational activity wheel



Appendix 7 Kerala agroecology course schedule

		Week 1 June 1-3	Week 2 June 5-10	Week 3 June 12-17	Week 4 June 19-24	Week 5 June 26-28
AE June 2017		INTRODUCTION and PREPARATION	OUT IN THE FIELD 1	REFLECTION	OUT IN THE FIELD 2	SUM UP
		What is there? Present		What does it mean?	Future - What can we do?	How can we do it?
Monday	09:15 - 10:00		First Field Visit	Presentation of first field visit Feedback - teacher and peer	Second Field Visit	Presentation of casework
	10:15 - 11:00		In groups of three students	Start working on documents: Report for stakeholder and individual learner document		
	11:15 - 12:00		Daily log		Participate on the farms	Daily log
	12:15 - 13:00		Participate on the farms	Work on Competences	Participant observation	
	13:15 - 14:00		Conduct interviews	Observation	Conduct interviews	Public workshop
	14:15 - 15:00		Daily log	Participation	Daily log	Daily log
	15:15 - 16:00			Daily log		
Tuesday	09:15 - 10:00		Participant observation	Work on Competences	Reflect on experiences	Reflection on and evaluation of the whole course
	10:15 - 11:00	Intro to Agroecology		Dialogue	Conduct a Vision Session with the Stakeholders	
	11:15 - 12:00	Holistic approach		Reflection	Future Situation	Daily log
	12:15 - 13:00	Rich Picture of the course	Daily log	Daily log		
	13:15 - 14:00	Students present themselves				
	14:15 - 15:00		Reflect on experiences	Work on Competences	Work on documents: Report for stakeholder and individual learner document	
	15:15 - 16:00		Daily log	Visioning	Daily log	
Wednesday	09:15 - 10:00	Observation walk	Make a rich picture of the situation	Read literature relevant to methods and topic	Work on documents: Report for stakeholder and individual learner document	Hand in of documents?
	10:15 - 11:00	Joint Reflection	Prepare for presentation of field vis	Daily log	Daily log	
	11:15 - 12:00	Daily log				
	12:15 - 13:00	Qualitative methods - interview techniques				
	13:15 - 14:00	Interview each other	Daily log			
	14:15 - 15:00					
	15:15 - 16:00					
Thursday	09:15 - 10:00	Manual for Fieldwork	Work on rich picture and presentation	Prepare for fieldtrip	Work on documents: Report for stakeholder and individual learner document	
	10:15 - 11:00	Daily log intro	Daily log	Daily log		
	11:15 - 12:00	Team work				
	12:15 - 13:00					
	13:15 - 14:00					
	14:15 - 15:00					
	15:15 - 16:00					
Friday	09:15 - 10:00	Prepare for fieldtrip				
	10:15 - 11:00	Daily log				
	11:15 - 12:00					
	12:15 - 13:00					
	13:15 - 14:00					
	14:15 - 15:00					
	15:15 - 16:00					
Saturday	09:15 - 10:00					
	10:15 - 11:00					
	11:15 - 12:00					
	12:15 - 13:00					
	13:15 - 14:00					
	14:15 - 15:00					
	15:15 - 16:00					