

The effect of Transformative education on students' learning experiences on agroecology

A case study of the Farm Experience Internship



Jonne Walstra - 9747826

Bachelor's Thesis Global Sustainability Science (GEO3-2422)

Supervised by Heitor Mancini Teixeira & Irene Katsaros

Second reader: Stefanie Lutz

Date: February 5, 2024

Number of words: 7462



**Utrecht
University**

Abstract

This research aims to explore the transformative character of educational elements in agroecology learning. Transformative education can motivate people to get involved in the agroecological transition towards more sustainable and equitable food production systems. For this study, the transformative elements in the case study of the Farm Experience Internship (FEI) are analyzed through the lens of the Transformative Agroecology Learning model, by Anderson et al (2019). This framework provides four pillars that promote agroecological learning for social change: 1. Wisdom dialogues; 2. Horizontal communication; 3. Combining the practical and the political; 4. Building a social network and movement. Data for this study was obtained through seven in-depth interviews with organizers of the FEI, providing insights in the organizational structure and program of the course. To explore participants' learning experiences, a questionnaire has been sent to all former participants. Analyzing transformative elements in the FEI has shown that this four-week course can support a wide range of learning experiences, by promoting horizontal knowledge sharing, emotional self reflection and stimulating critical awareness. This can motivate students to evolve a more critical understanding of the link between theory and practical real-world problems and get involved in the agroecological movement. However, the success of transformative educational cannot be understood without bringing it into historic-geographic contexts, since cultural differences also influence the transformative potential. Organizing local initiatives similar to the FEI, adapted to the local context can catalyze transformative change and help to bring agroecology in Europe to a bigger scale.

Table of content

1. Introduction	5
2. Theory and concepts.....	6
2.1 Agroecology as a science, movement and practice	6
2.2 Case study: Farm Experience Internship	7
2.3 Transformative education	7
2.4 Transformative Agroecology Learning	8
3. Methodology	9
3.1 Semi-structured interviews	9
3.2 Questionnaire for participants of the Farm Experience Internship.....	10
3.3 Data analysis interviews	11
3.4 Data analysis questionnaire	11
4. Results	12
4.1 Pillar 1. Wisdom dialogues (Diálogos de saberes)	12
4.2 Pillar 2. Horizontal learning	14
4.3 Pillar 3. Connecting the practical and political.....	15
4.4 Pillar 4. Building multiscale social networks and movement.....	17
4.5 Unexpected remarkable outcomes.....	18
5. Discussion	20
5.1 Interpretation results.....	20
5.2 Limitations.....	22
6. Conclusion.....	23
7. Acknowledgement.....	24
8. References	25
9. Appendixes	28
Annex 1. Overview of interview respondents	28
Annex 2. Interview Blueprint.....	28
Annex 3. Questionnaire	37
Annex 4. Coding scheme qualitative content analysis	39
Annex 5. Questionnaire results open questions.....	40

Together, we bridge science, practice and movement;
We bring agroecology and food sovereignty to the university,
and students to the field;
We hear the voices of the people, the peasants, the indigenous,
– people from different backgrounds, nationalities and religions –
and believe in the value of co-creating knowledge together.
We proof that young people want to start in agriculture
and visualize the challenge of these future farmers;
We demand the university to bridge science, practice movement,
and listen to the challenges and needs of the peoples.
We believe in our vision and we prove this is possible:
an alternative to conventional agriculture that is good for the soil, for the
people, for the planet.

From: The FEI movement, 2016

1. Introduction

The aim of this research is to analyze the impact of transformative education, such as the Farm Experience Internship (FEI) course, on its participants. This study intends to provide useful insights for the establishment of transformative educational programs that promote the agroecological transition. The FEI is a four-week summer course in Wageningen in which students learn about agroecology as a science, political movement, and farmer's practice (Wezel et al., 2009). The FEI was inspired by the 'Estágio Interdisciplinar de Vivência' (EIV), an 'Interdisciplinary Internship Experience' that emerged since 1989 from the Brazilian agroecological movement that was fighting against large scale agribusinesses (Farm Experience Internship, 2020). These educational initiatives connect with the worldwide urgency for an agroecological transition to ensure a future with a healthier, more sustainable, and equitable food production system (FAO, 2018a).

The current traditional education fails to provide students the wide range of skills that is needed to deal with the challenges of the agroecological transition (Taylor, 2000). Traditional education lacks in interdisciplinary methodologies and focuses strongly on institutional theoretical knowledge, exacerbating the gap between theory and practice. This makes students unprepared for the dynamic contexts they will work in, emphasizing the significance of interdisciplinarity and contextual thinking (Taylor, 2000). The focus on theoretical learning also creates strong emotional disconnection from (non-human) nature undermining students' environmental awareness and can be seen as a deeper root cause of the environmental global crisis (Ives et al., 2017). Therefore, it is argued that shifting to a more sustainable world can only go together with a deeper emotional shift in our ecological awareness, in which we become more sensitive to the interconnectedness of all life on earth (O'Sullivan & Taylor, 2004; Pisters et al., 2019; Ives et al., 2017; Nisbet et al., 2009).

Universities like Wageningen University & Research are still driven by neoliberal players, and function primarily within the anthropocentric paradigm (Hageraats, 2016). This is reflected in programs that fail to question these underlying root causes of the multifaceted sustainability crisis of the Anthropocene (Dorninger et al., 2020; Hageraats, 2016; Catton & Dunlap, 1980; Anderson et al., 2019).

Given these constraints, the agroecological transition requires a transformative system change, which is described as a drastic shift in systematic linkages and behavior that results in fundamentally altered sustainability outcomes (Dorninger et al., 2020). Transformative education emerges as an important technique to develop emotional connection and engagement, required for creating radical change (Maiteny, 2002; Pisters et al., 2019). This innovative type of education, illustrated by the FEI, aims to reconnect people with non-human nature, encourage deep reflection on systemic root causes and reconstruct the ivory tower idea of knowledge building to co-creation of knowledge between diverse players (Abson et al., 2017).

Currently, less is known about which specific practices hold a strong transformative potential. Different papers offer a theoretical description of what this education should contain, but there is a lack of specific

prescriptions or practices (O’Sullivan, 2008). Therefore, the research question for this study is: What elements are needed in a course to make it transformative and how does this influence students learning experience? This will be answered through two sub-questions: 1) How are transformative educational elements embedded in FEI?; 2) How do these elements affect student's learning experience? This study aims to define the particular aspects that lead to transformative learning experiences during the FEI, which will offer insights for further improvement of transformative educational programs and motivate similar initiatives in the future.

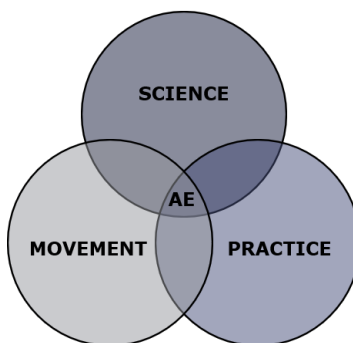
2. Theory and concepts

2.1 Agroecology as a science, movement and practice

The definition of agroecology as a science, movement and practice, by Wezel et al (2009), was chosen for this study, because it provides a complete, holistic view on the topic. Wezel et al (2009) provides a schematic display of this definition. Wezel et al (2009) investigate the historical development of the field of agroecology, describing a shift from an agronomy focused science to a more holistic worldview. The relevance of using this definition by Wezel et al (2009) arises from its ability to capture this deep interconnectivity of these three aspects of the agricultural systems which allows for understanding the complex dynamics within food systems.

Agroecology as a science has evolved from a focus on plant physiology and agronomy at field scale to a broader study of worldwide network of food production chain (Wezel et al., 2009). Currently, it is an interdisciplinary field of study that combines agrarian natural sciences with social sciences and applied ecology (Wezel et al., 2009). Agroecology as a movement contains the commitment to sustainable rural development, advocating for local communities’ sovereignty and autonomy while opposing the negative effects of industrial agriculture. Agroecology as a practice consists of a set of practical agricultural methods and techniques to improve food production, while minimizing the impact on the natural environment (Wezel et al., 2014). This involves for example promoting soil fertility and soil life, biological weed and pest management, and crop rotation (Wezel et al., 2014).

Figure 1. Schematic figure of agroecology (AE), defined by Wezel et al (2009)



2.2 Case study: Farm Experience Internship

The history of the Farm Experience Internship (FEI) can be traced back to the ‘Estágio Interdisciplinar de Vivência’ (EIV), an ‘Interdisciplinary Internship Experience’ that began in 1989 as being part of the Brazilian agroecological movement. In 2013, Irene Cardoso and Heitor Mancini Teixeira of the Federal university of Viçosa, Brazil, that were involved in the EIV, founded the Farm Experience Internship at Wageningen University & Research, through Stichting Boerengroep (SBG) (Farm Experience Internship, 2020). A decade later, the FEI is still an important aspect of SBG, coordinated by a team of volunteers, activists, farmers, SBG members and students doing internship or thesis work (Stichting Boerengroep, 2023). Together with SBG, the FEI provides an activist, counterforce to the impact of corporate agricultural research at Wageningen University & Research, cultivating a critical point of view (Jongerden & Wiskerke, 2022). The FEI stimulates students to deeply reflect on agroecology through integrating academic and practical learning experiencing, to allow them to shape their own future (Hageraats, 2016).

The course format is divided into three parts: preparation, agricultural experience, and evaluation. During the preparation phase, participants take active part of one week of interactive lectures, excursions, workshops, group-building activities, and reflection exercises, all organized in an inspiring outdoor setting (FEI, 2020). The goal is to provide diverse knowledge while allowing conversation on topics around the different aspects of agroecology, like food sovereignty, farmer social movements and agroecological practices. After the preparation phase, the participants spend to weeks working on various Dutch farms, primarily organic. The farmers teach practical skills and provide insight into everyday farming methods. Participants can make videos and pictures to capture their experiences, to promote interactive and creative sharing, later with the group, during the reflection week. Students that would like to obtain academic credit for the course also have to write a reflection essay in the last week (FEI, 2020).

2.3 Transformative education

One of the first foundations for Transformative Learning (TL) was made by the Brazilian pedagogue Paulo Freire, in his book ‘Pedagogy of the Oppressed’ (1972). Freire advocates for a radical shift in the approach of education, where students become protagonists of their own education, where learning becomes a process that creates critical consciousness about the oppressive elements of reality (Freire, 1972). He describes becoming conscious of the oppressing systems as becoming a ‘radical form of being’, that empowers people to get into action and bring forward positive social change. Based on his work, many educational perspectives and applications were developed, mainly around complex challenges that require a deeper transformative change at the system level, addressing leverage points that relate to the system’s rules, paradigm, and underlying values (Meadows, 1999; Dorninger et al., 2020; Pisters et al., 2019).

2.4 Transformative Agroecology learning

Transformative education for agroecology offers an epistemology that challenges the dominant agronomic paradigm, in which land and food are purely considered as commodities, by offering an ecocentric sustainable paradigm that includes multifaceted interrelated character of the food system (Singleton, 2015). Different educational programs have been developed to promote agroecological learning.

For this investigation, the Transformative Agroecology Learning model by Anderson et al (2019) will be used to analyze how transformative educational elements are embedded in the FEI. This theory was examined as being suitable for this research because transformative learning is especially applied for agroecological learning for transformative social change. Anderson et al (2019) analyzed various grassroot agroecological educational initiatives, leading to the formulation of four pillars that together form the key processes for TL for agroecology as a science, movement, and practice.

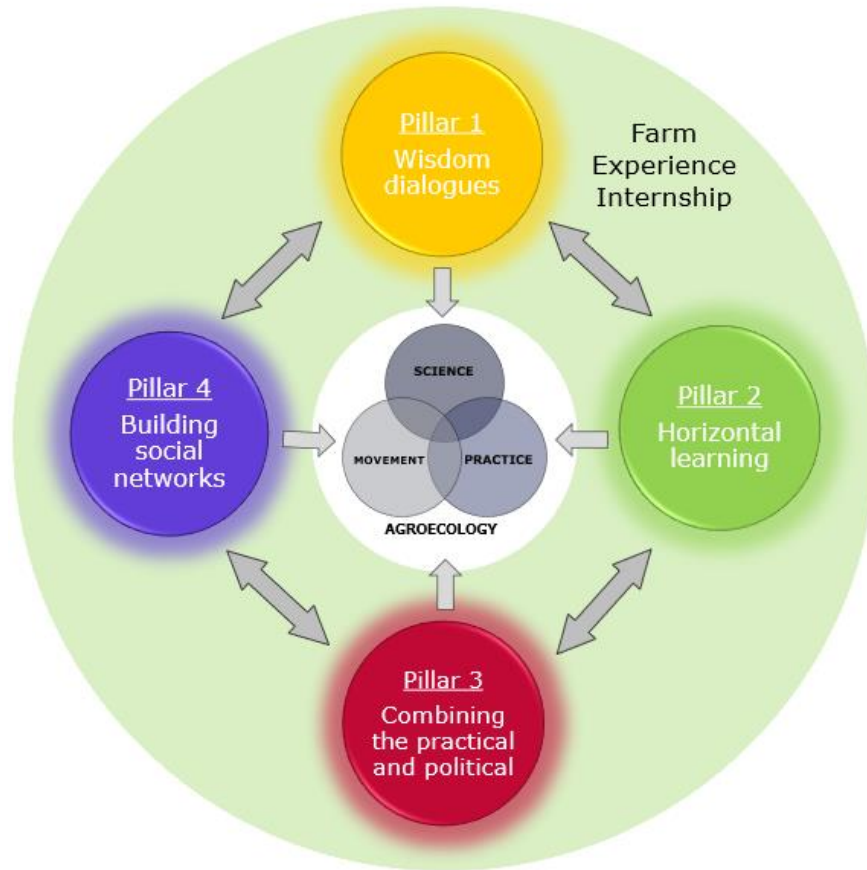
The first pillar, 'Wisdom dialogues' (Diálogo de saberes), emphasizes the importance of bringing together actors from different backgrounds. In the context of agroecology, it facilitates the exchange of knowledge, recognizing multiple valid perspectives from actors like farmers, consumers, and academic institutions (Anderson et al., 2019).

The second pillar, 'Horizontal communication' includes nonhierarchical, democratic communication. Communication should be based on mutual dialogue, leading to collective knowledge building, assuming that everyone is both learner and teacher. This builds on Freire's critique on the banking style of education, that students should not be considered as passive, knowledge absorbing learners, but as active agents of their own learning process, engaging in collective reflection (Freire, 1972; Anderson et al., 2019).

The third pillar, 'Combining practical and political knowledge' aims to foster critical consciousness, through linking locally acquired knowledge to political movements. This is reflected in the critical pedagogical process outlined by Freire as having a stage of learning to understand reality, then critically reflect on this reality, followed by denouncing the oppression, finished by announcing a better alternative (Freire, 1972). In the context of agroecology, this process involves the challenging of power structures, and learning about agroecology through a socio-political lens, instead of merely having a technical approach to practical problems (Anderson et al., 2019).

The fourth pillar, 'Building social networks and movements' is centered on expanding the agroecological movement. Building a strong multi-scaled network of organizations is crucial for sharing agroecological knowledge. Agroecological learning connects individuals to organizations, providing an empowering sense of identity through belonging to a collective network. The four pillars of transformative agroecology learning provide a systematization of the key processes for strengthening transformative education (Anderson et al., 2019). This systematization allows to better define separate transformative elements and reflect on the implementation of these different transformative processes in the FEI, which is schematically displayed in Figure 2.

Figure 2. Schematic figure of the conceptual framework: The promotion of Agroecology as a science, movement, and practice (Wezel et al.,2009) through Transformative Agroecology learning (Anderson et al.,2019) in the Farm Experience Internship



3. Methodology

3.1 Semi-structured interviews

To collect qualitative data on how transformative educational elements are embedded in the FEI, semi-structured interviews were conducted with people that have been closely involved to the organization of the FEI, the past decade. Eight former organizers of the FEI have been approached through an e-mail with an explanation of the scope of this bachelor thesis. Seven reacted positive and were open to participate in an interview, either online in a Teams meeting or in a physical meeting. An overview of the respondents and their function, relevant for this research provided in Annex 1.

Semi-structured interviews can provide in-depth information on how the structure of the FEI came in place, and which different methodologies and educational theories might have been used. In semi-structured

interviews, a premade blueprint with an interview schedule and questions guides the conversation in a certain direction. This method still allows space for asking follow-up questions and diving into important topics that interviewees might raise themselves (Haydam & Steenkamp, 2020).

The interview blueprint is provided in Annex 2. In the first section of the interview, detailed information about the project is provided, followed by assuring the consideration of ethical principles, like permission for voice recording. The interview itself consists of seven topics with a defined objective of what information should be obtained in this section. The different topics are linked to the four pillars of transformative learning by Anderson et al (2019) from the analytical framework. All sections have several key-questions and possible sub-questions to obtain more detailed in-depth information. The standardized questions create more consistency in the data collection, which makes it more reliable and better comparable (Haydam & Steenkamp, 2020). In the end, the respondent is asked if important topics have been left out in the interview, to create space for personal input.

For ethical considerations, respondents' personal names have been anonymized for privacy reasons. An important note is that some outcomes can be recognized by other respondents since all have been involved in the same project. However, since the information that has been shared is not considered as sensitive, this is not considered as a problem. All respondents agreed on voice recording and that the interview will only be used for the purpose of this research.

3.2 Questionnaire for participants of the Farm Experience Internship

To gather information about the impact of the FEI on students' learning experience, a questionnaire was sent to all former participants. Stichting Boerengroep provided a list with 156 email addresses from all former participants of the past ten FEIs. Through an e-mail, they received an explanation about the research followed by an invitation to fill in an online questionnaire. 62 email addresses appeared to be expired, which created a response rate of 26,6%, with 25 respondents.

The questionnaire consists of 19 statements for which they can choose from a 5-point Likert scale with five nominal categories, to what extent they agree or disagree with the statement. A survey with Likert scale allows to gather a relatively large amount of data in a short period of time (Nemoto & Beglar, 2014). The survey statements are formulated based on the four pillars of transformative learning, by Anderson et al (2019), to be able to analyze the impact of the FEI on the different processes in transformative learning. Also, demographic information about study background, nationality and gender was asked. In the end, open questions invited the participants to reflect on their experience with the FEI, giving the opportunity to obtain information that cannot be gathered with Likert scale. The entire questionnaire is provided in Annex 3. Names are anonymized and the data will only be used for the purpose of this research. Following the Data Management Plan Template, provided by

Utrecht university (2018), both the questionnaire and the interview transcripts will be safely stored for ten years, on a drive account with a password. None of this data will be shared without personal consent from the respondents.

3.3 Data analysis interviews

The semi-structured interviews were recorded and transcribed into written text. These transcripts can be made available on request, only with approval of the respondent. The content of the interviews is first coded through deductive analysis. Deductive content analysis is most useful when the research aims to test a certain theory or framework in a specific situation or case study (Elo & Kyngäs, 2008), which is very suitable for testing the pillars of Transformative Learning within the FEL.

The obtained data is structurally coded into categories, for which the four pillars of Transformative Learning will be used as separate coding categories. In the analysis, the content of the data is assessed on correspondence with the coding categories, by schematic use of color highlights. In strict deductive analysis, data that does not correspond directly to the predesigned codes is left out. However, by using a combination of deductive and inductive content analysis, important aspects that are not reflected by the initial framework will not get lost (Elo & Kyngäs, 2008). Starting with deductive analysis allows one to become more familiar with the data, through which returning elements that do not correspond to the initial coding categories can already become clearer.

During inductive analysis, new codes and subcodes can be created (Erlingsson & Brysiewicz, 2017). This divides the information per pillar into subgroups, allowing for a deeper understanding of the individual elements contributing to each pillar. This helps in finding connections between different parts. One extra code has been developed, and subcategories are created for the existing categories. The coding scheme is provided in Annex 4.

3.4 Data analysis questionnaire

The nominal data from the questionnaires was used to create a general overview of participant's learning experiences. Since the ordinal categories do not have a quantitative meaning, one should be careful with coding the categories with numbers and calculating mean values, since this can lead to inferential errors (Petrillo et al., 2011). It is more recommended to show the response distribution of Likert data in bar charts. Stacked bar charts are a useful tool to show several statements simultaneously, by subdividing every bar into different colors, corresponding with the response categories. For this study, the questionnaire results are displayed per pillar in centered stacked bar chart, in which the neutral categories are centered in the middle, creating a central line that divides the positive and negative answers. This makes it easier to see the skew of the data and compare

distribution between various statements (Petrillo et al., 2011). Some statements link to more than one pillar and are displayed in both graphs (see Annex 3). Since all statements have the same number of respondents (25), the bars are a direct display of the number of responses per category. One figure has been created to compare all pillars. Since not all pillars are linked to the same number of statements, the total sum per Likert category has been divided over the number of statements for every pillar. Therefore, the bars in this figure represent a percentage, instead of an absolute number. The data from the open questions will be analyzed together with interview data, for which the detailed analyzing steps are provided in section 3.3.

4. Results

4.1 Pillar 1. Wisdom dialogues (Diálogo de saberes)

During the FEI, the diversity of speakers, participants and methodology stimulate curiosity, leading to inspiring conversations between participants and speakers, leading to more empathy (Respondent 6, *personal communication*, January 12, 2014). First, diversity of participants is promoted by striving for inclusive education, allowing to bring together people from different backgrounds (Respondent 6). This is realized by keeping the fee for the course as low as possible. Also, there are no entry requirements, apart from writing a short motivation letter. This creates a diverse mix of students from different bachelor and master programs, but also working people that are not connected to the university. During the FEI 2023, a fundraiser created the opportunity for four asylum seekers to join the FEI, a project that they usually would not come across or could not afford.

Secondly, several coordinators from earlier years mentioned diversity among speakers as being a core element of the program (Respondent 1, *personal communication*, December 19, 2023; Respondent 2, *personal communication*, December 20, 2023; Respondent 7, *personal communication*, January 16, 2024). This diversity creates a wide range of perspectives and worldviews and stimulates exchanges. Respondent 6 mentions that the objective during the preparation week is to create a full, holistic representation of agroecology as a science, movement, and practice, for which farmers, social scientists, natural scientist, NGOs, and activists from the movement all have their place.

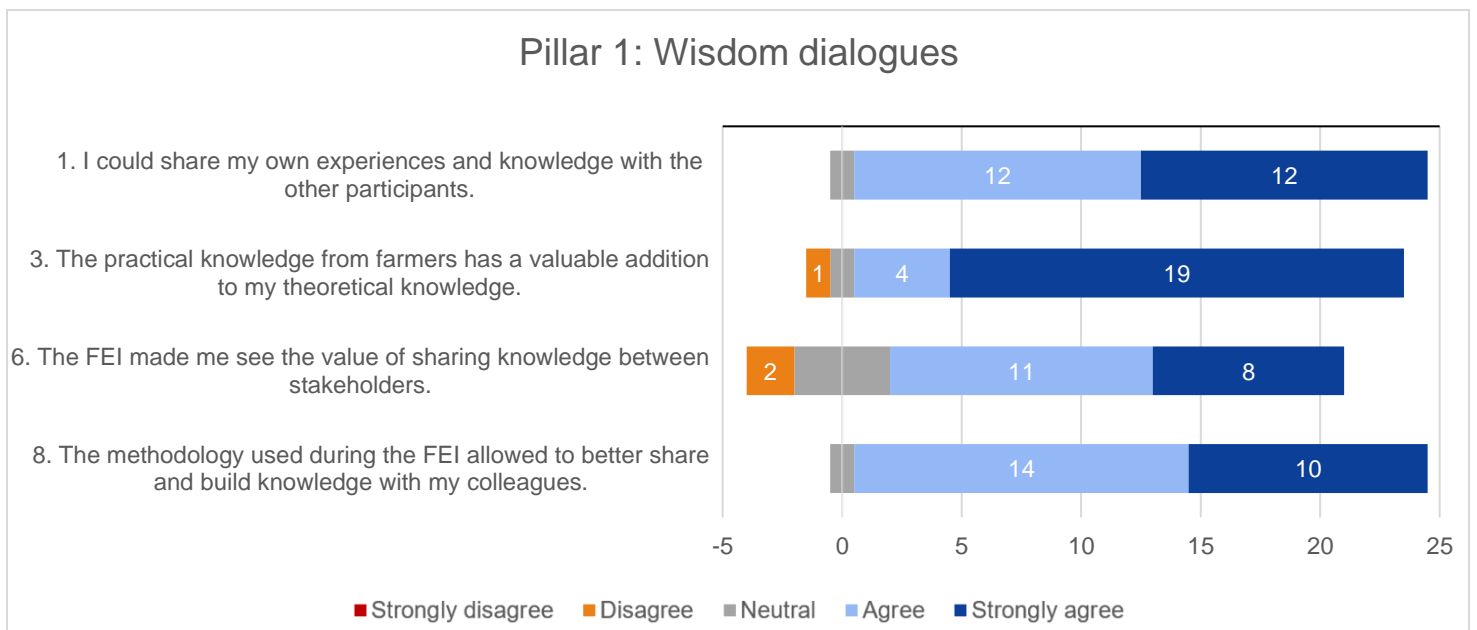
Finally, the diversity in methodology also seems crucial to create space for knowledge sharing among these diverse people. Interactive teaching with alternating between lectures and physical energizers and icebreakers can help creating a comfortable safe environment where people feel comfortable to share ideas (Respondent 2). The inclusion of making artwork, making music, storytelling and doing theatre also belongs to the core of the FEI program, creating another creative medium that promotes sharing stories and insights (Respondent 4, *personal communication*, January 5, 2024; Respondent 6 & 7). Another powerful tool is the formation of ‘tribes’, which creates more structure in knowledge sharing and gives participants a sense of identity,

making them feel more comfortable in sharing (Respondent 4 & 6). The knowledge sharing can more be seen as an open dialogue that continues through the entire duration of the FEI, without a linear structure (Respondent 6). Small practical adjustments, like gathering around round tables and sharing food together also allowed for more exchange. This was something that participants also reminded vividly (Questionnaire, see Appendix 5 for responses). Participants described the FEI as being an ‘inspiring space for knowledge sharing and learning’, with ‘inclusive participation’ and the use of ‘creative methods’, creating room to ‘express thoughts and feelings’ (see Figure 3 & 4). The result from the questionnaire about the learning experiences on wisdom dialogues are provided in Figure 5. **Error! Reference source not found.**

Figure 3 & 4. Photos representing creative methods for knowledge sharing, during FEI 2023 (Photo by Estève Helias)



Figure 5. Questionnaire results pillar 1 : Wisdom dialogues



4.2 Pillar 2. Horizontal learning

Horizontal learning is reflected in the principles and organizational structure of the FEI. First of all, the project is not ‘owned’ by a small group of teachers: It is built by the collective and is owned by the collective (Respondent 5, *personal communication*, January 10, 2014). The initiative for the FEI has to come from students themselves and they decide what they would like to include in the program. Respondent 6 mentioned that the FEI is about breaking hierarchical knowledge sharing, where everybody comes to share on the same topic: ‘Everyone is on the same boat towards the same direction and there is no chief.’

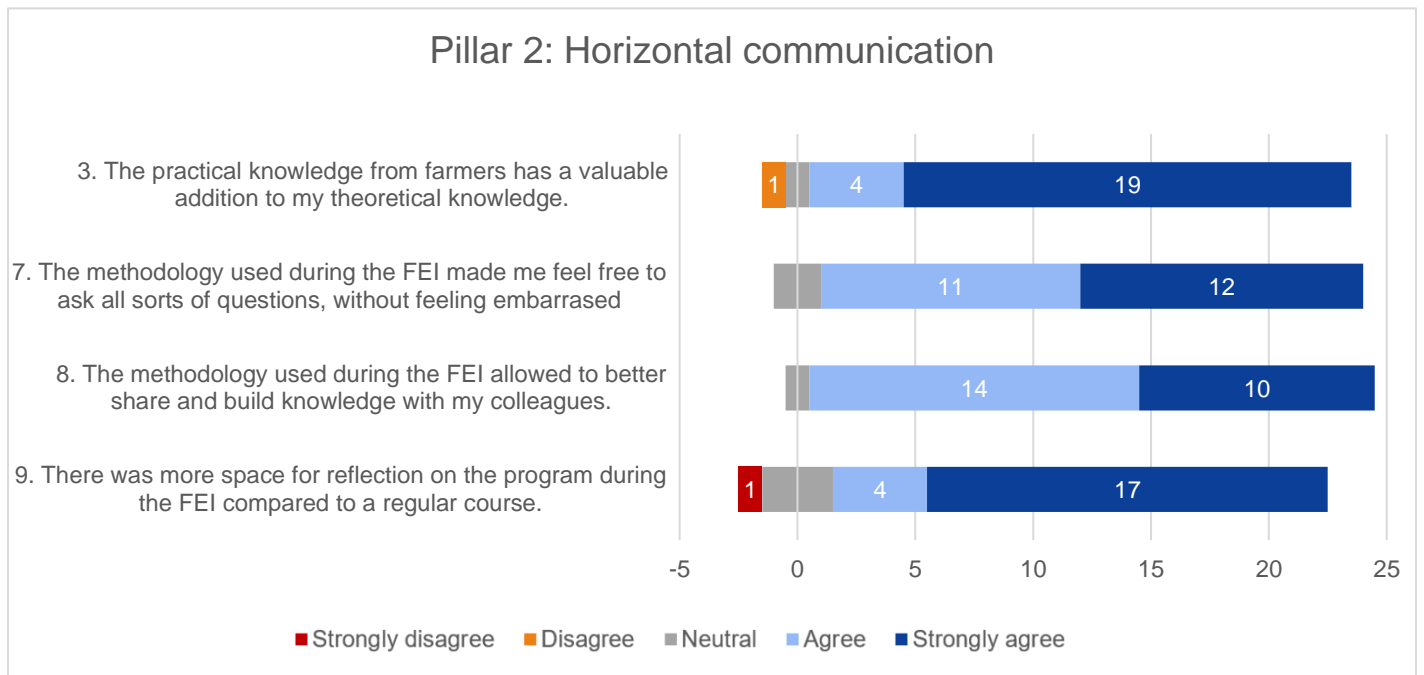
A special method that has played an important role in breaking the individual ownership of the FEI is the ‘Dragon Dreaming’ (Respondent 1, 2, 5 & 7). It helps to create a collective dream and an action plan, making Dragon Dreaming a powerful tool to inspire and motivate people to be actively committed to the organization of the project (Respondent 5 & 7). Dragon Dreaming was also used in defining the objective for the first FEI. The first initiators discussed together with farmers, scientists, and organizations from the agroecological movement about the biggest bottlenecks in bringing agroecology to a bigger scale, in the Netherlands and in Europe. They defined the most urgent problem as the lack of connection between university and farmers- between science and practice (Respondent 5).

Inspired by the pedagogy of Paulo Freire, the FEI tries to bridge this gap by striving for horizontal communication between participants, speakers, and farmers (Respondent 5). This comes most forward in the farm experience, when participants are in direct contact and conversation with farmers. A key principle is to always respect and value farmer’s knowledge, implying that participants go to the farms to learn, instead of to teach. When a dialogue between farmer and participant is not based on respecting each other’s worldview and knowledge, the farmer can easily feel disacknowledged. There is also the risk of farmers being ‘used as a source to extract knowledge from’, which can harm the farmer (Respondent 1). The purpose of the farm experience is to experience all aspects of the farmer’s life by working with the farmer, living with the farmer, and ‘doing’ like the farmer, regardless inner conflicts that might arise, although finding this balance can be challenging (Respondent 3, *personal communication*, December 22, 2023). Respondent 3 mentioned the importance of the ‘no interference principle’: participants should not explain the farmer what to do. If the farmer raises a problem, they can try to find a solution together, which can also be relieving for students:

The farm experience can take a lot of pressure from peoples’ shoulder: they get rid of the idea of having to go to a farm and having to bring solutions to the people. It’s a way to free your thoughts. You are there. You are not obliged to have solution. You’re not obliged to find the problems. You just are there to learn. (Respondent 3)

The questionnaire outcomes for Pillar 2 are provided in Figure 6.

Figure 6. Questionnaire results pillar 2: Horizontal communication



4.3 Pillar 3. Connecting the practical and political

In an interview with respondent 5, he mentions that an important cause of the gap between science and practice is that students do not obtain a proper idea of farmer’s reality, during their academic programs. During the FEI, participants get the opportunity to be with the farmer and learn about their daily lives and challenges (Respondent 1 & 3):

You see farmers that are fighting to have a place to live, to plant, to be with nature, and that they are very solidary, and that they are very oppressed by the system. So, when you see it by yourself, you change completely. (Respondent 3)

By living closely with the farmer, participants start to understand their logic and start to understand the interconnectedness between practical and theoretical knowledge, something that participants emphasized in the questionnaire (Respondent 4). For farmers, it is important to realize that the project is not about receiving free labor, it is part of creating a better future for themselves as well:

The FEI offers the last chance for university students to learn about farmer reality and to obtain some bit of political consciousness about power structures within agriculture. Once students finish their university and start working, their experience with farmer’s reality can be embedded in their work or turn out in political action (Respondent 1).

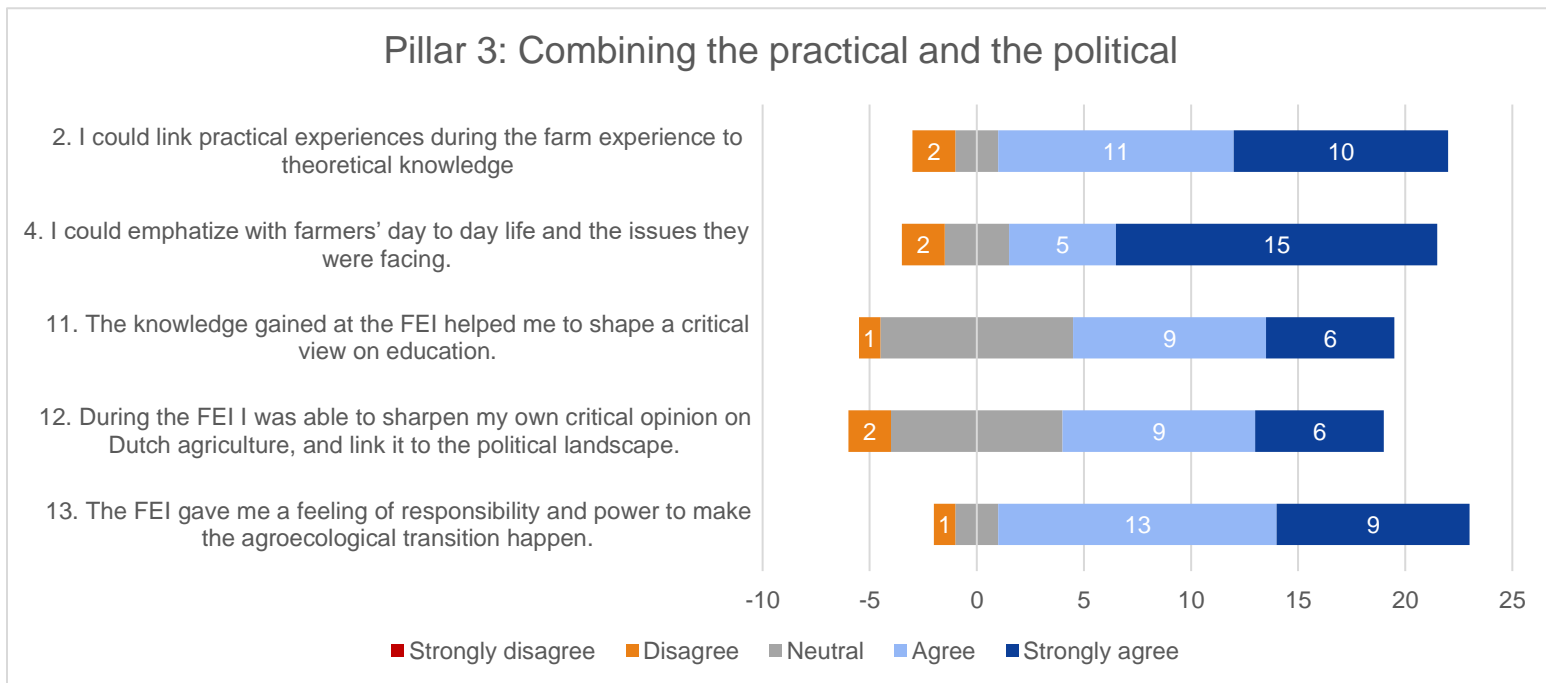
To create critical consciousness, the FEI provides implicit critique on the standard education at WUR, by showing that it is possible to teach in different ways, using a horizontal, diverse, and holistic methodology (Respondent 1 & 7). This is for example done through creating space for worldviews that are not always acknowledged by western scientists, by creating space for practical knowledge and spirituality (Respondent 4 & 6). Providing this diverse program with many ways of learning helps participants to reflect and formulate their own ideas, based on their own experiences (Respondent 6).

Several bottlenecks in agroecology, like poor solidarity payment, poor access to land, seed sovereignty and suppressing power relations are introduced as being political issues that need political solutions instead of technical solutions (Respondent 1 & 3).

The concept of having a strong political message in the FEI is highly inspired on the Brazilian EIV (Respondent 1 & 5). Although the political message in the Dutch FEI is slightly less prominent, the FEI highlights how power structures contribute to inequalities within the industrial food system. Participants are exposed to fundamental political concerns in agroecology, fostering a feeling of urgency to become political agents or start sustainable initiatives (Respondent 1, 4 & 5). Hearing about other inspiring initiatives gives participants confidence and can provide connections and a network of support (Respondent 6).

The results from the questionnaire are provided in Figure 7.

Figure 7. Questionnaire results pillar 3: combining the practical and the political



4.4 Pillar 4. Building multiscale social networks and movement

During the last week of the FEI, there is time and space to reflect on how participants are already connected to the movement by actively participating in the FEI (Respondent 1 & 4). The FEI manages to create a strong feeling of community among the people involved in the course, through group activities, tribe formation and sharing many thoughts and experiences (Questionnaire, see Annex 5).

Inviting speakers from the agroecological movement allows for creating contact between participants and organizations like Stichting Boerengroep, Toekomstboeren or La via Campesina (Respondent 4). They share about their expertise and experiences and help to reflect on how to create transformative change through mobilizing ourselves in social organizations (Respondent 5). Many participants become enthusiastic to get involved in the agroecological movement through the FEI and some are even inspired to become farmer afterwards (Respondent 2).

Asking the interview respondents about their vision of the future with the FEI, almost all respondents have the wish to see more initiatives similar like the FEI (Respondent 2, 3,5,6 & 7). Respondent 7 talked about her wish to see ‘A whole network of FEIs all over Europe’ and respondent 6 mentioned how he is ‘Dreaming about the FEI not being one singular project, but that it would become a common thing among sustainable agricultural sciences, in different parts of Europe.’ Respondent 5 mentioned possible cooperations with a European agroecological organization that could provide good funding opportunities, which could tackle the returning struggle of finding sufficient fundings. The current Boerengroep coordinator is working on starting up smaller FEI crash courses, that could also motivate new participants to attend the four-weeks FEI (Respondent 4).

Since students are the protagonists of the project, the project cannot keep on running without enthusiasm and commitment from participants themselves. Nearly half of the respondents on the questionnaire reacted that they would like to organize a FEI or that they already did, as displayed in Figure 8. On the open question, participants reacted as follow:

I think many of us wanted to organize something similar in our home countries. I think being able to connect people with the topic alongside local context (local initiatives, farmers, and NGOs) allows you to comprehend the material better. I still want to do this in Finland when I have a stronger network here. (Participant 1, see annex 5)

I would love to organise such a similar event in Gambia, especially with the rural communities to get to learn more about agroecology and farming systems. (Participant 2)

Reflecting on the impact of the FEI, respondents 1, 3 and 5 mention that creating a broader social movement in Europe is challenging, because people are less used to the idea of the power of the collective, compared to Brazil.

They mentioned that the FEI needs support from a stronger network, which could be improved by involving different organizations during the planning and designing of the course. Stichting Boerengroep has only has a certain capacity, having one paid coordinator and one intern, while being involved in the organization of many activities. Several years ago, also ILEIA and Otherwise were helping during the organization and there might be possibilities for financial support from agroecology Europe (Respondent 5 & 7). On the other hand, job handovers between Boerengroep coordinators could be improved to better prepare the new coordinator and make the organization run more smoothly.

The questionnaire results for pillar 4 are provided in Figure 9.

Figure 8. Questionnaire outcome “Would you like to help organizing a FEI yourself?”

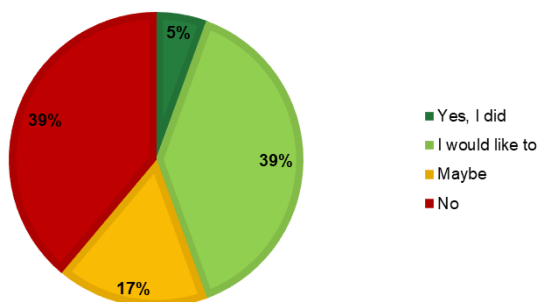
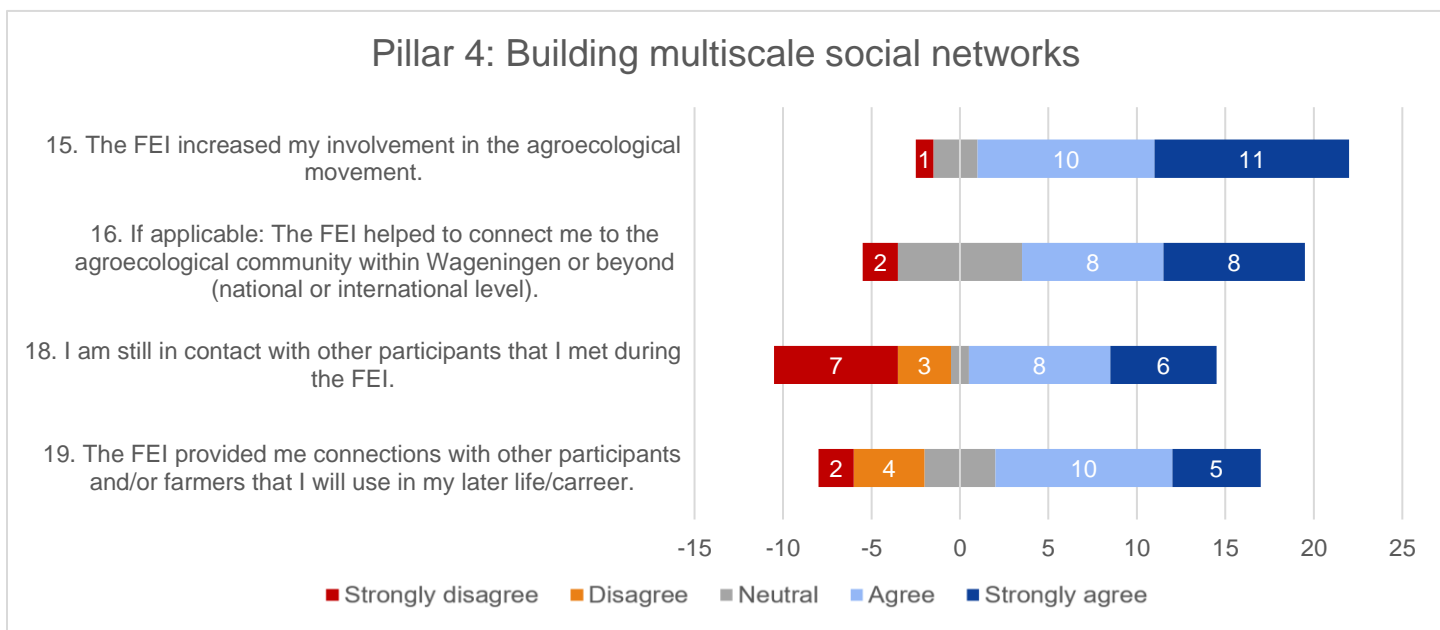


Figure 9. Questionnaire results pillar 4: Building a multiscale social network and movement



4.5 Unexpected remarkable outcomes

Through inductive content analysis several elements that were not reflected by the Transformative agroecology learning model by Anderson et al (2019) appeared to be worth mentioning. The reactions from participants on what made the FEI different from other education were remarkably interesting. Several quotes from participants describing their learning experiences from the FEI are displayed below:

The FEI truly changed the way I see that the world around me works and what I envision for myself in the future. To me, agroecology felt like the most effective way of having a real positive impact on the environment and against climate change (Participant 3, see Annex 5).

It has been a course that developed my capacities to recognize my personal boundaries, explore my spiritual, intuitive, and emotional dimensions, and intertwine cultural identities (Participant 4).

The FEI solidified my desire of becoming a farmer (Participant 5)

Participants emphasize how the FEI made a deep impact on their personal lives, and how they changed emotionally, through the course. Allowing space for acknowledging feelings and using creative methods to express emotions helped participants to understand themselves better and reflect on what drives them personally (Respondent 6 & 7).

Further, the focus on theoretical problem analysing during academic studies can be negative and demotivating, while working outside, in practice can provide fresh, positive energy (Respondent 2). This gives the feeling of being part of the solution, motivating several participants to get into farming themselves. Figure 10 provides the results from two additional statements, which are not directly linked to the pillars. Finally, Figure 11 gives an oversight of the questionnaire results of pillar 1, 2, 3 and 4.

Figure 10. Questionnaire results, additional statements

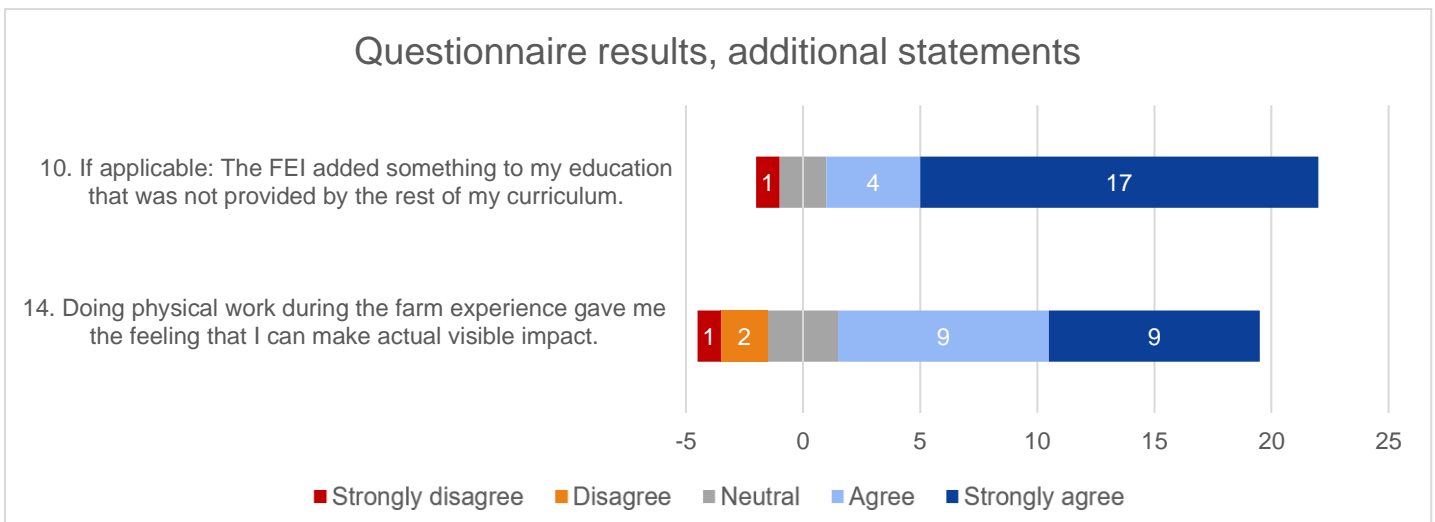
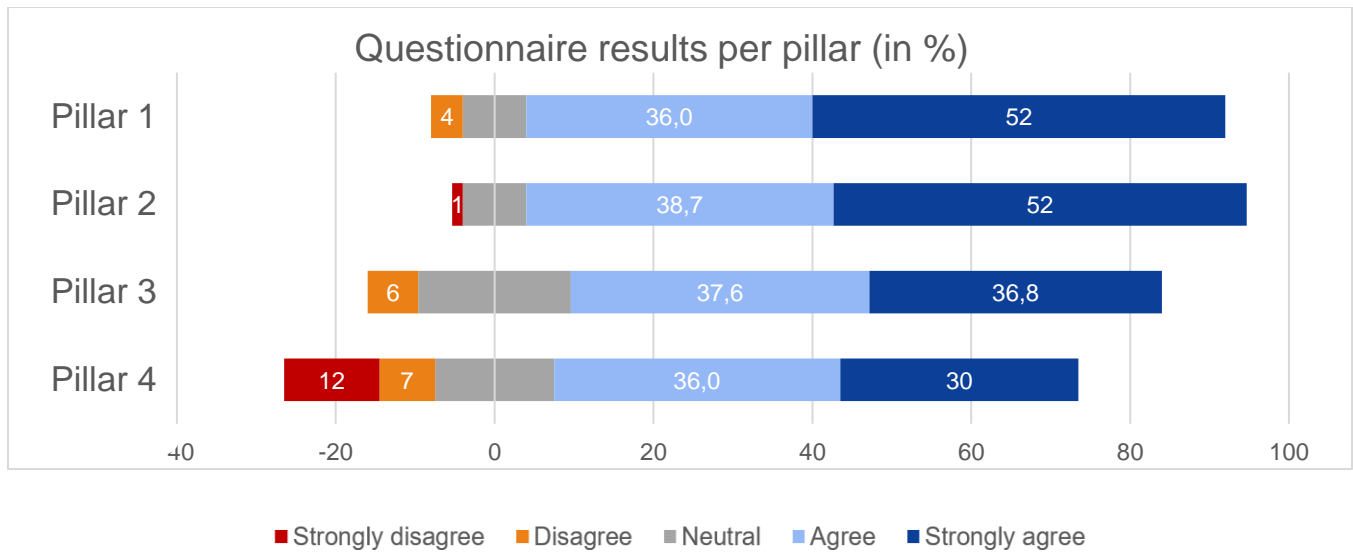


Figure 11. Oversight questionnaire results Pillar 1, 2, 3 & 4



5. Discussion

5.1 Interpretation results

This research aimed to create better understanding of what is needed in a course to make it transformative by analyzing the implementation of educational elements in the Farm Experience Internship and analyzing how these elements affect student’s learning experiences. From the questionnaire results for pillar 1 ‘Wisdom dialogues’ and pillar 2 ‘Horizontal learning’ can be concluded that the FEI succeeds in positively stimulating both these transformative learning processes. The implementation of educational elements to enhance these learning processes in the FEI are rather synergetic. The program focuses on promoting diversity at multiple levels, creating a diverse mix of students, speakers, and methodologies, fostering a rich learning environment. However, an essential prerequisite for successful Wisdom dialogues is Horizontal learning, emphasizing non-hierarchical communication, creating space for open dialogue between people that might hold different worldviews. The collective ownership and organization of the project changes students into active protagonists of the content of their own education and learning process. However, in recent years, issues arose through lower commitment among student volunteers, during the organization phase. Beside making the continuity of the future program more challenging, this can also form a threat for the horizontal principle of students being the protagonists of the project.

The questionnaire results for pillar 3 ‘Combining the practical and the political’ and pillar 4 ‘Building multiscale social networks’ also show that the FEI has a positive impact for these learning processes. The first aim

of the FEI, to bridge the gap between science and practice, is widely reflected in pillar 3 ‘Combining the practical and political’. During the farm experience, participants are immersed in farmer’s daily lives which helps to understand the practical challenges and realities that farmers come across. This physical experience contributes to reflecting on power structures within agriculture and raises critical consciousness about interrelatedness between the practical and social struggle and how this relates to politics. Participants feel inspired to join organizations from the agroecological movement and mention to feel inspired and empowered to start initiatives. Pillar 4, ‘Building a multiscale social network and movement’ is stimulated through strong representation of different organizations from the social movement in the program, fostering connections between participants and organizations, inspiring political engagement and promoting new initiatives. The FEI itself creates a strong sense of community, which provides a basis to stay involved.

It is important to note that participants were slightly more hesitant about their learning experiences for pillar 3 and 4 than on pillar 1 and 2. To reflect on the transformative effect of the program on creating critical consciousness about reality and social movement building, this learning processes should always be understood in the light of historical-geographic context (McCune & Sánchez, 2019). The FEI, inspired by the EIV project in Brazil, has been brought to a completely different context. Latin America has a strong history of rural social movements, where the agroecological evolution often emerges from a reciprocity between a change in scientific paradigm, social movements and political processes, going hand in hand with a transformation of the education system, based on Freire’s pedagogy (Gallardo-López et al., 2019; Freire, 1972). In Europe, agroecological peasant movements only recently began to form and with a history of neoliberal education, agroecology is still more widely acknowledged as a science, while it lacks a focus on collective thinking and building a broader movement (Anderson et al., 2019; Gallardo-López et al., 2019).

A first explanation for the lack of a broad social movement is that societies in western Europe, especially in the Netherlands, are known to have a highly individualistic culture (Country Comparison Tool, n.d.). People are less used to collective thinking and the belief in collective power is less strong (Hofstede, 1991; Country Comparison Tool, n.d.; García et al., 2021). According to Hofstede’s (1991) cultural dimension theory, collectivism and individualism can be considered as opposite poles. European countries, especially the Netherlands score much higher on individualism, while Brazil is described as having a more collective society (Country Comparison Tool, n.d.).

Beside that, the historical process of depeasantization of (western) Europe caused an important part of the traditional knowledge on farming to get lost, which degraded the strong rural communities that are still more existing in Brazil (McCune & Sánchez, 2019). Only a limited part of the European population is still concerned about agricultural problems and the mass of (agroecological) farmers has to be rebuild as well, making it more difficult to scale up a grassroot movement (Wezel et al., 2009; Bernstein, 2014; Anderson et al., 2019).

Considering this European historic-geographic context, the agroecological transition will not come

naturally, for which transformative learning emerges as a powerful tool, because it entails a process of becoming aware of how we internalized our own set of cultural habits and perceptions (Mezirow, 1981). It can help to challenge deeper cultural values and rewire people into collective thinking and collective action for building a multi-scaled agroecological network (Anderson et al., 2019)

5.2 Limitations

An important limitation of this research that emerged from inductive coding, is that the framework by Anderson et al (2019) does not provide a complete understanding of transformative learning. The framework mainly focuses on transformative group learning, while individual transformative processes are less reflected. Participants emphasized how the FEI had a deep impact on their personal lives, by fostering spiritual, intuitive, and emotional development, indicating the transformative character of stimulating personal growth. These results could be better explained through the “head, heart and hands” model for transformative learning, by Singleton (2015). This framework outlines transformative experiences as helping learners to find personal meaning in their local learning, through connecting the cognitive (head), with growing critical reflection and caring awareness (heart) and active use of concepts through active engagement (hands) (Singleton, 2015).

To improve the understanding of the complex relation between personal and collective transformative processes, a more complex framework should be developed. Blending the “heart, head and hands” framework by Singleton (2015) with the pillars of transformative agroecology learning by Anderson et al (2019) may offer a better holistic lens on transformative learning.

Beside that, O’Sullivan (2008) writes about the importance of blending transformative educational elements into the specificity of local contexts. Therefore, further research should focus on how transformative learning elements can be adjusted to the local context of a smaller beginning agroecological movement like in Europe, that that is still in an early stage of development. This would help to improve adapting initiatives to the local socio-political context, all with the purpose of improving the transformative potential.

Addressing personal limitations for this research, the limited time scope hampered to do in-depth interviews with former participants. Beside that, the learning experiences could be better quantified by applying statistical analysis on the questionnaire outcomes. Although, a higher response rate than 25 would be preferred. Further, more interviews should be conducted with coordinators and interns from the time span of 2016-2022. None of the interview respondents was involved in organizing the FEI during this time, making it more difficult to create a total overview of the evolution of the FEI over time. Also, the farmer’s view and experience with the FEI is poorly reflected in this research- a contradictive shortcoming in research about co-creation of knowledge and agroecology, in which farmer’s have a leading role.

Finally, it is crucial to acknowledge the potential influence of confirmation bias, through the risk on

positive hypothesis testing, during deductive and inductive coding and the interpretation of results, which could decrease the validity of this research (Klayman, 1995). Beside that, this research process was guided by two supervisors that have been closely involved to the FEI. This might have decreased the objectivity of the research, but it mainly provided valuable expertise and contacts to bring this research to a successful end.

6. Conclusion

This research aimed to create better understanding of what is needed in a course to make it transformative and how this influences students' learning experience. The findings in this research show that a relatively short course like the FEI can support a wide range of transformative learning experiences and motivates students to get involved in the agroecological transition. This is mainly achieved through the powerful structure of the course: Students are the protagonists of their education, and the organization is based on horizontal communication principles. The first week provides space for sharing knowledge while the farm experience creates a strong experience that enables participants to link the practical to the political and create sense of farmers' reality. In the end, the reflection week creates space to bring all insights and experiences in context and link these to the agroecological movement. Together with personal emotional reflection and stimulation of different senses, participants change their perspective on agroecology, and often experience an inner shift that makes them more emotionally connected to the topic, reactivating a feeling of hope. Transformative learning, as stimulated during the FEI, has shown to be able to create a deep impact on people's lives, and succeeds in getting people on board of the collective agroecological transition, by breaking through deep-rooted cultural structures.

Considering the European context of highly industrialized food production systems and strong individualistic cultures, there is great urgency and potential in spreading transformative educational projects like the FEI to different universities. It only takes a few enthusiastic pioneers that dare to be the protagonists of a new project in a different place. By building on the support of organizations from the agroecological network, and using the experience from the FEI, new transformative educational initiatives can be organized, resonating this story of hope, in the pursuit of a sustainable, equitable food system.

7. Acknowledgement

The seed for this thesis was planted on a winter evening, one year ago, in the south of France. I had the honor to meet and speak with Irene Cardoso, on a dinner table in a very open horizontal setting- a term that I only came to understand a year later. Her experiences and talks about the Brazilian agroecological movement and the EIV moved something inside: it touched right upon some desire that I've had since the beginning of my bachelor, that I could not really place. A desire to understand how all this academic knowledge can be practically applied in the 'real world'. Diving into the topic of agroecology and transformative learning slowly turned into a transformative process itself, helping me to better phrase this desire, which activated my curiosity to also explore farming as a practice, after finishing my bachelor.

I am very grateful for the connections that I made through the research process and the enthusiastic engagement of all the people I interviewed. This showed me the power of the FEI as a project and the urgency to create a bigger movement. But also, the reactions from participants, telling how the FEI changed their lives where heartwarming to receive.

I would like to thank Heitor Mancini Teixeira for sharing all his thoughts and his experience with horizontal learning through providing positive, constructive feedback and open interaction, which made me more confident through the process. Irene Katsaros has been a great co-supervisor, by her enthusiastic engagement through my process, and her extensive, constructive feedback. Her invitation to the meetings with the Boerengroep community formed a valuable opportunity for me to get to know the context in which the FEI operates.

Finally, I cannot finish without mentioning the little 'family history', that I discovered through my research process. Last spring my grandmother passed away, at the age of 90 years. To me, she was an inspiring woman, that always strived for women rights, and more equity for 'the poor and the oppressed'. As a young, clever lady, her parents never allowed her to attend high school. Her frustration and experience of injustice manifested itself in her act to catch up her entire high school education and university at the age of 40, while sustaining a four-kids family. When I told my own mother, a pedagogue by heart, about my thesis, she laughed, went up the stairs and came back to hand me some document: 'Geloof in de vrouw. Een beschouwing over enige vrouw en geloof groepen in het licht van de pedagogie van Paulo Freire.' It was my grandmothers' thesis, from 1985- written by typewriter, about the mobilization of catholic feminist groups, in the light of Freire's pedagogy. Finding out about my mothers and grandmother affinity with Paulo Freire's Pedagogy of the Oppressed, was a powerful discovery. It gave me a feeling of having a legacy to not remain silent, don't take the world for granted but to keep striving for a more just world. And above all, to not become apathic, but remain hopeful.

8. References

- Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., Von Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, 46(1), 30–39. <https://doi.org/10.1007/s13280-016-0800-y>
- Anderson, C., Binimelis, R., Pimbert, M., & Rivera-Ferré, M. G. (2019). Introduction to the Symposium on Critical Adult Education in Food Movements: Learning for Transformation In and Beyond Food Movements—the why, Where, how and the what next? *Agriculture and Human Values*, 36(3), 521–529. <https://doi.org/10.1007/s10460-019-09941-2>
- Bernstein, H. 2014. Food sovereignty via the “peasant way”: a skeptical view. *Journal of Peasant Studies* 41 (6): 1031–1063.
- Boerengroep. (2023, May 16). *What is the FEI? - Boerengroep*. <https://www.boerengroep.nl/what-is-the-fei/>
- Country Comparison Tool*. (n.d.). The Culture factor group. <https://www.hofstede-insights.com/country-comparison-tool?countries=brazil%2Cnetherlands>
- Dorninger, C., Abson, D. J., Apetrei, C. I., Derwort, P., Ives, C. D., Klaniecki, K., Lam, D. P. M., Langsenlehner, M., Riechers, M., Spittler, N., & Von Wehrden, H. (2020). Leverage points for sustainability transformation: A review on interventions in food and energy systems. *Ecological Economics*, 171, 106570. <https://doi.org/10.1016/j.ecolecon.2019.106570>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, 7(3), 93–99. <https://doi.org/10.1016/j.afjem.2017.08.001>
- FAO (2018a). The 10 elements of agroecology – Guiding the transition to sustainable food and agricultural systems. Rome.
- Farm Experience Internship. (2016, 12 August). *The FEI movement*. <https://farmexperienceinternship.wordpress.com/movement/the-fei-movement/>
- Farm Experience Internship. (2020, 27 February). Study Guide – FEI 2020. <https://farmexperienceinternship.wordpress.com/2020/02/27/study-guide-fei-2020/>

- Freire, P. (1972). *Pedagogy of the oppressed* (MB Ramos, Trans.). New York: Continuum, 2007.
- Gallardo-López, F., Hernández-Chontal, M. A., Cisneros-Saguilán, P., & Linares-Gabriel, A. (2018). Development of the concept of Agroecology in Europe: a review. *Sustainability*, *10*(4), 1210. <https://doi.org/10.3390/su10041210>
- García, D. L., Padilla, M. C., De Azevedo Olival, A., Laranjeira, N. P. F., Méndez, V. E., Parada, S. P., Barbosa, C. A., Salas, C. B., Caswell, M., Cohen, R., Correro-Humanes, A., García-García, V., Gliessman, S. R., Pomar-León, A., Sastre-Morató, A., & Tendero-Acín, G. (2021). Building Agroecology with People. Challenges of participatory methods to deepen on the agroecological transition in different contexts. *Journal of Rural Studies*, *83*, 257–267. <https://doi.org/10.1016/j.jrurstud.2021.02.003>
- Hageraats, E. (2016). Promoting empowerment through the Farm Experience Internship (FEI). *Wageningen University, Rural Sociology Group*.
- Haydam, N. E., & Steenkamp, P. (2020). A methodological blueprint for social sciences research—the social sciences research methodology framework. *EIRP Proceedings*, *15*(1).
- Hofstede, G. (1991). *Cultures and organizations, intercultural cooperation and its importance for survival*. Harper Collins Publishers, UK
- Jongerden, J., & Wiskerke, H. (Eds.). (2022). *On Meaningful Diversity: Past, present and future of Wageningen rural sociology*. Wageningen University, Rural Sociology Group.
- Klayman, J. (1995). Varieties of Confirmation Bias. *Psychology of Learning and Motivation*, 385–418. [https://doi.org/10.1016/s0079-7421\(08\)60315-1](https://doi.org/10.1016/s0079-7421(08)60315-1)
- Maiteny, P., (2002). Mind in the Gap: Summary of research exploring ‘inner’ influences on pro-sustainability learning and behavior. *Environ. Educ. Res.* *8* (3), 299–306. DOI: [10.1080/13504620220145447](https://doi.org/10.1080/13504620220145447)
- McCune, N., & Sánchez, M. (2019). Teaching the territory: Agroecological pedagogy and popular movements. *Agriculture and Human Values*, *36*(3), 595–610. <https://doi.org/10.1007/s10460-018-9853-9>
- Meadows, D. 1999. *Leverage points: Places to intervene in a system*. Hartland: The Sustainability Institute.
- Mezirow, J. (1981). A critical theory of adult learning and education. *Adult Education Quarterly*, *32*(1), 3–24.
- Nemoto, T., & Beglar, D. (2014). Likert-scale questionnaires. *JALT 2013 conference proceedings* (pp. 1-8).
- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2009). The Nature Relatedness Scale: Linking Individuals’ Connection With Nature to Environmental Concern and Behavior. *Environment and Behavior*, *41*(5), 715–740. <https://doi.org/10.1177/0013916508318748>

- O'Sullivan, E., & Taylor, M. M. (2004). Learning toward an Ecological Consciousness: Selected Transformative Practices. *IPalgrave Macmillan US*. <https://doi.org/10.1007/978-1-349-73178-7>
- O'Sullivan, E. (2008). Finding Our Way in the Great Work. *Journal of Transformative Education*, 6(1), 27–32. <https://doi.org/10.1177/1541344608316960>
- Petrillo, F., Spritzer, A. S., Freitas, C. M. D. S., & Pimenta, M. S. (2011). Interactive analysis of Likert scale data using a multichart visualization tool. *IHC+ CLIHC* 358–365 <https://doi.org/10.5555/2254436.2254496>
- Pisters, S. R., Vihinen, H., & Figueiredo, E. (2019). Place based transformative learning a framework to explore consciousness in sustainability initiatives. *Emotion, Space and Society*, 32(September 2018), 100578. <https://doi.org/10.1016/j.emospa.2019.04.007>.
- Research data Management support*. (2024, January 19). Utrecht University. <https://www.uu.nl/en/research/research-data-management>
- Singleton, J. (2015). Head, Heart and Hand Model for Transformative Learning: Place as Context for Changing Sustainability Values. *Journal of Sustainability Education*, 9. 171-187.
- Taylor, P. (2000). Improving forestry education through participatory curriculum development: A case study from Vietnam. *The Journal of Agricultural Education and Extension*, 7(2), 93–104. <https://doi.org/10.1080/13892240008438810>
- Wezel, A., S. Bellon, T. Doré, C. Francis, D. Vallod, and C. David. 2009. Agroecology as a science, a movement or a practice. A Review. *Agronomy for Sustainable Development* 29:503–15. doi:10.1051/agro/2009004.
- Wezel, A., Casagrande, M., Celette, F., Vian, J.-F., Ferrer, A., & Peigné, J. (2014). Agroecological practices for sustainable agriculture. A review. *Agronomy for Sustainable Development*, 34(1), 1–20. <https://doi.org/10.1007/s13593-013-0180-7>

9. Appendixes

Annex 1. Overview of interview respondents

Name	Position	Date interview	Location
Respondent 1	Boerengroep coordinator 2010-2013, initiator first FEI and agroecological farmer	19-12-2023	Online Teams meeting
Respondent 2	Boerengroep coordinator 2014-2015	20-12-2023	Online Teams meeting
Respondent 3	Expert of the Brazilian AE movement + initiator first FEI	22-12-2023	Physical meeting
Respondent 4	Boerengroep coordinator 2023-24	5-1-2024	Online meeting
Respondent 5	Boerengroep intern, initiator first FEI 2013 and agroecological farmer	10-1-2024	Physical meeting
Respondent 6	Boerengroep intern 2023	12-1-2024	Physical meeting
Respondent 7	Boerengroep intern 2016	16-1-2024	Online Teams meeting

Annex 2. Interview Blueprint

Interview guide questions for organizers of the FEI

Date: 13-12-2023

Name respondent:

Conducted on: ...

For: GSS bachelor thesis on Transformative learning in the Farm Experience Internship

Interview phase (+-75 min total)	Content	Answer

Introduction (5 min)	<p>My name is Jonne Walstra, and I am studying at Utrecht University. Currently, I am writing my bachelor thesis for Global Sustainability sciences. For my thesis I am analyzing how the elements of the Transformative Learning theory for agroecology by Anderson et al 2019, are coming back in the Farm Experience internship. In short, this theory consists of four pillars, defined as</p> <ol style="list-style-type: none">1. Horizontalism: nonhierarchical, democratic communication2. Wisdom dialogues (Diálogo de saberes): knowledge sharing between different actors3. Combine practical and political knowledge to build critical consciousness4. Building social movements and networks <p>The aim of my research is to create a better understanding of which elements of the FEI make it transformative education, in order to learn from the FEI and contribute to the organization of other agroecological education initiatives.</p> <p>To learn more about the organizational structure of the FEI, I am interviewing several former organizers. From my supervisor Heitor Mancini Teixeira I understood that you were involved in organizing the Farm Experience Internship in ..., so that is why I contacted you.</p> <p>I am very happy that we could meet today. I think that the interview will take around 75 minutes, is that good for you?</p>	
---------------------------------------	--	--

	<p>Is it fine with you if I record our meeting? I will only use our discussion for the scope of my bachelor thesis, and not share any further. And if there are parts of our conversation that you prefer me to keep out of my analysis, please let me know in the end.</p> <p>In our interview I would like to dive deeper into how the FEI was organized, into the development of the course, into the different methods and theories that were used, and which visions were kept.</p> <p>If you don't have any further questions, we can start.</p>	
<p>Topic 1 (5 minutes)</p>	<p>Topic 1: Objectives + motivations to organize the FEI</p> <p>Objective: personal background + motivation to get involved with the FEI</p> <p>1.1 Can you tell me how you got involved in organizing the FEI?</p> <p>1.2 Which study programs were you attending?</p> <p>1.3 In which year(s) you were organizing the FEI?</p>	
<p>Topic 2 (10 minutes)</p>	<p>Topic 2: Organization of the FEI</p> <p>Objective: What are authors/methods/theories are used for the organizational structure of the FEI?</p>	

	<p>How do you make a good balance of using old experience from the EVI without copying it to another context. (NL different agricultural landscape)</p> <p>2.1 What are the objectives of the FEI from your perspective?</p> <p>2.2 What theoretical methods/frameworks were you drawing inspiration from?</p> <p>a. Did this change over time?</p> <p>b. Is there one overarching methodology that is used every year?</p> <p>2.3 How is the communication and decision making within the FEI organized?</p> <p>a. How is the team build up?</p> <p>2.4 How is the responsibility of different parts of the organization divided?</p> <p>a. Are the participants also involved in shaping the course, during the course itself? Or more afterwards, with feedback?</p> <p>Extra: (later added)</p> <p>2.5 Did you feel prepared by the former organizers?</p> <p>a. Did you use the guidelines from previous FEIs?</p> <p>b. Did you add anything for the people after you?</p>	
<p>Topic 3 (10 minutes)</p>	<p>Topic 3: Methods and techniques to promote knowledge sharing and building</p>	

	<p>Objective: Understand decision making on how diverse knowledge sharing is promoted, and how knowledge sharing is encouraged with different techniques/activities</p> <p>3.1 How are the topics of the preparation and the evaluation week chosen?</p> <p>a. All days of the first week have a different theme. How do you decide which themes are most important to involve in the course?</p> <p>b. How do you decide who will be guest speakers?</p> <p>3.2 How do you ensure diversity in the FEI?</p> <p>a. How is the FEI providing a diverse group of speakers/ themes?</p> <p>b. How do you deal with attracting participants with a diverse background?</p> <p>c. How are participants from outside WUR motivated to get involved in the FEI?</p> <p>3.3 What methods/activities/dialogue techniques were used to promote knowledge sharing and building among the people involved?</p> <p>a. Are there special techniques or activities to encourage knowledge sharing?</p> <p>b. Which ones where most successful?</p> <p>c. Which ones where not successful?</p>	
<p>Topic 4 (10 minutes)</p>	<p>Topic 4: The place of the FEI in the WUR</p> <p>Objective: Understand the place and the role of the FEI withing Wageningen University and understand how FEI formulates its critics.</p>	

4.1 How does the Boerengroep profile itself towards Wageningen University? (knowing that it holds strong bonds with agribusiness)

a. Can FEI, being part of Boerengroep be considered as a countermovement to the neoliberal education at WUR?

b. With which parts of the WUR are you in contact? It is a big institution.

c. Is the WUR backing up the existence of Boerengroep, or more trying to neglect it?

4.2 How is the FEI criticizing the operation of the WUR?

a. Are the critics made explicit, or is it more underlying criticism by teaching in/with different worldviews?

b. How do participants generally react to this?

c. How do you motivate students to formulate their own opinion/critics? Do you think the FEI succeeds and contributes to creating critical consciousness?

4.3 Students can now obtain credits (3 ECTs) for the course. What was the process of getting the FEI being an acknowledged course?

a. How did the WUR react to the FEI course?

b. The course has to meet some of the WUR regulations to be able to give out ECT credits.

Did this change the course? 1. Compulsory elements 2. Decrease in freedom of the content of the course?

c. Does the ending reflection paper reflect the vision of the FEI? Or more of the RSO board?

<p>Topic 5 (10 minutes)</p>	<p>Topic 5: Link to social movements</p> <p>Objective: understand the place of the FEI within the agroecological network and movement</p> <p>5.1 What is the role of Boerengroep in the social network that drive change within the agroecology movement?</p> <p>5.2 How are (international) social movements represented in the FEI?</p> <p>a. I heard that Boerengroep later got involved in La Via campesina, did you see this back in the FEI?</p> <p>5.3 Do you think that the FEI contributes to a little agroecological community (within and outside the WUR)?</p> <p>a. If yes: What makes up this community? Having critical discussions, share events and info?</p>	
<p>Topic 6 (10 minutes)</p>	<p>Topic 6: Bottleneck and challenges</p> <p>Reflect on challenges and bottlenecks of the organization of the FEI. Which methods or activities did not work out?</p> <p>6.1 What were the main obstacles/bottlenecks in organizing the course?</p> <p>a. Where there any methodologies that did not work?</p>	

	<p>b. Where there any techniques/activities that where part of the FEI program that turned out to be less successful?</p> <p>6.2 What lessons did you learn from the process of setting up the FEI?</p> <p>a. What would you have done differently in the beginning with organizing the course, with the knowledge that you have now?</p> <p>a. How can these lessons contribute to other initiatives?</p>	
<p>Topic 7 (10 minutes)</p>	<p>Topic 7: Development over time + future vision</p> <p>Objective: How did the FEI develop over time? Where do you see the FEI in the future? What can it contribute to other initiatives?</p> <p>7.1 Do you see changes in the course over the past few years?</p> <p>a. in the structure of the course</p> <p>b. in the content of the course</p> <p>7.2 What is your vision of the future of the FEI?</p> <p>a. What could be changed to the FEI to improve it?</p> <p>b. What are you most proud of?</p> <p>7.3 How can the FEI contribute to shaping other agroecological education initiatives?</p>	

Final thoughts (5 minutes)	<p>Objective: giving the option to share any important aspects of the FEI that were not covered during the interview.</p> <p>Is there anything you would still like to share?</p> <p>Are there any major improvements that I should make in the interview?</p> <p>Are there any points that were not addressed?</p> <p>Thanks a lot for your time. If you are interested I am very happy to share my final paper with you.</p>	
-----------------------------------	--	--

Annex 3. Questionnaire

In what year did you attend the Farm Experience Internship?

What gender do you identify with? Male Female Non-binary I prefer not to say

What is your nationality?

If you were studying, which educational institution were you attending, when you joined the FEI?

If you were studying, what study program did you attend when you joined the FEI?

If you were not studying, what educational or professional background do you have? What elements/principles made the FEI different from your formal educational program?

Please answer in several sentences.

For the following statements you can choose to which extent you agree:

1. I could share my own experiences and knowledge with the other participants. (pillar 1)
2. I could link practical experiences during the farm experience to theoretical knowledge (pillar 3)
3. The practical knowledge from farmers has a valuable addition to my theoretical knowledge. (pillar 1 + 2)
4. I could empathize with farmers' day to day life and the issues they were facing. (pillar 3)
5. Before the FEI I did not have any practical farming experience. (impression of participant background)
6. The FEI made me see the value of sharing knowledge between stakeholders. (pillar 1)
7. The methodology used during the FEI made me feel free to ask all sorts of questions, without feeling embarrassed (pillar 2)
8. The methodology used during the FEI allowed to better share and build knowledge with my colleagues. (pillar 1 + 2)
9. There was more space for reflection on the program during the FEI compared to a regular course. (pillar 3)
10. If applicable: The FEI added something to my education that was not provided by the rest of my curriculum. (extra)
11. The knowledge gained at the FEI helped me to shape a critical view on education. (pillar 3)

12. During the FEI I was able to sharpen my own critical opinion on Dutch agriculture, and link it to the political landscape. (pillar 3)

13. The FEI gave me a feeling of responsibility and power to make the agroecological transition happen. (extra)

14. Doing physical work during the farm experience gave me the feeling that I can make actual visible impact. (pillar 3)

15. The FEI increased my involvement in the agroecological movement. (pillar 4)

16. If applicable: The FEI helped to connect me to the agroecological community within Wageningen or beyond (national or international level). (pillar 4)

17. I am still in contact with farmers/teachers from the FEI. (pillar 4)

18. I am still in contact with other participants that I met during the FEI. (pillar 4)

19. The FEI provided me connections with other participants and/or farmers that I can use in my later life/career. (pillar 4)

Did you ever (consider to) organize a similar initiative like the FEI? This can be outside Wageningen or outside the Netherlands. (pillar 3 + pillar 4)

Is there anything else about the FEI that you would like to share? Mention the statement nr, if you would like to explain your answer. (Not mandatory)

Annex 4. Coding scheme qualitative content analysis

Deductive coding categories	Inductive coding categories	Inductive subcategories
1. Wisdom dialogues		<ul style="list-style-type: none"> - Diverse backgrounds participants - Diverse backgrounds speakers - Diverse methodologies for knowledge sharing
2. Horizontal communication		<ul style="list-style-type: none"> - Valuing farmer's knowledge - Bottleneck: Risk of extracting knowledge - Co-creation of knowledge - Collective ownership of the project through Dragon dreaming - Bottleneck: Low sense responsibility and commitment
3. Combining the practical and the political		<ul style="list-style-type: none"> - Create better understanding of farming reality - Creating critical consciousness -political consciousness and action
4. Building social movement		<ul style="list-style-type: none"> - Connect participants with organizations in the AE movement - Being part of the movement through the FEI - Expanding the movement - Bottleneck: weaker AE movement and small Boerengroep's capacity
	5. Personal growth	<ul style="list-style-type: none"> - Focus on emotional development - The experience of doing physical farm work - Life changing experience

Annex 5. Questionnaire results open questions

What elements/principles made the FEI different from your formal educational program? Please answer in several sentences.
Being outside during learning, sharing food, and playing games together. A feeling of real community among the learners and teachers.
The practical experience is a big plus. I should say that after so many years I remember very little about the theoretical part.
In addition to theory and discussions we also had the practical application which is what made it different from my other academic experiences. Field trips and working on a farm helped connect the theoretical to the practical.
Creative methods, more equal relationship students and teachers, farm work experience.
Reflective, caring and practical learning approach
Dragon dreaming. Working on a real farm. Sharing what was learned with other participants. Daily excursions to different farms.
Smaller group, more in field experiences
All of the following aspects I did not or barely experience in my formal education: 2 weeks of a practical internship About the course weeks (1 and 4) It was an informal atmosphere Lectures were outside Smaller group Eating together Informal contact with coordinators and teachers More meditative / intuition focused elements like yoga, the council of beings (it was called something like that) We also did practical things like cooking and foraging Chill moments where you could take some time for yourself

The FEI was singular because it has been a course that developed my capacities to recognize my personal boundaries, explore my spiritual, intuitive, and emotional dimensions, and intertwine cultural identities.

The course happened outside, in a therapeutical garden on the very same ground of a farm, close to natural elements. Real time observations disappear in classrooms.

Being outside, less hierarchy between teachers and students, focus on co-creating instead of learning "facts", physical movement incorporated into lessons, attention to what the group needs, different approaches to sharing knowledge, creating a shared group culture

The FEI program that I attended was strongly linked to practical and farmers' life. Living and working with the farmer, helped me to gain new insights and experience farmer's lifestyle in the Netherlands. I also gained insights about agriculture in the Netherlands, challenges for young farmers and the value chain since I was also involved in selling the products of the farm. So my experience was comprehensive and intensive at the same time.

The enthusiasm of the group. Participation of many countries.

FEI provide me practical exposure to different agroecological activities.

FEI create rooms for the participants to express their thoughts and feelings.

It was open to students and non students. So, you could do it for your studies and ECTs or just for yourself to broaden your insights in farming. It had a preparation, an active work and reflection phase. it was cooked at the study place with regional food.

I remember most vividly how the Dragon Dreaming method ran through the course. I think the first step of Dragon Dreaming "the dreaming" and the last step "the celebration" differ the most to other brainstorming and project planning methods. Also being exposed to such a variety of different farms lacks in other courses. Usually one farm (at max two) represents the content of a course. At FEI the diversity of interpretation of agroecology (sometimes more strong, sometimes less strong) was visible.

The practical part was very valuable and the personal reflections of the other participants

The FEI is different from my formal educational program, due to the following elements that I would rather prefer to list;

Inclusive Participation

Collective coordination of activities

Nature oriented

<p>The farm experience concept Diversity etc.</p>
<p>I really enjoyed the learning by doing aspect of the FEI, as well as its outdoors component. Because I took part during covid, we were outside all day, every day, no matter the weather, and that was a truly amazing experience. Visiting farms, having guest lectures, having the opportunity to exchange with stakeholders, was really precious. While field trips are common in classes for children, they should remain an integral part of higher education as well. I also appreciated the radical openness, and deep reflection opportunities, although it may not always be safe or possible to do in other, more typical class or work contexts.</p>
<p>FEI connected the theoretical information to the real practice and to everyone attending in a tangible way. This was not done in most WUR courses.</p> <p>There were many excursions that brought you into contact with farmers and their ideas and practices (this was super valuable), during WUR courses I've only been on one farm that I can remember (apart from breeding companies etc.).</p> <p>I don't remember what it was called but the FEI did these things to connect as a group or to yourself (the FEI organizers will know), I think there were MOA courses that did similar things but it's definitely not an education staple.</p>
<p>The farm experience was participatory.</p> <p>It was a space for knowledge sharing and learning</p> <p>It was an avenue to learn real situations on agroecology.</p>
<p>Outdoor setting made a huge impact. The visits to farms together made the material we were learning visible in practice as did the visiting lecturers. It was also nice to have smaller optional and occasionally self-organized workshops on other topics from acrobatics to in-spot-meditation.</p>

Did you ever (consider to) organize a similar initiative like the FEI?

This can be outside Wageningen or outside the Netherlands. If so, please explain shortly.

I think many of us wanted to organize something similar in our home countries. I think being able to connect people with the topic alongside local context (initiatives, farmers, and NGOs) allows you to comprehend the material better. I still want to do this in Finland when I have a stronger network here.
I will love to organize such similar event in Gambia especially to the rural communities to get to learn more about agroecology and farming systems.
I contributed to the FEI in 2016
Yes, I wish to organize a similar initiative some day. Hopefully in my Country the Gambia. Well, if there is anything that this whole FEI Program has thought me during the one-month period is to pay more attention to the environment most especially in agriculture. Therefore, I believe introducing the FEI initiative to other students outside the Netherlands will also help to install similar or more environmental-conscious concepts among young people.
Yes, another participant and I wanted to set up a similar initiative in the South of the Netherlands. Unfortunately, this didn't happen because we moved away after we finished our studies.
Yes, and I did
Would like to have it in Germany as well. I will try it one day. Thank you!!
While the FEI primarily focused on farming practices, agroecology encompasses various social, economic, and cultural dimensions. I would consider creating shorter, specialized versions of the FEI, each lasting for two weeks for example, with a focus on these dimensions. These specialized programs could be spread throughout a yearlong curriculum, with the FEI as the core of it. For instance, a course focused on agroecology as a social movement could be created. Besides theoretical content, students would dive deeper into the significance of agroecological networks through an internship of one or two weeks. Students could join activism organizations; communities engaged in the improvement of their local food systems or build a fundraising event that supports an agroecological cause.
No I didn't consider, even it would be very possible in the region around Freiburg. But I'm not in the university sector anymore. But I'm very connected to the organic gardeners and farmers around Freiburg.
NO, but that is a great idea!
Not soon, but I can imagine organizing something like this at some point.
Yes
Yes
Yes
Not yet
It would be nice, but not something that I would probably do

No
No
No
No
No

Did the FEI had an impact on deciding what you wanted to do in your personal future?
Yes, it made me very passionate about agroecology and I still am today.
It shaped my personal future of becoming a gardener, more precise a fruit farmer myself! :) thanks for that!!
Yeah, it actually solidified my desire of becoming a farmer.
Absolutely. It was a life changing experience (cheesy but true). I've since decided to focus my work much more on the agrifood industry and sustainable food futures. I previously worked with gender and education issues, which remain a part of my work, but in an integrated way rather than as the main focus.
Yes sure, the FEI really made a lot of impact in my personal life and helped shape me towards the person I want to become.
It actually did! I had never thought of agriculture in my studies before and it was very poorly covered as a topic. However, the FEI made me passionate about agroecology. I've volunteered at three farms and a community garden since I did the FEI. I also am currently studying creative sustainability MA (in design) where my personal projects focus on food systems, and I am planning on doing another master in agricultural studies or a vocational training in organic farming. In the end I hope to farmland for myself one day. So yes, the FEI truly changed the way I see the way that the world around me works and what I envision for myself in the future. To me agroecology felt like the most effective way of having a real positive impact on the environment and against climate change.
The farm experience internship was the best thing that happened to me last year.
I am still in contact with some of the organizers/participants and I've met them since the course. One of them is my dearest friends and we both inspire each other in the agroecology movement (we both work on these topics now).

Is there anything else about the FEI that you would like to share?

Mention the statement nr, if you would like to explain your answer. (Not mandatory)

Good luck with the thesis! :)

It was a great experience. I really enjoyed the little community in Wageningen, and my practical farming experience was interesting. I liked the format of being at Wageningen first, then the farm and then back to Wageningen.

It would have been nice to be provided more with tips/pathways to join the movement or contacts of the teachers.

It was a really nice experience, the summer camp vibe with sharing dinners and the interesting people that were joining, helped me on a personal level. I got nice friendships out of it.

'corraby!!!!!!!!!"

Here is the conclusion of my internship report. It resumes well the power of the FEI in my opinion:

In agroecological education within universities, it becomes evident that the successful integration of theory, practice, and subjective human experience is achievable. By directly incorporating farming experience into the curriculum, students not only gain a deeper understanding of theory but also cultivate critical thinking skills through hands-on experiences.

Additionally, the course's model of the FEI 2023 showed that holistic and equitable access to knowledge can be achieved by inviting diverse speakers representing various facets of agroecology as a science, practice, and movement. This diversity, also encompassing the students, farms, and activities, promotes unity and offers a well-rounded perspective on the place of agroecology within the broader agricultural landscape.

Moreover, transformative agroecological education recognizes the importance of embracing deeper layers of oneself, such as creativity, spirituality, intuition, emotions. These elements, rooted in the personal background of oneself, significantly influence one's journey in agroecology. However, they also present challenges, such as balancing idealism with needs of practicality and the current state of society. By dedicating time and activities to explore these dimensions, students can develop a profound connection to the subject matter. This exploration of self through farming practices and workshops can lead to a love of place and a sense of belonging (Mayer & Frantz, 2004), both of which are foundational for sustainable behaviors and ecological awareness.