

PEAT VALLEY A STRATEGIC PARTNERSHIP

REPOSITIONING EDUCATION IN THE REGION



FINAL REPORT



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Erasmus+

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1 Context

1.1 Project Identification

- Grant Agreement Number: 2015-1-NL01-KA202-008979
- Project Title: Peat Valley: repositioning education in the region
- Project Acronym: Peat Valley+
- Project Start Date: 01/09/2015
- Project End Date: 31/08/2018
- Project Total Duration (months): 36
- Beneficiary Organisation: Stichting AOC Terra, the Netherlands

1.2 National Agency of the Beneficiary Organisation

Identification National Agency Erasmus+: Stichting CINOP | P.O. Box 1585 | NL 5200 BP 's Hertogenbosch

2 Project Summary

2.1 Short summary of the completed project.

2.1.1 Context/background of the project

The PV+ project finds its source in the first Peat Valley project, dating back to 2012 – 2014, when the Dutch and Swedish partners met first in an EU consortium. Together they learned about building their regional triple helix partnerships, the so-called golden triangles. When finishing their project, they made arrangements to continue their cooperation, preferably heading to regional food chains as one of their core content subjects. In the current PV+ project, they involved VIVES as a partner highly experienced in labelling and marketing regional food. Thus, the three regions each agreed to conduct a regional food pilot to function as a living lab for their underlying matter: bringing the regional knowledge triangle into everyday practice, for schools as well as for market participants and public authorities. Education institutes in this process play a central role. To actually take their role in the innovation chain, schools must be flexible and responsive to the needs of the labour market. Schools for vocational education and training (VET) and universities of applied sciences (UAS) therefore must align their ambitions with the regional agenda. They will have to choose a new position in the region to remain up-to-date, flexible and competitive. They must commit to public-private-partnerships reflecting the aims of 21st century education and research.

In a nutshell, this is what the PV+ partners' ambitions are aimed at:

- Improve the education quality and create facilities for practice-based learning and research (initial education);
- Enhance the innovation capacity of small and medium enterprises (SMEs) and (semi)public organisations involved (regional innovation);
- Improve the skills, mobility and flexibility of current and future employees and entrepreneurs in the region (Life Long Learning).

2.1.2 Main question

How can schools consolidate their positions and performances in steady regional partnerships, and how do these partnerships affect the newly established regional triple helix in their ecosystem, the portfolio of services and the needed capacity within the school?

2.1.3 Objectives

The cooperating partners pursued three shared objectives:

1. **Repositioning:** develop, in cooperation with the regional partners, sustainable public values as to regional innovation processes and find out how to combine them with traditional public values as to (professional) preparatory learning
2. **Networking:** develop new interactive links with regional stakeholders and demonstrate how school management can contribute to designing a strategic learning network in the region.
3. **Capacity building:** change working routines and processes within the stakeholders' organisations, such as HRM, work flow, business models etc., and demonstrate how to anchor regional ambitions in new internal capacities, business models and organisation systems.

2.1.4 Partners involved

Education institutes (VET to MSc, students, teachers, education development staff, researchers), public authorities and entrepreneurs from three regions in the Netherlands, Belgium and Sweden (NL/BE/SE) have formed a team of directly involved partners of ca. 50 members. In addition, through the involvement of regional networks indirectly at least 5,000 beneficiaries have been targeted. This is only an estimate, because next to direct face to face

communication we used also channels like regional broadcasting and newsletters, particularly to inform and involve regional entrepreneurs in the short food supply chain.

The partnership is composed to build on the core experience of each partners and to meet their learning objectives in a shared effort:

Partner	Knowledge lead / experience	Learning objectives
Terra	<ul style="list-style-type: none"> • Co-founder of Regional Cooperative Westerkwartier (RCW) • Regional Learning method 	<ul style="list-style-type: none"> • How to permanently increase the flexibility of curricula and timetables
Hanze Uni	<ul style="list-style-type: none"> • Innovations in education system • Tight relations with regional entrepreneurs • Innovation Factory method 	<ul style="list-style-type: none"> • How to create a sense of regional togetherness • How to implement the transformations throughout the organisation
RCW	<ul style="list-style-type: none"> • New style triple helix cooperation towards regional development 	<ul style="list-style-type: none"> • How to become a learning organisation
VIVES	<ul style="list-style-type: none"> • Tight relations with regional public authority • Extensive food knowledge • Regional food label 	<ul style="list-style-type: none"> • How to create a sense of shared tasks and responsibilities
BYS	<ul style="list-style-type: none"> • Tight relation with regional authority • Extensive food knowledge • Regional food label 	<ul style="list-style-type: none"> • How to progress from conceptual goals to day to day practice • How to create a permanent stream of funding
Uni Skövde	<ul style="list-style-type: none"> • Curriculum development • Learning monitoring 	<ul style="list-style-type: none"> • How to find staff equipped for the new tasks and approaches

2.1.5 Main activities

In this section, we will describe only the most relevant activities: the cooperation towards the intellectual outputs, the students' and staff exchange and the transnational meetings.

Main activities related to the intellectual outputs (IOs)

- In order to realize the IOs, the combination of actually working in the pilot and drawing conclusions from that delivered its benefits from the very beginning. What is decisive here, is not the actual subject of the pilot itself. The crucial point is, whether a project or a programme touches the interests of the key triple helix stakeholders in the region.
- Our action research allowed for a road map to be developed, step by step guiding the triple helix stakeholders through complex processes. Special attention is payed to the parts that VET and HE institutions can be playing. Provided a clear management decision and within a solid partnership, schools are able to drive the regional and local innovation process, functioning as a change agent for the region. Basically, the road map can be applied to all regional innovation processes.
- The first ideas for the IOs 1 to 4 were developed within the action research setting of the regional pilots. During the transnational meetings, partners took the chance to extrapolate their pilot experiences and transfer them to conclusions at a more abstract level.

Student & staff exchange

- VET blended mobility of learners: total of 101 participants, total days 896
- VET Short term joint staff training (total of 20 participants, total days 140)
- HE Short term joint staff training (total of 14 participants, total days 70)

The exchange numbers were less than it was stated in the application. The reason for this is that under activity C3 (EQF level 3-5 VET), we realised 5-day long study visits instead of the 4-week long LTTAs as it was stated in the application. Through the shorter study visits we were able to address and involve more participants. The 5 day-long visits were aimed at shared developing of the project processes and delivering pilots in form of joint workshops. The context was to foster the problem-solving abilities in a regional context.

Evaluating the learning development of the participating students, the LTTAs contributed to the students' proactive approach in problem-solving in an international environment. Students' soft skills were improved, since the assignments coming from regional learning demand a specific ownership in one's learning goals. It means that the students took responsibility for their own professional advancement. As to the students learning results, we noticed that in many occasions there were longer term results rather than immediate effects. It seemed to us that students first have to digest the input they receive from abroad learning activities, mainstream it with their other training and learning content and finally achieve learning results, such as deepening their insights through another traineeship abroad to learn more about clearly defined questions.

Transnational meetings and work sessions

We had 8 transnational meetings (1 more than it was stated in the application). For further descriptions please refer to section 5.2.



2.1.6 Results & deliverables

Following the description in the project application, five intellectual outputs were developed.

1. Repositioning the school
 - Partners worked out a manageable model supporting their opinion building and decision process. It is a Venn diagram, formed by three circles, each representing one of the three public values: initial training, lifelong learning, regional innovation. The volumes vary in size and mutual position.
 - Partners sketched their current and envisaged position
 - In a final step, partners drew up their future proceeding strategy:
 - In the forthcoming period the Flemish partnership agreed that VIVES will maximize their efforts for lifelong learning. Initial education stays key for future performance and efforts. VIVES will connect regional innovation more solid to initial education. For students this means steady cooperation with regional SMEs. Student companies will be integrated as a full course for all students.
 - For Terra & Hanze UAS the three pillars of public values are already well connected in the current situation. For the future cooperation, the triple helix partners agreed on increased dialogue and efforts, coordination and allocation of resources.
 - The Swedish partners agreed to better balance the three public values. They will establish a triple helix cooperation platform with a focus on regional learning.
2. Developing strategic learning networks in the region
 - There are two main questions in this section. 1. Who are the key players and their competences, contributions and learning ambitions? 2. Who will, as a change agent, pull and push the process?
 - Partners worked out a five steps procedure: 1. Secure framework conditions, 2. Take stock of the regional knowledge available, 3. Take stock of the knowledge offered by regional knowledge institutes, 4. Deploy the content of the knowledge agenda, 5. Make a deal with the identified stakeholders
 - The steps are supported with actions as (1) determine the models for network structure and (2) develop a methodology for building a triple helix learning network structure. Both actions are described in detail.
 - A network canvas is delivered to truly understand the regional network parameters
 - A manual is delivered to be used for preparing the network canvas
3. Capacity building
 - Each partner in the triple helix is asked to map the initial situation as to challenges, capacity, (educational) goals, etc.
 - A tool for measuring and unfolding the available and envisaged capacities and services is developed and applied.
 - The organisation's agenda, followed by the shared regional agenda, have to be described.
4. Regional pilots

Per region the partners realised their own pilot. When doing so, the project partners carefully divided the current, Peat Valley+ and EU REFRAME projects respecting the grant and partnership agreements and the corresponding legal framework.

Belgium

Actions

- The pilot was about supporting local producers in product and service development so they could reach out with their 100% Flemish products, a label to guarantee the product's authenticity, quality and regional origin. In addition, it allows for joining the network of local producers which farmers gives access to trainings, courses and events. Part of the programme is the 'innovation lab', where entrepreneurs are supported to develop their innovative ideas into products and services and prepare them for business market.
- The 100% label is a triple helix initiative, as well as the innovation lab. Having received an entrepreneurs request, students together with researchers and teachers set up a multidisciplinary student team, develop an innovative food product, set up a company, write a business plan and bring the product to the market. In this process they are guided by entrepreneurs, teachers, researchers and the regional authority.

Results

- New innovative food products were developed by students of VIVES on demand of entrepreneurs.
- Existing business models of local companies were analysed and improved.
- Teachers, entrepreneurs and authorities facilitated and guided the process.
- Do's and don'ts were elaborated: most important is to make sure your partners know what you stand for; don't hesitate to discuss potential bottlenecks. Give students the opportunity for trial and error, but train them to identify potential pitfalls at an early stage.

General conclusions

- Students developed entrepreneurial and 21st century skills.
- Teachers maintain state of the art knowledge.
- Entrepreneurs learn new techniques and insights about their own products.
- Researchers get acquainted with entrepreneurial practice and decision processes.
- The food industry is provided with new products.

Netherlands

Actions

- At Terra students started a so called student foundation for mapping regional agro-food companies related. They developed a questionnaire and an app to collect data about regional food production. The pilot forms basic building block for cooperative structures to link and match regional B2B supply and demand. In addition, a supportive structure for food-based SMEs has been developed for smart specialization strategies (new products/services) fitting the regional potential and demand: the so called learning and innovating communities.
- Brainstorming between partners resulted in a set up for a circular approach to link production, processing, distribution, consumption and re-use of waste in the regional cooperative structure.
- Hanze students worked on diverse master theses and other research assignments, concerning market surveys on regional chains, new business models, sustainable business canvassing and managing short chains for instance via open data approach and blockchain. Where possible, they are linked to the learning communities.

Results

- Region based information regarding companies throughout the food chain in order to create new networks and chains (40 km around the city of Groningen).
- An online tool to service the match making process.
- A dynamic, smart system that maps the various 'food points' of the whole food chain in a specific region via a digital map of the region. With the use of filters and smart connections between databases, various food points and connections between food points can be visually identified within the region on the map of the region.
- Research delivered diverse new business opportunities and models, of which a regional free range beef chain and a regional food factory are already getting shape.
- Next to that, entrepreneurs and local authorities attended the regional event at the end of the mapping week ('Food Week')
- Regional and even national attention payed to the regional food chain activities via the media: newspapers, broadcasting and social media.

General conclusions

- High attention for the concept, the regional producers, new business models and opportunities for short food chain supply and a valuable data collection.

Sweden

Actions

- The process was realised within the Agro-Technician Programme at the Biological Post-Secondary VET School (BYS).
- From a focus group mapping the conclusion was drawn to concentrate on products in the sub-regional food chain.
- The pilot has been broken down to student projects in line with New Economic Model for Cooperation outlined in IO 3.4.
- The pilot is used to establish and to develop a cooperation platform according to IO 3.4.
- The students followed chosen raw materials, as well as the products' way all along the food chain.
- Teachers coached the student projects
- The entrepreneurs provide the environment to create the best possible workplace-based learning conditions.
- Researchers of the University of Skövde have delivered their input via the Competence Centre.

Results

- The pilot delivered information on specific regional food products and their way along the food chain
- Information of large-scale consumers has been monitored.
- The findings of the pilot foster discussion about setting up a circular approach to food chain on regional level.
- An attractive learning environment has been created by the participating students and teachers (together with regional partners).
- Assignments have been linked to the curriculum.
- The students got familiar with problem and project-based learning in an international context.
- The education institutes have integrated work placements and project-based learning into their programmes and innovated their methods.
- A model for new cooperative structures has been investigated.

General conclusions

- Within the triple helix teamwork and problem-solving was exercised and improved
- Coaching skills were developed and improved
- A circular approach to food chain on regional level has been developed, with new cooperation among stakeholders, research and the business.



2.1.7 If relevant, longer-term benefits

The PV+ project period has just ended. It is therefore difficult to draw conclusions as to the longer-term benefits.

However, the approach of building steady triple helix cooperation in the region has gained attention in the EU, especially when – just like in the North of the Netherlands – a cooperative triple helix SME is founded.

The Dutch representatives were invited to discuss the approach at the Annual EAIE Conference 2017 in Sevilla. A new European partnership with partners from Belgium, Germany, Lithuania, the Netherlands, Romania and Spain is pursuing the approach and its policy implications further. In the Netherlands, the approach will further be elaborated in national programmes of the ministries of education, internal and economic affairs.

In Belgium, a new methodology for cooperation between students, local SME's and local stakeholders has been developed by installing a new course for students of VIVES to design innovative food products with support of teachers and researchers on demand of entrepreneurs. VIVES continues executing this pilot-project every year. Example of products developed: fish snacks based on by-catches from the North Sea for a new crosnes crop, a preservation technique was found by blanching and a new market was found for dried herbs by using them in deli food products.

In Sweden, an approach has been developed to involve entrepreneurs into education on a steady basis. Thus, the permanent connection and mutual exchange between education institutes and regional business and labour market have been established. In the region new insights as to self-sufficiency in food and local production were gained, which open up new chances to realise short food chains.

2.2 Summary of participating organisations

Role	PIC	Name	Country	Type	Accr (i.a.)	Start	End
Applicant	948410614	Stichting AOC Terra	NL	School/Institute/Educational centre – Vocational Training (secondary level)		01/09/2015	31/08/2018
Partner	940155235	Gebiedscooperatie Westerkwartier	NL	Other			
Partner	940307040	Department of Education, Social Psychology and Language	SE	School/Institute/Educational centre – Vocational Training (tertiary level)			
Partner	940614530	Västra Götalandsregionen, Naturbruksförvaltningen	SE	School/Institute/Educational centre – Vocational Training (secondary level)			
Partner	996747848	Hanzehogeschool Groningen Stichting	NL	Higher education institution (tertiary level)	NL GRONING03		
Partner	972455944	Katholieke Hogeschool Vives Zuid	BE	Higher education institution (tertiary level)	B KORTRIJ01		

3 Description of the Project

3.1.1 Were all objectives met?

The envisaged objectives	Realised objectives
Repositioning: renewal of mission & vision and renegotiation of public value with stakeholders.	PV+ partners wanted to find an answer to the question how new public value on regional development can be combined with traditional public values around (professional) preparatory learning. The objective is met by delivering IO1. Building on a three circle Venn-diagram, a model for repositioning the three public education tasks were repositioned: initial training, lifelong learning and regional innovation. Using the model, diverse scenarios have been outlined to help the schools understanding their current position and developing their future position in the region. The process is facilitated with an interactive exercise that determines the focus and transition process of the educational organisation.

Networking: development of new interactive links with other regional stakeholders.	The partnership aimed to find ways for the school management to contribute to the design of a strategic learning network in the region. The objective is met by delivering IO2. The project partners developed a 5-steps-method for building regional networks. In addition, partners applied a model for progressively and systematically growing towards steady regional cooperation. Finally, a partnership canvas was used to discuss the initial phase of a process with different stakeholders, where cooperation is directed towards, what steps need to be put to get there and which method fits best here.
Capacity building: internal change of organizational routines and processes, such as business models, HR etc.	Management is supported to translate new external ambitions from the region in internal capacities, business models, self-managing teams and new systems. The objective is met by delivering IO3. A 6-steps-method was developed to build up capacity for educational institutions for being able to cooperate as main partners in regional learning networks. In addition, a new service portfolio was developed. We worked out a canvas for providing an overview of the possible services.

3.1.2 Detailed description of the results

Regional pilots

As the large part of the results is referred to in the section about intellectual outputs, in this section we will focus on describing the regional pilots .

Three major regional pilots were realised. They provided the environment and a living lab for designing the four IOs repositioning grid, network model, capacity building plan and toolbox. For their pilots each of the partners have selected a real life case study on the subject of food, being an issue which is relevant in all of the three partner regions. Each of the partner regions is situated on the rural-urban axis. We see that many SMEs, especially in the green and agro-food sector, do not have the potential to be successful on globalizing markets. However, they have good business opportunities in their own regions by developing short food supply chains ((SFSC). Developing these short chains is a strategy that is mushrooming across Europe. SFSCs contribute to new regional SME development and can serve as an attractive branding element to boost the region.

The pilots at regional level helped creating an ecosystem for triple helix cooperation. Next to this, they have delivered facts and figures on regional level, concerning diverse links in the chain: growing, processing, storing, distributing, transporting, selling and consuming food and re-using waste. These data state the foundation for SMEs to develop new smart specialisation strategies for business models in the regional markets. In detail, the pilots have delivered useful outputs for the partners:

- Understanding the regional food chain and the opportunities and limitations in production volumes as to the given circumstances of arable land volumes.
- Understanding the regional food market and the interaction of producers and clients, starting with producers. Deliverable: a database with the characteristics and details about producers and clients
- Focus groups meetings with entrepreneurs and stakeholders in the agro food chain to discuss their challenges. Students participated in these groups, which helped them to get acquainted with entrepreneurs and their businesses and train specific skills. Vice versa, entrepreneurs introduced their companies to students and help them understand the regional labour market.
- Prepare focus on specific challenges to be tackled, tailored to specific regional demands (f.i. as to food sector, logistics, retail, sort consumers) and develop business cases related to regional challenge: usable as good practice and assignments for students
- Distract and collect insights from networking in the case pilots towards developing a triple helix network structure.

The pilots' indicators:

Envisaged	Realised
Three comparable pilots are developed and implemented.	✓
Each pilot has involved at least 12 studs, 3 teachers, 8 employees of bus. or gov. + multiple experts	✓ Students: 264 ✓ Teachers: 32 ✓ Entrepreneurs: 125 ✓ Experts and others: 100
At least 3 students have participated in the pilot from another country	✓ 11



<p>At least 3 different approaches to food and short chains have been developed within each pilot</p>	<ul style="list-style-type: none"> • BE: link entrepreneurs to students and researchers to help them developing products and business models; take advantage of existing labels and platforms and further build on them; face to face contact with entrepreneurs, resulting in research catalogue. • NL: mapping supply and demand; build communities and product related cooperatives; create unifying focus points and local working labs in the region, cooperatively connected to regional SME; develop a multi-faceted education programme; • SE: create better understanding of the food chain; lay the foundation of a data pool for further research concerning entrepreneurs, intermediaries and policy makers; create an attractive learning environment for students, teachers and regional partners; link assignments to the curriculum.
<p>At least 5 new skills in new jobs have been identified.</p>	<ul style="list-style-type: none"> • The most innovating job within the chain is the chain management. This job asks for regional agents who guide, monitor, administrate and constantly keep developing the functioning of the chain. • Next to this, new technologies such as blockchain, may be appropriate for handling the logistic and financial transactions within the chain. • In addition, working in a short food supply chain asks for new skills even if the job as such is not new. Chain members constantly will have to be aware of their tasks in the chain related to the other chain members. • Finally, the triple helix working asks for new staff skills in the organisations from private and public partners. It demands personal and professional flexibility, institutional understanding, intuition and sensitivity.
<p>The intensive cooperation creates a further developed sustainable network: at least three new partners have been added</p>	<p>In all the three pilot regions much more than just three new partners have joined the network. In the Netherlands the regional network grew by ca 60 entrepreneurs. Similar results for Sweden, where 10 branch organisations were directly involved, each representing a range of individual SMEs and in Belgium two local government and a trade organisation joined the network.</p>
<p>Good authentic learning environment for cross sectoral learning developed and experienced: at least 35 students and 10 teachers</p>	<ul style="list-style-type: none"> ✓ Students: 101 ✓ Teachers: 34
<p>A model for cooperative structures has been tested by three businesses.</p>	<p>Within the scope of a three years project it is not possible for SMEs to properly implement and test a new cooperative business structure, as they have to arrange for funding, train their staff and need time for testing. Nevertheless there are successes. In the Netherlands the cooperative triple helix learning and innovation structure of the regional 'Innovation Factory' is in the process of further expanding its regional impact for the business and education sectors, and has been growing from 1 to 3 regional branches in the North of the Netherlands, with the expectation of growth.</p>

3.1.3 Innovative aspects

This project has been innovative on three levels.

1. Cross sector cooperation within the education institutes (from VET level to MSc) on a transnational level; The participating schools were
 - In BE: VIVES UAS
 - in NL: Terra MBO, Hanze UAS
 - in SE: Biologiska Yrkeskolan (Biological Post-Secondary VET School, BYS) and University of Skövde
2. Cross sector cooperation by developing a learning network structure of triple helix partners; PV+ partners developed intellectual outputs (IOs) to support the transition process. In particular, IO 2 is focused on developing a triple helix network structure.
3. Cross sector cooperation between industries; PV partners realised a regional pilot about the short food supply chain, which includes by its nature participants from divers industries from primary production to processing, marketing, logistics & distribution to re-use & waste management.

3.1.4 Most relevant horizontal or sectoral priority

Development of high quality work-based VET – A lack of workplace experience and the related skills and competences is one of the factors contributing to a skills gap. However, work-based education and learning is not just defined through the number of apprenticeships and traineeships. In our project, we found that it is possible to create an authentic learning environment, in which the active participation of all the three tripe helix partners is a strong element of work-based learning, facilitate young people's transition to work already during their education period. More than that, the learning is not limited to the students, but also exceeds to entrepreneurs, teachers and other members of the learning and innovating communities. Overall, this contributes to increasing the relevance of VET and HE as to regional development and innovation and labour market.

3.1.5 Other relevant horizontal or sectoral priorities

The two topics selected did not change as compared to the application:

1. Supporting the implementation of reforms in line with the 2011 EU Modernisation Agenda's priority areas – Education institutes play a central role in a knowledge-based economy. Creating an environment that brings together learners and learning opportunities is key for constantly innovating key competences and re-directing teaching to develop these competences. Schools will have to fulfil a double task: their traditional roles of education and research, and their role as regional innovators in pushing forward such learning environments. The partners from BE, NL and SE have shaped such environment and described how to create, maintain and further develop these regional learning opportunities.
2. Making the knowledge triangle work – The major regional questions that require innovation, arise where sectors overlap. These are complex and often wicked problems that cannot be answered by a single sector. Within the PV+ project partners therefore, in each triple helix, education (from VET to MSc and research) has cooperated with businesses and government and even brought into shape a sustainable regional cooperation triangle.

3.1.6 Most relevant topics

The topics didn't change as compared to the application:

1. Regional dimension and cooperation
2. Quality Improvement Institutions and/or methods (incl. school development)
3. Intercultural/intergenerational education and (lifelong)learning

4 Project Management

4.1.1 Activities and indicators of achievement

Our project leader on a continuous basis observed the project achievements, assisted by the members of the working team. During regional and collective meetings and events the PV+ outcomes were discussed and evaluated and the progress was taken care of. The documents were collected and administrated in a shared cloud.

As a monitoring plan we had a gantt chart and a working plan, which obviously not always has been practicable. Together we decided for each individual case how to proceed. For instance: during one of our partner meetings one of the regional project managers was quite frustrated and even was about to give up. She found the project too time consuming and lost confidence we could achieve the envisaged results in due time. A partner project leader stepped in and was able to tackle the (threatening) problem with clear explanations, sketches and actions to take. This is just one example proving the benefit of transnational cooperation for mutual added value and monitoring.

Following the application, for the monitoring we used the following indicators:

1. General indicators

Envisaged	Realised
<ul style="list-style-type: none"> • All partners have contributed to the development of the tools 	✓
<ul style="list-style-type: none"> • All partners have accepted the results and have giving their commitment. 	✓
<ul style="list-style-type: none"> • All schools have tested the education related results and added their findings into the development of the final documents 	✓
<ul style="list-style-type: none"> • All partners have tested the cross sector cooperation between triple helix partners and added their findings into the development of the final documents 	✓
<ul style="list-style-type: none"> • The relevant partners have used the tool for monitoring the development of the education institute towards the responsive knowledge match maker and used these findings to optimise their path 	✓ We have used our working plan as a monitoring plan and assisted each other within the transnational team when questions occurred.



2. **Indicators for specific results** (where the boxes are checked, you will find further explanations about the implementation and results in section 5)

Envisaged	Realised
<i>Repositioning the college, capacity building and use of toolbox</i>	
<ul style="list-style-type: none"> A new method for repositioning the school has been implemented in three colleges using the toolbox 	<p>✓ It is important to notice here that the participating schools have set different aims to work towards and that the results vary accordingly. Please refer also to the explanations in section 5.3</p>
<ul style="list-style-type: none"> A reposition grid and method has been tested by at least 3 colleges 	<p>✓</p>
<ul style="list-style-type: none"> All schools have used the monitoring tool for repositioning themselves in the region and the capacity scan and used these findings to optimize their path 	<p>± During the course of the project we noticed that the description in the application were rather unrealistic. It is not possible for schools within a three years process to reposition yourself, the more since repositioning is not a one sided process with 'only' schools involved. It is a triple helix transformation process which takes much longer than a couple of years. Nevertheless, we think we can state to have achieved good results on our path together with the triple helix partners.</p>
<ul style="list-style-type: none"> The model for repositioning has been put into practice within at least one school in each country 	<p>✓ See for further explanations the box here above. The model indeed has been put into practice. But this does not mean it already functions well. Moreover, this will be an ongoing process of shared regional development.</p>
<ul style="list-style-type: none"> The portfolio of the school has been altered according to the new needs within at least one school in each country 	<p>✓ In the North of the Netherlands, a new education programme was developed, relating to food and its technological, social, lifestyle and health impact. In addition, the permanent cooperation in the Innovation Factory will be continued and further improved. The Flemish partner will continue the programme matching students, researchers and entrepreneurs and developing new products, services and business models. In Västra Götaland, the BYS students and teachers will continue to establish a well-functioning cooperation with the branches of trade. Work Based Learning is envisioned to be integrated in student projects, which are initiated by the entrepreneurs. It is based on the findings of the Uni Skövde in the PV+ project.</p>
<ul style="list-style-type: none"> At least 5 managers have tested the tools in the toolbox 75% or more of the managers that have tested the tools, rate the tools a 7 out of 10 or higher 	<p>± Diverse managers were consulted already while developing the tools. But we noticed that it takes much more time for confirming the validity of our approach.</p>
<ul style="list-style-type: none"> Each school has revised their current capacity plan according to the new requirements 	<p>✓ In Sweden, a new staff member has been recruited to guide the implementation of the new approach. In the Netherlands a new national pilot is started, with a special focus at describing and testing the Life Long Learning results of our approach, which will enable Terra and her partners to further develop the staff's and management's competencies. The Flemish pilot project with students and entrepreneurs has been expanded and is now integrated in the curriculum of all students agro and food technology.</p>
<ul style="list-style-type: none"> At least one other school in each country has tested the results 	<p>✓</p>
<i>Networking, structure and business model</i>	
<ul style="list-style-type: none"> A structure of learning networks with triple helix partners is tested and implemented in each region 	<p>✓</p>
<ul style="list-style-type: none"> One network model per region has been chosen and tested 	<p>✓</p>
<ul style="list-style-type: none"> At least 75% of the persons involved have rated the use of the model a 7 out of 10 	<p>For reasons explained in the box hereabove concerning the testing of the tool by managers, we have not performed rating and tracking processes of the model.</p>
<ul style="list-style-type: none"> Measurements, tracking processes and status reports that pertain to planning, managing and closing the project itself are used actively by all partners involved 	<p>✓ All partners were consulted at diverse occasions and in particular during the transnational meetings.</p>

<ul style="list-style-type: none"> • First ideas for new regional market mechanisms have been transferred into a business model. This has been judged by at least 4 partners 	✓
<i>Pilots and triple helix collaboration</i>	
<ul style="list-style-type: none"> • The three Pilots have been used as a living lab for the design of the repositioning grid, the network model, capacity building plan and toolbox. The pilots have their own indicators as described below. 	✓
<ul style="list-style-type: none"> • Three similar pilots regarding a combination of sectors of food and urban have been developed and implemented. 	✓
<ul style="list-style-type: none"> • Each pilot involved at least 12 students involved, 3 teachers, 8 employees of businesses and government and multiple experts 	✓
<ul style="list-style-type: none"> • At least 3 students have participated in the pilot from another country 	✓
<ul style="list-style-type: none"> • At least 3 different approaches to food and short chains have been developed within each pilot 	✓
<ul style="list-style-type: none"> • At least 5 new skills in these new jobs have been identified. 	✓
<ul style="list-style-type: none"> • The intensive cooperation has created a further developed sustainable network: at least three new partners have been added 	✓
<ul style="list-style-type: none"> • A good authentic learning environment for cross sectoral learning has been developed and experienced by teachers and students. At least 35 students and 10 teachers have experienced this environment 	✓
<ul style="list-style-type: none"> • A model for cooperative structures has been tested by three businesses 	✓

4.1.2 Quality monitoring and evaluation

As explained above, our project leader throughout the project checked the project achievements, in close cooperation with the members of the working team. We prepared a working plan and a gantt chart and elaborated and discussed the PV+ outcomes accordingly. However, we noticed the planning as described in the application could not always be maintained, since reality has not always been according to what the application anticipated. As ever, the theory is right but the practice is not. This refers in particular to cooperation and communication processes with the regional triple helix partners which was time-consuming. Following the application, for the monitoring we used the indicator as displayed in the section 4.1.1. here above. To avoid extra overhead and keeping the organisation lean and mean an additional monitoring group has not been established.

Within the partnership the working team took care of progressive evaluation and feedback throughout the project. Each regional partner has been responsible for communicating and knowledge sharing the about progress and results with its fellow regional organisation partners and in the wider area. sharing of the knowledge created.

In the application also an impact assessment has been mentioned. Our consultations with the regional partners indicate the impacts as being threefold:

Schools reward themselves as to repositioning themselves in the region a score of 6 to 10. We now think these expectations have been overestimated. Schools have just started their transition towards the expected level of integration. There are several reasons for this. Partly this is due to their learning process. The more schools understand what reposition really means, the more they see what changes are needed to really add value to the region. They also understand better what it takes to internally change minds, knowledge, skills, competencies and procedures.

Next to this, the repositioning is not a one way process. It asks for changes in the regional partners' organisations as well, which are even difficult for them to carry out. And not in the last place schools are faced with national regulations and the role of school inspections, which are not always in favour of supporting flexibility and innovation in schools. In a similar manner, the impact on regional level as to enabling organisations to match skills against recruitment and employment needs cannot yet be rated in the way we expected when writing the project application.

Matching skills and jobs to recruitment and employment takes longer than just two or three years and depends, in addition, on external circumstances that are not always in control. However, there are definitively improvements in the connection between training and the labour market in the professional fields we have been working for. For instance, the Innovation Factory in the Netherlands provides an excellent opportunity for teaching and training within the authentic professional work field. In addition, it provides completely new and practically-oriented very good life-long learning opportunities.

4.1.3 Bottlenecks and risk management

We have already mentioned it before: the progresses took longer than we have been expecting in advance. It became obvious that the process sketched in the application form has been on a rather theoretical base. Thus, time management was challenging in the PV+ project and delivering the intellectual outputs took longer than expected on first sight. Next to this, as transnational partners we started the project activities from quite different levels. Partly, this provided benefits, as for instance the Belgian partners offered highly developed technical knowledge on food and nutrition and the Dutch could already show best practice examples on triple helix cooperation. At the same time, this was also a potential source of frustration or incomprehension. Also, within the regional pilots, the transition processes turned out to be time demanding (and thus cost intensive) This implies that we needed more time to realise



innovations or to reach the required quality. As a matter of fact, the transition towards a real triple helix partnership in the region thanks to the PV+ project could have been started and from now on can be further unrolled.

5 Implementation

Activities and methodology

The activities were broken down in three categories: activities related to the transnational process and those related to the regional pilots, next to the activities for project management. We will here specify all the three categories.

1. Activities related to the transnational process
 - Transnational meetings: We started with a preparation video conference in October 2015 and a kick-off meeting in Sweden from 13 – 16 January in Sweden. In the course of the project, seven more, mostly multi-day transnational work meetings were organised. They were used for shared knowledge development, mutual information and field trips and in turn took place at the project partners locations. For the contents of the meetings please refer to section 5.2.
 - Monitoring team meetings / coach meetings: Our team was quite small. We therefore decided to not over-complicate the process and keep project working and monitoring in one hand. Separate monitoring and coach meeting therefore did not take place.
 - Dissemination took place through diverse regional meetings to promote the outcomes of the project and to inform and engage the partners in the regional triple helix.
2. Activities related to the regional pilots
 - Related to the working team meetings we had field trips to the regional pilots in each region to work on the aspects of the transition in the education institutes and the collaboration with the triple helix partners. Following this, at regional level pilot activities were organised with students and staff from the triple helix. Because of the high frequency of the regional meetings, it is not possible to list here every single meeting. We therefore here refer to the major triple helix meetings per partner region:
 - BE: a regional kick-off event, where VIVES presented the expected development and innovation. During the kick-off event VIVES also explained the free provision of services for local food producers who expressed their interest in cooperation. Next to this, VIVES organised meetings with local producers, who worked out their questions concerning diverse subjects, such like labelling and calculation of the nutritional value, organising taste panels, shelf-life of diverse products and dishes. Also stakeholder meetings in which students and entrepreneurs presented their ideas to local stake-holders were organised.
 - NL: First to mention is the triple helix meeting at the end of the food week, where entrepreneurs were updated about the general outcomes and declared their interest in taking part in further shaping the regional food chain. Next to this on a regular basis in the Innovation Factory meetings with students were organised to present their research progresses.
 - SE: In Sweden the key regional large-scale consumers were identified. Establishing the Hospital in Skövde as a key player, its most frequently ordered food products were used as a reference point for identifying the key branches for observation of the food chain in the region. Then the sectoral food products in the food chain were followed, based on the methodology and instructions developed by the coordination team at the start of the pilot. 2016 student projects mapped the piglet, the cheese, the egg production and the bread chains. 2017 student projects dealt with the beef, the milk, the lamb, the oat and the legume chains. The students results were identified and a multiplier event was organised at the end of the project.
 - Partners from the three regions joined the other regions' pilots, in particular as a part of the transnational working team meetings.
 - Building a future funding structure and business model: the pilot activities were meant to elaborate on funding and business models, allowing the partners to continue their cooperating and learning network structure after the finish of this project. As the pilots are not limited to the working period within the PV+ framework, this part of the project is still running. At this stage, already the following revenue and business models are in place:
 - BE: By working with local entrepreneurs in Student Companies in mixed teams with researchers, initial questions of entrepreneurs were answered. The work resulted in developing new products and business models. Examples of products developed are: fish snacks based on by-catches from the North Sea for a new crosnes crop, a preservation technique was sought (with blanching being the best), a new market was found for dried herbs by using them in deli food products, new products have been developed with seaweed and yacon crops including market research on how this products should be sold have taken place
 - SE: For the Swedish partner a major achievement consists of the lessons and courses conducted in the authentic learning environment of the regional work field. As a new economic model for BYS, the Swedish partners have worked out a process in which regional questions will be collected from a triple helix steering and leading committees. After being checked as to their contents and relevance, the questions will be translated into student projects in the educational programmes as part of work place

- based learning. Thus, business is integrated within education, together with the research input of Skövde University. This makes a multi-funding base for programmes and projects possible, since the Competence Centre at the Department of Natural Resources is involved as a public body.
- NL: the Dutch partners delivered diverse new business models. A new triple helix cooperative for breeding, processing and selling free range beef has been founded. In addition, the regional partners are preparing a regional all round food factory, where regional products sustainably will be processed into healthy dishes for large regional purchasers. A student with diverse entrepreneurs is working on a business model for vertical farming. Last but not least a brewery in cooperation with a penal institution has re-introduced regional hop production.
3. A third category of activities is the project management that lasts the whole period of the project. Main responsibility is the lead partner's, but all partners have been consulted. The PV+ management was organised by the project leader, since already at the video conference we agreed not to put in place a steering group. We did not want to divide the management into hierarchic levels, as the number of partners was not too large. Terra provided for the project leader: Eveline Kist. She is manager International matters and teacher at TERRA. She has been in charge as to the operational and administrative and financial aspects. Her main activities can be listed as follows:
- Prepare work meetings
 - Prepare procurements for external services, such like website developer
 - Compose interim and final report
 - Safeguard internal and external communication and dissemination
 - Finance management and control
 - Prepare LTTAs

Specific competences contributed by the project partners

Terra

- Evelien Kist - Internationalization manager at Terra; secretary and treasurer EUROPEA Netherlands; Project manager/ secretary in various mobility projects; partner in several Transfer of Innovation Projects (Peat Valley, AN-GIE); expert in the use of the Mobility Tool and controller of insurances and expenses of students and staff; partner 4Groen International. In addition, she is a teacher at Terra. Evelien has been in charge of the day-to-day project management but also dealt with the organisation of the several outgoing and incoming LTTAs.
- Wim Cnossen – Manager Regional Innovation Programme and leading the PV+ project; in addition, he is board member of the Regional Cooperative Westerkwartier Province of Groningen
- Willem Foorhuis – transition manager and regional innovation expert, connected to a large number of EU Interreg projects in Europe; honourable professor Transition Management at the Yunnan Agricultural University in Kunming, China; Transition manager Terra; has been responsible for expert input and monitoring feedback, on behalf of Terra, Hanze and RCW.
- Annet Mulder: innovation manager at the diverse locations of the Innovation Factory
- Diverse Terra teachers, consulted for their input to the Three-circle-Venn-diagram and other feedback from education perspective.
- Terra students together with teachers organised their regional learning process; next to this, they took care of preparing and realising a workshop for their Swedish fellow students.

Hanze UAS

- Jaqueline Gomashie, dean and leading the development of regional learning and innovation, in particular implementing the establishment of regional innovation labs for triple helix learning.
- Willem Foorhuis: professor of Sustainable Cooperative Entrepreneurship, refer for further details here above
- Jannes Houkes: PhD and teacher at Hanze UAS, experienced as to FEM-Office, Innovation Factory and cooperative processes, author on economic issues in care and welfare sector and the cooperation in trade unions.
- Marcel van der Werf: teacher at Hanze UAS and doctoral candidate on innovative triple helix regional leadership
- Theo Bos: teacher and researcher at Hanze UAS; connecting link and match maker between Market and university in the Innovation Factory.
- Nidale Etber, teacher and researcher at Hanze UAS, experienced in the field of process management and management information systems. Doctoral candidate on governance structures in multi stakeholder cooperatives.
- Diverse students for research and preparing regional learning communities.

Regional Cooperative Westerkwartier

- Maarten Groeneveld: MSc Environment & Resource Management, programme manager at RCW on regional food chains
- Eric Veldwiesch: management assistant at RCW and programme manager of a major Innovation Factory programme at the interface of water management, nature conservation and industrial activity.
- Frans Traa: project manager and business developer on green education programmes, regional development and innovative cooperative processes.
- Hans Bergsma: director of RCW.
- Wobbe Reindersma: manager of Innovation Factory at RCW.



VIVES UAS

- Elke Denys: researcher at the research group Food and Nutrition, leading the Belgian pilot case. She transferred knowledge about the concept of sustainable farming and its economic, social as ecological aspects. She contributed input to realise the deliverables of the regional pilot and provided input to the IOs.
- Yves de Bleecker is coordinator of the EC Agro and Biotechnology. As a coordinator he has a great network in food and agriculture industry. He provided input on regional chain dynamics in the agri-food industry and contributed current facts and figures. Next to this, he is a lecturer at the university college and is experienced with the blended learning.
- Lies Kestelyn: teacher and researcher at VIVES, specialised in economics, agro-marketing, cost calculating and informatics in the agricultural and food sector. Next to this coordinator of Student Companies in VIVES campus Roeselare.
- Sylke Vandercruysse: PhD Educational Sciences, at VIVES responsible for research integration in education and research-teaching Nexus Professionalization, experienced in blended learning in higher education and educational technology.
- Annelien Desplenter: researcher at research group nutrition at expertise centre for agro- and biotechnology

BYS & Skövde University

- Zoltán Dóczi: business developer at Västra Götalandsregionen and experienced in international project management focusing on education, research and innovation, migration and asylum. Working with EU and UN funds, working with EU and US multinational companies and start-ups, working in business intelligence and forensic and litigation services as a side-line.
- Andrea von Essen: business developer at Västra Götalandsregionen and experienced in plant protection, experienced in project management, leadership and expectation management.
- Ingela Gyllspång: researcher and lecturer in Education at Skövde University, School of Health and Education, experienced in stimulating research projects and courses within education and special education, third party evaluation, feedback and feed forward.
- Gunnel Marwén Kastenman, experienced in competence development, leadership and transition management
- Malin Ljungné, experienced in the management of natural resources and conduct in educational activities at BYS.
- Barbro Mattsson: professional competences in agriculture, teaching skills, knowledge development.
- Britt-Marie Benjaminsson – teaching skills, coaching skills

Quality of the cooperation and communication between the partners and with other relevant stakeholders

It has been a pleasure to cooperate with the partners and our regional stakeholders. However, anytime diverse stakeholders from different countries come together to work on a project, there's a risk of misunderstanding. Within the project team as well as towards the external stakeholders we could have had even more intensive dialogues and knowledge exchange. It is not easy pinpointing exactly how communication could be improved. Sometimes we had the feeling that we mutually could have provide more food for thought and more frequent status updates.

Also the shared cloud we had put in place in the beginning has not been used as frequently as we would have expected. This is a problem one might recognize from many other projects as well. It seems very easy and convenient and with the steadily increasing use of mobile devices and the improvements of cloud-based applications the possibilities for sharing content are almost endless. Nevertheless, people tend not to use the cloud storage and are pumping around files via e-mail instead – with all risks of overlooking important content or not providing the answers asked for. We are curious whether other project partnerships face this problem as well and whether they have suggestions to tackle it.

Overall, we think when describing the project in the application, we were too optimistic. The process itself and the results to be achieved are sketched in a quite theoretical way, whereas in practice change and transition processes take much more time and need much more focus on communication, internally as well as externally. We now think, we should have met more frequently, the more because we all started from a different level. Of course, this is an essential provision for a good learning process. However, although the central aim is clear and brief, you must have the opportunity to discuss it again and again to make sure you understand each other. This holds true for the cooperation at transnational as well as for the regional level. So, more focus on communication would be one point of improvement, coupled with a less intricate scheme of IOs.

Target groups

Our target groups have been teachers, managers, educational policy makers, entrepreneurs, and, in addition to what has been stated in the application, local and regional government officials and governors. We wanted them to be informed about our project, but also to actively support the aim for establishing a regional food chain on the one hand, and to integrate educational institutions into regional processes from a social, environmental, economic and community perspective.

In our view, for a large part we already have achieved positive results. For instance in the Netherlands, were the school now is a partner of a neighbourhood community in Groningen city and has set up a shared agenda, with shared finance. Local governors and civil servants support this development, as well as residents and entrepreneurs.

In Sweden, the school is now available for the branch organisations and is ready to channelize their input into the educational programmes. Regional stakeholders are briefed regularly on the incoming project ideas making multi-financed projects deliverable contributing to empowering innovation on regional level

In Belgium, students will be reached on a regular basis since the pilot activities are now part of the regular education programme. Staff of VIVES has been activated to engage in this project by success stories of the pilot project and several informal meetings about the opportunities. Also more formal information moments have been organised. SMEs have been invited using existing channels like events and seminars and the regional public authority did have a major role in communication to the SMEs.

Target groups and other relevant stakeholders

In addition to the teachers, managers and educational policy makers, our target groups have been entrepreneurs and local and regional government officials and governors. We kept them informed via regional debates, meetings, workshops. Moreover, we wanted them to actively support the process towards a regional food chain on the one hand, and towards integrating the schools into regional networks on the other hand.

It is quite early to make substantial remarks about the impact of our project on these target groups. However, we think we have already achieved positive results. For instance in the Netherlands, were the school now is a partner of a neighbourhood community in Groningen city and has set up a shared agenda, with shared finance. Local governors and civil servants support this development, as well as residents and entrepreneurs. In Sweden, the school is now available for the branch organisations and is ready to channelize their input into the educational programmes. Regional stakeholders can participate in multistakeholder projects, contributing to empowering innovation on regional level. In Belgium, SMEs are taking part in events and seminars and the regional public authority contributed in the cooperation process. In all cases there has been a snow ball effect. Once the regional communication process has been started, the number of interested people increasingly grew.

Contribution to the achievement of the most relevant priorities

When preparing the project, as an impact we wanted to increase the relevance of the education institute, to implement innovative practices in education and to realise a close relationship between the education system and the industry and keep up with the recent developments. We can state that we succeeded in closing the gap between education and businesses. We wanted to find opportunities to combine professional preparatory learning with regional development processes. This priority is met by developing the IOs described in this report. A model for repositioning the three public education tasks: initial training, lifelong learning and regional innovation is delivered, a new regional network has been established and new sustainable cooperation structures with public and private partners have been prepared. This brings a new dynamic into the education system to meet the demands of the regional partners. For students this means their skills are up to date, having cooperated with authentic partners in an authentic learning environment. For teachers, this provides opportunities for life long learning and improving their competences and to broaden their professional networks. For entrepreneurs it provides new insights as to food chains and triple helix networking.

The methods we delivered through our IOs will provide capabilities and expertise regarding the repositioning of the education system in the region.

Impact at the local, regional, European and/or international levels

Our consultations with the regional partners indicate the impacts have been threefold:

At local and regional level, schools have started their transition towards the expected level of integration. They have experienced a learning process and they still do. The more they understand what reposition really means, the more they see what changes are needed to really add value to the region. They also understand better what it takes to internally change minds, knowledge, skills, competencies and procedures. In the regional partners' organisations a transition process has started as well. However, matching skills and jobs to recruitment and employment takes longer than just two or three years and depends, in addition, on external circumstances that are not always in control. We see definitive improvements in the connection between training and the labour market in the professional fields we have been working for. For instance, the Innovation Factory in the Netherlands provides an excellent opportunity for teaching and training within the authentic professional work field. In addition, it provides completely new and practically-oriented very good lifelong learning opportunities.

We will build on this progress and continue to work on that basis. Whether we can really speak about impact on EU-level is difficult to say. At least we have gained the attention of the researchers at EURADA, the European Association of Development Agencies, who gathers professionals working on economic development through a large network of 81 members in 23 countries in the EU and beyond. Recently one of their researchers has completed a research paper on the new generation triple helix cooperation as it can be found in the regional cooperative approach. The paper will be published shortly and shared in EURADA's EU network.

5.1 Participants With Fewer Opportunities

The PV+ project didn't have a focus towards participants with fewer opportunities.

5.2 Transnational Project Meetings



After a video-conference in October 2015 for setting general agreements, we had 8 transnational meetings (1 more than it was stated in the application). We started off with a kick-off meeting in Sweden from 13 – 16 January. In the course of the project, seven more, mostly multi-day transnational work meetings were organised. They were used for shared knowledge development, mutual information and field trips and in turn took place at the project partners locations. In the next sections, you will find details about the meetings.

- First preps by means of a video conference on 08 October 2015. We recalled and agreed on the ideas and aims of the PV+ project. Next to this, we welcomed three silent partners and set the date and overall programme for the kick-off meeting in Sweden.
- Kick-off meeting on 13 – 16 January 2016
 - The project leader drafted the overall work plan, a working and cooperation structure and a gantt chart for monitoring the quality and safeguarding the realisation in due time
 - We agreed that the participating regions organise themselves in a comparable manner: a regional coordinator, steering committee and project team.
 - We discussed the IOs being expected revenues of the projects and mandated the Dutch partners to prepare input on IO1 and IO2 for the next meeting.
 - As to the pilots in IO5, we discussed the outlines of the regional projects and further elaborated on the ideas behind the pilot, the expected results, the regional partners.
 - Important item was how to plan the students' and teachers' exchanges. We agreed to prepare the details to be presented and discussed at the next meeting.
 - At the end of the two days meeting we presented the main features and formats for the financial administrative management.
 - A partnership contract was prepared but due to time constraints, has not been discussed. A draft was sent to the partners on short notice to be discussed in the next transnational meeting.
 - We arranged for a shared cloud to give all partners access to the crucial documents.
 - Our silent partner in the UK due to time constraints wasn't able to join the project. The Dutch and German silent partners attended the kick-off. We agreed they would attend the meetings, send their students for exchange and provide good practice. However, much to our regret, neither of them could participate during the further course of the project. We kept in touch through other channels.
- Work team meetings: In the application a work team and a development team were mentioned as two separate units. In practice, we worked in one steady transnational team which - occasionally and to the team members' needs - was attended by special guests. During the meetings, we updated the process, exchanged and analysed ideas and insights and elaborated on the IOs. Next to this, the work meetings were used for field trips and project administration.

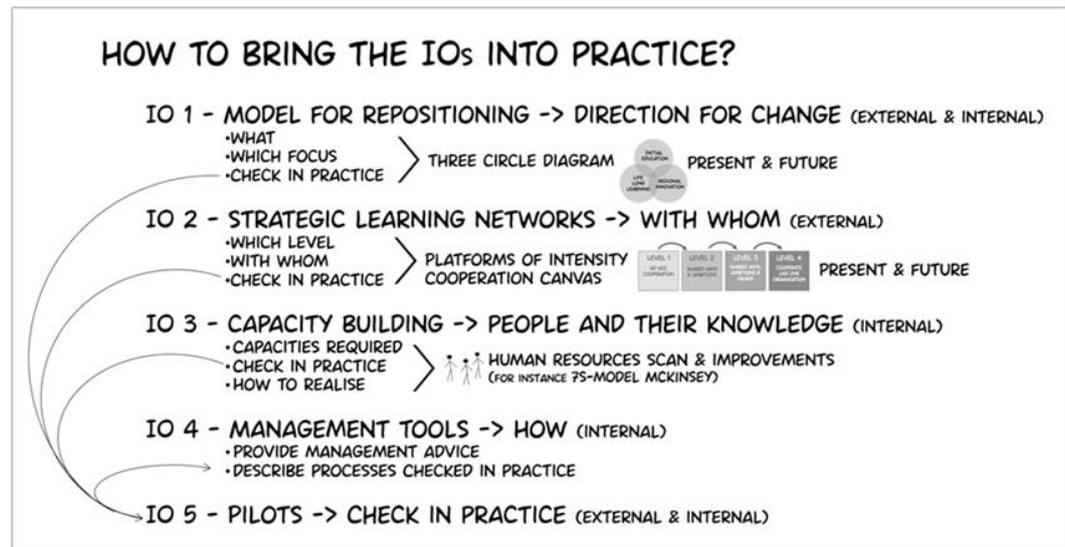
The following work meetings were organised:

- 16 / 17 June 2016, Kortrijk, Belgium.
 - Start off with a recap of the IOs by professor W. Foorthuis, followed by a presentation of Hanze University's newly developed and tested approach for connecting business to school. It is the so-called FEM-Office (FEM referring to one of Hanze's Institutes: the School of Financial Economical Management). FEM-Office is a students' company. Regional entrepreneurs, organised in the Regional Cooperative Westerkwartier, send their questions to FEM-Office, who link students to the questions asked. For their work, the students running the FEM-Office get paid. At this moment, they are organising a study tour for teachers, principals, entrepreneurs and managers to Mondragon, Spain, the world's largest cooperative. (NB: the FEM-Office later on in the course of the project, will be expanded into a structure, which is better integrated in Hanze as well as in the region. We will return to this later in this report.)
 - A. Muller, researcher and teacher at Terra, introduces a special Terra approach for cooperating with the city of Groningen. Terra students and teachers cooperate with the local civil servants, various local and regional organisations, external experts and local entrepreneurs and citizens to set a local agenda and to solve shared problems. They will establish their own cooperation lab in the neighbourhood, enabling them to cooperate on a steady basis. Both the local authorities and Terra management take care of finance and management. Amongst others, they are aiming at new local business models, run by local citizens.
 - These two examples from Hanze and Terra illustrate the Dutch repositioning approach: one at local, the other at regional level, but both based on cooperative principles with shared responsibilities and tasks.
 - The pilots – IO5: all partners worked out the pilot according the format.
 - The BE partner Vives started with the curriculum: 'In what parts do we cooperate with business'. They have composed their pilot out of the following activities: mapping the demands, develop business innovation models, student companies working on innovative products or services and, their marketing and valorisation, seminars and workshops (organised by the students, coached by the teachers) and, finally, dissemination. Five companies will be guided in their questions by the students. The students work in multi-disciplinary teams from different studies.

- The SE partner Vastra Gotaland BYS were going to map the food chain in the region of 15 municipalities. Students create a model on the volume of food needed for a large scale purchaser. They organise regular meetings and discussions with farmers. A bottleneck was seen in that procurement structures already are set, e.g. all the milk goes to Arla. In their discussions they try to create awareness about the way processes are set at the moment. Skövde University and Drivhuset observe the learning process within this project.
- The Dutch partners Terra, Hanze and Regional Cooperative Westerkwartier (RCW), map the data and performances of the regional producers in a 40 km radius from Groningen city. They organise a Food Week with a kick off with stakeholders, a food market and workshops on day 1, collecting data by interviews, executed by students (Hanze, Vives, Vastra Gotaland, RSG De Borgen, Dollard College and Terra) on days 2-4 and a final conference with all stakeholders on day 5. The results are transferred to additional practical and research assignments. By doing so, the Dutch partners continue their work on preparing an intermediary connection between education, research and business.
- We discussed how to monitor and evaluate the pilots and decided to prepare a simple and easy workable method. The Dutch partnership will prepare a draft.
- We had a critical look at the interview questions for the mapping. Together we adapted the questions to the students level. In addition we discussed how to prepare the students for their interviews. We decided to draft a workshop which will be useful for all of us in various occasions, when our students cooperate in tripe helix environments.
- Finally, we reviewed the interim report with the input from all partners; we completed the evaluation forms, and discussed some administrative or financial issues as to the LTTA
- 30, 31 January, 1 February 2017, Groningen, Netherlands
 - After start off with lunch, we had a field trip to the local 'Innovatiewerkplaats', hereafter referred to as Innovation Factory, which Terra and Hanze are partnering in with the city of Groningen, local citizens and entrepreneurs and diverse NGO's. We were introduced to the concept of 'Regional Learning' by Annet Muller, the Manager of the Innovation Factory. Work Place Manager. Also a representative of the municipality of Groningen and Willem Foorthuis, professor of Sustainable Cooperative Entrepreneurship were present and explained the idea of cooperation within the triple helix as it is realised in the Innovation Factory. For further details we visited two local projects developed in the Innovation Factory (a fitness track outside a fitness school, developed by Terra students together with the fitness entrepreneur, and a small greengrocer's shop, driven by students and local residents. We learn how both projects illustrate the benefits for all participants in the triple helix, and, in addition, for the local residents as well. The fitness shop owner benefits as the forecourt is being reshaped (playground, play equipment, space to play basketball) and thus attractive for kids and adults in the neighbourhood. The students benefit as they learn how to work on real projects, to cooperate with contractors, to lead and guide younger students and how to continue working until the expected results are achieved. People in the neighbourhood enjoy to play and gym, which makes their environment more liveable, healthy, safe and attractive to stay. The local greengrocery is hosted in a formerly run-down property which now is a small jewel in the neighbourhood. The shop is managed by students and residents, who not only and develop skills and understanding of professional values in a wide range of knowledge, but also meet each other on a regular basis.
 - Not only sunshine, there are problems too: in communication between the parties, in expectations (entrepreneurs towards the students; often the job takes longer then agreed on), in the progress (the outcomes look a bit different than planned), in the planning: school still uses a strict time table which does not fit the assignments of the students.
 - Together we watched a short video about the development of the former Sugar Factory. Following EU-regulations the sugar production was finished in the local factory. A huge area was given to Terra for education and cooperation purposes by triple helix partnerships. Terra together with Hanze and RCW, prepared a programme for developing a research, education and experience centre, where students, experts and citizens can meet for diverse arrangements related to food, agriculture, horticulture etc.
 - We discussed two documents prepared for the meeting: 'Repositioning education in the region' (Intellectual Output 1-4) and 'All about Regional Learning'. We started off with de 'Model of Moore': ta three circle Venn diagram representing three public values in education. Here, three scenarios can occur: (1) Keep operating within the limits of the school, (2) Connect strongly to the region (meet and cooperate on a regular basis), (3) Combine scenario 1 and 2 by initial classroom based education and collaboration with the region.
 - Then we work on the tool 'growth model', which gives us inside in the levels of cooperation. Where do we situated our schools now and in the future? Which level are we going to achieve?
 - The third tool is going to help us in finding possible solutions on how to achieve the expected level of cooperation. It is called the 'Fill Map Partnership', a canvas for discussing the initial phase of a process where diverse stakeholders are involved. It helps deciding where cooperation works



- towards (what are the goals, the expectations), which steps are needed and which method fits best here. We split up in working groups and worked out the models.
- As a fourth tool we worked on the capacity scan. The instrument is to support boards of institutions in determining their own administrative agenda in view of the internal capacity needed to realize this regional positioning. The tool is based on the developed 7S model constructed by McKinsey, and is analogous thereto composed by seven separate components. We exchanged first insights and agreed to detail the models back home in the forthcoming period. (The results are displayed in the IOs on our project website.)
 - We agreed further to translate the document about Regional Learning and prepare a video scribe about the Innovation Factory, as a task for the Dutch partners.
 - We discussed the LTTA possibilities, wishes of the partners and made a global planning (period, numbers, program,
 - We discussed possible future partnership projects. Interesting subjects would be: Sweden: robots, drones, simulators: new technologies in landscaping and ECVET units (Terra joins these ideas); Hanze University and RCW: Health and Mondragon-inspired programs with a combined practice and applied research programme; Belgium: social entrepreneurship, food; education for people with people with poor chances on the labour market.
 - During the last day we visited Hanze University, where E. Veldwiesch, explained the current working of the Innovation Factory as a further development of the FEM-Office. The RCW prepares bids based on questions and demands of regional entrepreneurs. Together with the intermediaries from Hanze they make sure the bids fit the education and research programme and are daring for the students to work on. Students chose their assignments out of the bid book and work on their assignment assisted by entrepreneurs in the RCW and the Hanze staff. The Innovation Factory for Healthy Ageing is one example for a network of knowledge and education, healthcare and welfare organizations and companies focused on open innovation and co-creation.
 - 11 October 2017, Skövde, Sweden
 - Start off with resuming partners' expectations as follows:
 - Learn about work place based learning; work with student companies; upscale the number of students, including develop business models; heading for a structural cooperation and how to build one; start an international project business case project; transfer regional learning to the university.
 - We continued working on the concept of the Innovation Factory and discussed some example projects, such like social inclusion, tiny houses, a lab for biobased economy.
 - We also discussed how to manage communication and dissemination with many diverse stakeholders. We learned about the pros and cons of tools like Basecamp and other online platforms to display the shared projects and to give room for discussions and to do's. Given its limitations it works, under the condition that all the stakeholders work disciplined, structured and dedicated.
 - The Swedish BYS works from another system and infrastructure. The school is part of the regional authority. Within the triple helix process all the tasks are performed by one officer. As to IO1 there were discussions with the management, the staff, and entrepreneurs. A steering group and a focus group were established. They worked on the Venn diagram, which was not easy but yet feasible. As to the level of cooperation (IO2) the school and the regional authority are at level 4, since they are one organisation. The cooperation with the entrepreneurs is on level 2.
 - Some partners doubted whether continuing the IOs in the way we started makes sense. We had a long discussion on that. Some partners felt frustrated, but others illustrated their approach which encouraged the doubtful ones to keep on going.
 - Finally, we worked on the structure for the website + outlines. The tasks were divided. VIVES works on IO1, Hanze on IO2, Terra on IO3 and IO4, each partner delivers output for IO5.
 - 15 – 17 January 2018 in Kortrijk, Belgium
 - Start off with a recap on what happened in the IOs. Partners present their IO1 Venn diagrams and state the outcomes are not completed, as they couldn't consult all the stakeholders yet. Question is how to proof something has changed by this project. You could compare the curricula 2015 and 2017. However, this does not really illustrate the school actually has gained another position within a cooperation with regional partners. The proof could be in new arrangements or plans for new arrangements. As to IO2, Hanze brings in a booklet titled 'Next Education, Next Governance, Next Business (Towards 21st century resilience and innovation capacity in Groningen city and region'. If we add an extra chapter about the practical implementation at Hanze, the booklet actually will serve as IO2. How does Hanze map their network? What gaps are there? How to fill them? (Organise a session for those who are interested; posters; use the network of the entrepreneurs; ...). We agree to produce a transnational methodology, based on Dutch experiences.
 - We discussed and reworked the IOs, which we summarized as follows: IO1: What do we want to change (focus on ..); IO2: With whom (use the 'growth model'); IO3: How (what is needed); IO4: With what (tools for management); IO5 Pilot (as implementation)



- We agree on the structure for presenting our IOs on the website: (1) theory belonging to the respective IO, followed by the recipe (steps, method), followed by the partner implementations, which of course are different from each other. For IO4, we have the video scribe (an illustration to inform staff); the infographic; and an animation (still in Dutch; translation in English is there). For IO5 we present a joint methodology with three implementations in practice. If necessary we make attachments where the actions of the partners are described. We attach value to and emphasise the heterogeneity of the partners. Here we can use the evaluation template, which makes it a case study with attachments. For the transnational use of the Innovation Factory we will translate the Innovation Factory model.
- The URL of the website is set: RegionalLearning.eu. As a subtitle we will use: PV+ Repositioning Education
- We agree that the Dutch partners take care of having the website designed. All partners send information of their organisation (+ picture and logo).
- 23 – 25 Mai 2018 in Aalsmeer, Netherlands(Wellant College as our host)
 - On the meeting we mainly dealt with finishing touch for the IOs to be displayed on the website, As to IO4 we decided together on the following steps: 1. Scan staff on regional learning ambitions/ qualities with a selecting tool (a profiling tool on the different roles within Regional Learning); 2. List the desirable competences; 3. Set up your team; 4. Provide training (bridge the gap between here and now situation and desired situation); 5. Convey a code of conduct; 6. Collect feedback; 7. Evaluate and act
 - As to designing the website. a tender has been done, but no answer yet. To be tackled shortly.
 - Next to this we made final appointment on who delivers what.
 - Wrapping up we evaluated our LTTAs.
- 28, 29, 30 August 2018 Skara, Sweden
 - Main issue of this meeting was the Swedish Multiplier Event. Terra was glad to be invited for taking part in this event. During the first and parts of the second day of the meeting we worked on last preps concerning location, numbers and back grounds of the attendants, the small diner and the finishing touch concerning the program, in which a Dutch presentation was included.
 - On the second day the event took place: Registration and welcome, followed by a presentation of the Peat Valley+ project as an international educational development project with a focus on the needs of the branches of trade. After this a short soup break with reflections. Then a Dutch contribution presenting the Innovation Factory approach. Next were the students' experiences with PV+ and a report of the mapping process. Finishing part of the programme were plenary discussion and answering questions.
 - The third day we evaluated the meeting. Slightly disappointed about the number of attendants but very satisfied about the content of the evening, the interest the guests showed, the questions they asked.
 - Last point of the program was visiting Axevalla Hästcentrum, an equestrian training centre. There is a new and modern training centre with a very well equipped facility for riding. As Terra also has a riding school, plans for work based learning to and from Sweden are made quickly. It is a suitable location for triple helix cooperation.
- 27, 28, 29 August 2018, Westerkwartier
 The visit was organised for the Belgian and Swedish partners. Main issue was a site visit to the pilots of the RCW and Hanze University.



- The first day the director of RCW introduced the guests to the ins and outs of the RCW. We took part in a workshop explaining the innovation approach, which was then specified as to innovative local residents' cooperatives. In the afternoon, we visited one of these local cooperatives.
- On the second day, we started with a consultation with researchers at the research group of Sustainable Cooperative entrepreneurship, guided by professor W. Foorthuis and the researchers Nidale Ethers, Marcel van der Werf, Jannes Houkes and Eric Veldwiesch. After lunch, we visited the neighbourhood cooperative at Groningen City and learned about the major Groeningen programme, combining the subjects of water management, food, tourism and nature management under one ecological and economic umbrella. Next to this we learned about social innovation and community building in the Groningen neighbourhood district.
- The third day was specifically reserved for a consultation with the international office about minors and student exchange at the Institutes for Law Studies and Financial Economic Management of Hanze UAS.

5.3 Intellectual Outputs

IO1: Repositioning the school

The IO was subdivided into 3 main components:

- a. The development of a grid for re-positioning
- b. Development of a methodology for re-positioning education institutes within the region
- c. Case study that describes the results of each region and education system

Actions:

- An interactive exercise about the public value of educational institutes and their position has been realised.
- A debate with regional and national stakeholders of green education and regional partners has been organised.
- National and regional stakeholders (economic operators, public administration and education actors) have been challenged to specify their expectations of (green) education and to support transition towards regional shared learning systems

Results:

- A model for repositioning
We built on an existing model to provide insight into the choices within our organisations, which was already prepared by the Dutch partners. It is a three circle Venn-diagram, each of the circles representing one of the three public levels: initial training, lifelong learning, regional innovation. The circles can vary in size and their mutual position, according to the time and attention spent to a specific public value.
- The challenge for educational institutions is to realise their position as cooperating and innovating partners in the region. Using the model, diverse scenarios have been outlined to help the schools understanding their current position and developing their future position in the region.
- The process is facilitated with an interactive exercise that determines the focus and transition process of the educational organisation.
The exercise has been repeated on diverse levels: management board, teachers, companies from the region, regional government, following an approach that is developed by the Dutch partners. Of course, also mixed groups may be organised.
 - STEP 1: Participants are asked to display their current situation using the Venn-diagram.
 - STEP 2: Participants are asked to display of the envisaged situation in the future.
 - STEP 3: Update the diagram using all the answers. Also take into account the size of each circle and the way in which the circles are interrelated.
 - STEP 4: Translate the differences and similarities between the current and future diagram into a transition plan.
 - STEP 5: Determine how to preserve what is going well and what is needed to bridge the differences.
 The exercise: Diverse working and focus groups met in the regions to apply the model. The results are described and detailed in supporting documents and on the website.

IO2: Developing strategic learning networks in the region

The content was subdivided in three components:

- a. Models for various forms of learning network structures and their effects on collaboration and requirements for an education system to work within each type of structure
- b. Cooperating in the regional pilot cases and international exchange
- c. Development of a methodology for building a triple helix learning network structure

Results:

- Learning networks
The methodology of IO2 focuses on how the stakeholders can be organised effectively so that the strategic goals of the educational institutions will be realised. The below steps have been prepared by the Dutch partners and have been followed within the PV+ partnership to be tested for developing such regional learning networks.
 - STEP 1: Securing framework conditions
 - STEP 2: Inventory of regional knowledge
 - STEP 3: Knowledge offer of the regional knowledge institutes

- STEP 4: Deploy content of the knowledge agenda
 - STEP 5: Make a deal with the identified stakeholders
 - Model for Network Structure: we used the Dutch 'growth model'. It shows how to work systematically towards a sustainable cooperation in the region; from ad hoc co-operation to sustainable cooperation within shared projects and tasks to achieve the goal, which is to work within one organization and to grow together. The growth model shows how and what steps should be taken to achieve this goal. Within the growth model there will be worked with four platforms. Each platform requires a different way of collaboration and network structure.
 - Methodology for Building a Triple Helix Learning Network Structure: a partnership canvas prepared by the Dutch partner was used to discuss the initial phase of a process with different stakeholders, where cooperation works towards (what are the goals, the expectations) and what steps need to be put to get there and which method fits best here. These steps are arranged in columns VALUES, RELATIONS, ACT, CONDITIONS and ACTIONS. Through an exercise, the steps to build a structure of cooperation in the triple helix, can be put.
- IO2 is detailed in the supporting documents and on the PV+ website

IO3: Capacity building

The content was detailed by five components

- a. Description of requirements for an education institute to be part of a network structure and the effects on the required capacity
- b. Procedure for deciding and developing a portfolio of services to provide
- c. Realisation of a capacity scan, development- and implementation that is needed in order to establish this (re)position in the region
- d. Establishing a new economic model for triple helix cooperation
- e. Advise on how to change routines to strengthen the schools' positions as a partner of the regional stakeholders

Results:

- A series of actions was developed to build up capacity for educational institutions for being able to cooperate as main partners in regional learning networks. We designed a 6-steps-method to get hold of the services to be offered:
 - STEP 1: Make an inventory of the service package
 - STEP 2: Determine the initial situation for the entire process
 - STEP 3: Establish the long-term goal
 - STEP 4: Make a deal with your partners
 - STEP 5: Plan the transition of the school to get step by step to the final goal
 - STEP 6: Make a flow chart for the partnership that you want to enter
- Each partner described their current and desired capacities, as a basis using the McKinsey 7S-Model.
- The Service Portfolio was developed. As a tool, we used the radar diagram based on the well-known spider web diagram. In developing the service portfolio, it is important to think about the appropriate financing instruments. We developed a canvas for providing an overview of the possible services. If the service is available or desired, an assessment of the current and desired quality of the services is delivered on a 1-10 scale, where 1 represents the lowest and 10 the highest score. With the help of the table, the potential shortages can be established.

The regional teams performed the exercises and detailed the results, which is described in the supporting documents and on the website.

IO4: Management toolbox

The question here was how the management of an education institute can guide their staff in this transition? What management tools are useful? This component was meant to deliver a toolbox with tools for management that encourages and allows education institutes to evolve so that their leadership and strategic management capacity matches that of modern enterprises (with appropriate strategic, financial and human resource techniques to ensure long-term financial sustainability and accountability requirement)

We designed the toolbox for the support of the management when planning and budgeting the next year upfront and taking into account what efforts are needed to further improve the quality of Regional Learning and the competences of his staff. For the activities in this component we used input from the Dutch legwork on regional learning which is collected and displayed on <https://www.groenkennisnet.nl/nl/groenkennisnet/portalen/regioleren.htm>.

Results: a seven steps process:

- STEP 1: List the desirable competences
- STEP 2: Scan staff on regional learning ambitions/ qualities with a selecting tool (a profiling tool on the needed competences in Regional Learning)
- STEP 3: Set up your team
- STEP 4: Provide training (bridge the gap between here and now situation and desired situation)
- STEP 5: Convey a code of conduct
- STEP 6: Collect feedback
- STEP 7: Evaluate and act

All steps are in detail described in supporting documents and on the website.

IO5: Regional pilots

- a. Three pilots were implemented and provided the real life environment for designing the repositioning grid, the network model, capacity building plan and toolbox. The pilots' shared focus was to develop a short (i.e. regional) food supply chain (SFSC). Each of the partner regions is situated on the rural-urban axis. There is a strong potential for SMEs when yielding business opportunities in their own regions, which demands for innovative regional networks, within the chain as well as between the triple helix stakeholders. Through their pilots, partners have contributed to building these networks.
- b. The pilot itself have delivered usable outputs for the partners, to be used in the curricula of the students as well.
 - Inventory of current food chain, starting with producers. Deliverable: a Greenpoints (= producers) database with all characteristics and details per producers
 - Focus groups meetings with entrepreneurs and stakeholders in agro food chain to discuss their challenges. Students have been invited to participate in the focus groups to exercise their communication, cooperation and research skills.
 - Identification of the regional food demands as to large scale consumers and their demand: input for lesson material and even development of a new integral food education programme.
 - Prepare focus on specific challenges to be tackled, tailored to specific regional demands (f.i. as to food sector, logistics, retail, sort consumers) and develop business case related to regional challenge: usable as good practice and assignments for students
 - New innovative food products were developed by students of VIVES on demand of entrepreneurs. For instance: diverse fish products (fish spring rolls, fish balls and fish burgers) for processing hake and red bean (fish from bycatch, waste product) in new products, and meringue with jam as a new product made from the surplus of protein after production of *Advocaat* (Dutch and Belgian drink made from eggs and alcohol)
 - Do's and don'ts were elaborated: most important is to make sure your partners know what you stand for; don't hesitate to discuss potential bottlenecks. Give students the opportunity for trial and error, but train them to identify potential pitfalls at an early stage.
 - Region based information regarding companies throughout the food chain in order to create new networks and chains (40 km around the city of Groningen).
 - An online tool to service the match making process.
 - A dynamic, smart system that maps the various 'food points' of the whole food chain in a specific region via a digital map of the region. With the use of filters and smart connections between databases, various food points and connections between food points can be visually identified within the region on the map of the region.
 - Research delivered diverse new business opportunities and models, of which a regional free range beef chain and a regional food factory are already getting shape.
 - Next to that, entrepreneurs and local authorities attended the regional event at the end of the mapping week ('Food Week NL')
 - Regional and even national attention payed to the regional food chain activities via the media: newspapers, broadcasting and social media.
 - The pilot delivered information on specific regional food products and their way along the food chain
 - Information of large-scale consumers has been monitored.
 - The findings of the pilot foster discussion about setting up a circular approach to food chain on regional level.
 - An attractive learning environment has been created by the participating students and teachers (together with regional partners).
 - Assignments have been linked to the curriculum.
 - The students got familiar with problem and project-based learning in an international context.
 - The education institutes have integrated work placements and project-based learning into their programmes and innovated their methods.
 - A model for new cooperative structures has been investigated.
- c. The budget for realising the pilots was provided through the EU cooperation project REFRAME. This project is still running. Therefore the results listed above do not yet represent the final outcomes. For project details please refer to the REFRAME project site at <http://www.northsearegion.eu/reframe/about/>.

5.4 Multiplier Events

Planning the multiplier event has not been easy, since such event is meant to share the project's IOs with a wider audience and thus cannot be realised until the IOs are delivered. In our project the Swedish and the Dutch partner organised a multiplier event.

- The Swedish multiplier event was prepared in a common effort of the Swedish and Dutch partners. It has been organised on 29-08-2018. After registration and welcome by the principal the PV+ project and its IOs were introduced to the audience. After a short break for soup and reflections, the Dutch guests were given the opportunity of highlighting their Innovation Factory approach. After a short discussion it was the students' turn to share their experiences in the project. The evening ended with a presentation of the mapping results and a

plenary discussion. Next day we evaluated the meeting. We were slightly disappointed about the number of attendants but very satisfied about the content of the evening, the interest the guests showed, the questions they asked.

- In the Netherlands, it proved difficult to find a suitable date during the examination and summer holiday period. Nevertheless, project partners valued the opportunity to share the project results with their regional partners. Therefore the Dutch decided to adopt an alternative multiplier method. Instead of organising one single event, they met for a number of face to face discussions with their network partners. By doing so, they could take their time for bilateral consultations, either on the stakeholders' premises or at the Innovation Factory. The Dutch multiplier consultations took place between the 26th of July and the 24th of August.

5.5 Learning/Teaching/Training Activities

Short-term learning, teaching or training activities – Student & staff exchange

- VET blended mobility of learners: total of 101 participants, total days 896
- VET Short term joint staff training (total of 20 participants, total days 140)
- HE Short term joint staff training (total of 14 participants, total days 70)

There is a difference between what was planned and what was implemented.

LTTAs are divided into sub activities. Activity C2 concerns higher educational partners. C1 and C3 focus on EQF level 3-5 VET. Under activity C3, in 92 cases 5-day long study visits were done in contrary to the envisioned 4-week long LTTAs. Nine participants did a 28 days study visit. We choose for this because of the different phases of the starting point in the current project, since the Dutch partner already had experience in regional learning. In this way, the projects reached more involved participants which is preferable in this project. The longer LTTAs were harder to organise because of the lack of appropriate work placements with project and regional learning based assignments. This is partly due to the nature of Regional Learning and a different matching mechanism of the students.

The number of VET short term joint staff training, C1, was less than envisioned. The first priority of principals and team leaders in the Netherlands is 'teaching'. It remains difficult to free teachers from that (very important, core) task. Despite these problems, 20 teachers have been to the partner school. Also the number of HE short term joint staff training, C2, was less than envisioned. At HE we faced the same problems as with VET.

The first year that the project was running was about exploring and recognizing. What needs to be done within the project? When? Who makes agreements with whom? This was easier with VET staff than with HE staff. That is also due to the type of staff. The teachers in VET are more practical and goal-oriented: 'What needs to be done? Then we arrange that'. HE employees are of a different, more academic, calibre. There they first look for more communalities (besides those of the project) to be able to get as much out of an LTTA as possible, also for the future.

Despite of the lower numbers, we are satisfied with the possibilities the LTTAs gave, for students and for staff.

The LTTAs contributed to the project's objectives in various ways:

- As to C1, VET staff: the Dutch teachers have experience with regional learning. They are not only teachers but also coach, broker/ canvasser or regional developer. They shared the experiences with these roles with the Swedish colleagues. The Swedish colleagues who were in the Netherlands have become acquainted with regional learning by talking to and exchanging with students, talking with lecturers, visiting companies that Terra works with. The participants met examples of regional cooperation, saw examples of student activities (triple helix projects) and were in this way forced to think broader. They experienced the importance of regional cooperation, the importance of reliable networks and have seen and felt the dynamics that such a way of working entails.
- C2, HE staff: the HE teachers of VIVES, Belgium, had an LTTA in Sweden. They have become acquainted with educational institutions, educational programs and innovations and (innovative) companies. Of course, they have taken note of the pilot in Sweden (IO5) closely. By sharing their own experiences with their pilot in Sweden, good discussions started about the experiences, the opportunities and the difficult issues. How to fit this into the rather rigid schedules of the institutions involved. As a result, they learned to look at their own school with different eyes and became more creative in the implementation of some parts in their curriculum. Staff of Hanze college was at VIVES. They shared experiences with the coaching of young entrepreneurs and/ or students (student companies). What is needed to be a good coach? What does the region ask of you, the school? What skills, competences do we need to work in this, pretty new, learning environment?
Staff of the Skövde University visited Hanze college. They met the people from RCW and were shown how an innovation work place (IWP) functions. They visited a few regional initiatives carried out by IWP. They learned what (and who) is needed to work, and learn, in this way. The university's staff shared its experiences with the implementation of the Swedish pilot with the Dutch colleagues, after which discussions about capacity, networks and, in general, the great complexity of this way of working and learning were conducted.
- C3. Blended mobility: there have been many student mobilities: 101. This concerned the students of several Västra Götalandsregionen schools and of the three VET schools of Terra. The students played a very important role in all LTTAs. The Swedish students joined the 'mapping' during the Food week in the Netherlands in 2017. Students prepared presentations about the pilot, about regional learning and all that in a foreign language. In addition, students had to think about which questions they would ask the managers of the companies they were



going to visit. Further they prepared and executed workshops: What is regional learning? How do I make a learning quotation? Quite a job for our youngsters but they handled it as professionals. During the implementation, other requirements were imposed on the students: social skills, language skills, creativity, cooperation. They met inspiring learning environments. A student from the Netherlands went in spring 2018 to Sweden for his LTTA. At the beginning of October he left for Sweden again to get some questions answered: can I build a future in Sweden? The country had made quite an impression and the introduction to business (livestock farming / food) as well. All students were proud they got the opportunity to join a LTTA.

Arrangements for recognition or validation of the learning outcomes

The students were handed a Europass Mobility. For the teachers, no recognition has been arranged.

5.5.1 Participants' Profile

VET and HE staff: we looked at development needs, learning needs, tasks in the own organisation, tasks and experiences in regional learning and language skills. Next to that, they needed to be interested in the project (or parts of the project such as the pilot, the IOs and the development of them).

Students: the LTTAs were explained to students of the higher classes, involved in regional learning and interested in food and food related themes. In Sweden the ones who were interested in executing the pilot (and thus Food) were asked. It was no problem to find them candidates.. Next to that, we demanded a positive and entrepreneurial attitude before, during and after the LTTA. We asked about their language skills and demanded English level A2/ B1.

6 Follow-up

6.1 Impact

As the impact of a project is defined as a long term change, partly achieved through the activities in a project but only indirectly to be influenced, we find it difficult to answer this question. However, we certainly can state that one of the most prominent effects is that schools, who first were focused on the education content part, teachers after participating in the project more and more dare to vary as to the content of the education programme, engage regional stakeholders and use the curricula more freely so the students and the educational program have a stronger connection to the branches of trade.

In the Netherlands, the method and system of the Innovation Factory is taking more and more shape. The roles and responsibilities of the team directly linked to the Innovation Factory were described, some of which might be covered by one and the same person. In addition, we changed the 'linear shaped' curriculum into a flexible one, which is described for the four years study programme at Hanze UAS. Terra learned that a consistent and coherent functioning of management and staff throughout the whole organisation is key to repositioning the school in the region.

From this three years during cooperation project we have not yet changed into dynamic education systems. But we are now much more open for meeting the demands of our regional partners. If we continue along the path that has now been taken we will gain more and more understanding of what must be done, what is used and who is responsible. Then we will be able to realise the impact we have described three years ago. Already now we can state that we have increased the relevance of the education institutes. We are asked to be a partner in many major projects. Terra even is a demonstration pilot in a national innovation experiment about a cooperative approach towards lifelong learning.

As to the students' and regional stakeholders' benefits, our Swedish partners have conducted a 3-phase-survey. In the first phase they interviewed students in the agro-technician's programme, to create an understanding for the students' experiences and perspectives at the beginning of their studies. In phase 2, a group interview took place with a co-ordination team and representatives of the field, to chart the nature of the collaboration between the study program and the field. In phase 3, we Categorisation of degree projects to identify the areas in which these projects are being completed.

The modern agro-technician's degree in all the participating countries is a form of problem-based learning (PBL), aimed at developing the students' capability for problem solving. PBL as a teaching method entails systematically working with objectives, formulating problems, searching for information and reporting results. The student is thereby expected to develop his/her ability to critically analyse, argue and draw conclusions. The PV+ project added guidance for the initial course of the program in 2016 and the at that time current PBL-work. The students' experiences and lessons learnt refer to a deeper understanding of the agro-food supply chains and needs for change. They appreciate the contacts with a multitude of producers in the chain and the customer's attitude and the knowledge of the quality of products and sustainability. They are convinced of the need for networking among producers and new forms of collaboration. In general, the students are satisfied with the knowledge that they have developed within the project. They are positive towards working in groups and with a problem-solving approach even if it was a new experience for many of them in an educational setting. Experiencing different traditions and routines and the consequences of different regulations and demands has even increased their interest in land management programs.

Representatives of the industry have expressed their concerns about the support entrepreneurs and students receive during the programme. They indicate that the student needs more time and a better involvement of teachers and coordinators. This might argue in favour of the Innovation Factory approach, where staff of the regional cooperative join forces with teachers and entrepreneurs to establish mixed learning communities. As the Swedish research pointed out, the focus is on the value of shared learning and innovating, as well as a balance in what you have to offer and what you want to receive in return.

6.2 Dissemination and Use of Projects' Results

Our dissemination strategy has been based on the communication channels at our stakeholders' organisations. Each of them was charged to take responsibility for communicating and disseminating the purpose and results of the project.

The communication was targeted at the members of the project consortium and our external partners, who were given a task in communicating themselves as well, to create a snowball effect. They certainly spread the word. However, often they forgot to display the required logo's and did not mention the projects name properly.

We ourselves prepared diverse brochures, posters and even a video scribe which in detail explains the triple helix approach and the way how tasks and responsibilities are getting shape. We have also on a steady basis communicated with the board of the schools regarding the developments of the school in their repositioning process.

Although we tried to make sure that they are constantly aware of the required commitments and the effects, we must admit that this has not always been implemented satisfactorily. The main reason for this is that everybody is faced with an overload of work. This means you have to explain again and again, which costs a lot of time.

Overall we can state we have gained momentum. The cooperative triple helix working approach is currently commonly known. Not to say, this is a result of the PV+ project. It is a movement that gains more and more support anyhow. From that perspective, we are positive towards the further development and progress of our process.

The project has been presented on the Europea website. The free access to the IOs has been advertised in diverse blogs, which we will continue to do in the future. Our project website (<http://regionalllearning.eu/index.html>) will be maintained by Terra for the forthcoming years and is going to be connected to larger portals and networks.

6.3 Sustainability

6.3.1 Maintaining activities and results

- Partners have decided to push forward on the path that has been laid out. Of course, this will have its positive effects on the regional levels. At transnational level, partners will keep each other informed and exchange knowledge within the firm network built during PV+ and its predecessor PV.
- In the region of Westerkwartier the PV+ project triggered a follow up which resulted in founding a new triple helix cooperative for breeding and marketing free range beef. In addition, the regional triple helix learning infrastructure is about to be extended to form a fine meshed regional learning network.
- In the Region of West-Flanders, similar projects will be organised on a regular yearly basis every year, taking into account the do's and don'ts as mentioned before.
- In the Region Västra Götaland, researchers of the University of Skövde as part of the current project implementation interviewed the students, the SMEs' organisations and the teaching staff to find out how to embed and connect the learning process to the entrepreneurs practice. The stakeholders will engage in the future processes.

7 Dutch Multiplier Annex

7.1 Prelims

In the Netherlands, it proved difficult to find a suitable date for a multiplier once the IOs had been delivered at the end of the PV+ project. For one group of stakeholders, the summer examinations were under way; for the other, the summer holiday period had already started.

Nevertheless, the Dutch project partners valued the opportunity to share the project results with their regional partners. Therefore they decided to adopt an alternative multiplier method. Instead of organising one single event, they met for a number of face to face discussions with their network partners. By doing so, they could take their time for bilateral consultations, either on the stakeholders' premises or at the Innovation Factory. The Dutch multiplier consultations took place between the 26th of July and the 24th of August.

In addition to the information we provided initially in the final report, we have been given the opportunity to add further explanations as to the contents and results of the face to face dialogues. In this annex to the final report, we will therefore first explain the selection of stakeholders, followed by a short report on the bilateral meetings.

7.2 The selection procedure



As the repositioning of schools refers directly to regional economic and social development and innovation, we wanted to make sure that SMEs as well as civil society and public authorities were represented. Next to this, we wanted our sparring partners to be connected to a wide range of stakeholders within their networks, which allows them to act as a multiplier themselves.

7.3 The general structure of the meetings

Each meeting's structure was defined by a couple of issues we wanted to address. These refer to our sparring partners' ideas about the current and envisaged position and tasks of regional knowledge institutions. Next to this we aimed at discussing the results of the PV+ project. Most important aspect of course was whether they thought the IOs to be helpful for the future triple helix cooperation process in the region. Last point was about asking for their advice about further actions and improvements.

7.4 The attendants

8 Mr. Paul Taming

Vice chairman of Collectief Groningen West, a farmers' association for agricultural nature management in the province of Groningen

The current and envisaged position and tasks of regional knowledge institutions

As Collectief West (formerly known as ANV Zuidelijk Westerkwartier), in 2013 we have been co-founders of the Regional Cooperative of Westerkwartier. One of the cooperative's principles is the steady triple helix cooperation. Since we started out cooperation, we notice that schools are very engaged in contributing to regional development. At the same time, they face barriers which restrict their flexibility. When we need their help, it sometimes takes a lot of time until they are ready to cooperate. It would be helpful for their productivity and responsiveness if they could operate more flexible.

The general results of the PV+ project

The project has been very useful, although I must admit that I didn't keep a close watch on the international dimension of the project. I'm glad there is a project website. However, it is not very easy to get the project results at one glance. In my view, the main result of the project is the attention that is drawn by the diverse project activities. From our perspective, the activities of the knowledge institutions on behalf of the farmer's new business models within the regional pilot are the most valuable outcomes.

The IOs and their contribution to further triple helix cooperation

As I already mentioned before, we, as a farmers' association, most gain from practical outcomes. So the regional pilot in the North of the Netherlands is most valuable for us. Students have researched many issues which are important for us. Next to this, the network building is the IO we have much in common with. Within the framework of the Regional Cooperative, we have short lines of communication, although the connection to the regional schools depends very much to personal motivations. I guess, in practice this is the most important aspect of networking and cooperation.

Recommendations for further actions

I would recommend to increase the schools' visibility in the region even more. From my view, this would add value to our regional cooperation. Of course, this is not a one-sided action by the schools only; it affects the other regional partners as well.

Mr Doeke van Duinen, Duinen Bouwadvies

The current and envisaged position and tasks of regional knowledge institutions

In the past few years I have been closely cooperating with schools within the framework of the de Regional Cooperative. Together with students and teachers from the School of Architecture & Built Environment at Hanze UAS we developed and designed the concept of tiny houses. In addition, in a larger context also with other schools attached, we elaborated on the concept of a cooperative for living in tiny houses.

The general results of the PV+ project

For me, this collaboration was highly instructive. We had – and still have – a fruitful co-creation process, dealing with regional self-supply as to renewable energy, materials, waste management and logistics. I think, this is most benefiting for both the students and the regional entrepreneurs and residents.

As to the PV+ project, this has not been in the centre of my attention, since our triple helix working was not focused on food in the first place. Nevertheless, as the project was dealing with methods to strengthen the permanent connection within the region, I think we must not underestimate the value of the projects like this.

The IOs and their contribution to further triple helix cooperation

I imagine, the IOs present many useful tools to work with. In particular, the IO about developing strategic learning networks in the region are interesting for the triple helix partners, since it demonstrates how to proceed with all the

regional stakeholders involved. In my view, you also might tailor this to a specific issue, like, in my case, the subject of tiny houses.

Recommendations for further actions

I very much would like to take the issue of regional network building further towards specific subjects. I expect this to deliver a nice approach to broaden and consolidate our tiny-houses-network.

Ms Joyce Kuijken, Eggworks Architect.

The current and envisaged position and tasks of regional knowledge institutions

I couldn't agree more to the previous speaker Doeke van Duinen. In the past few years, I have been coordinating the process on tiny houses. In addition, I coached students in designing our highly innovative project about the Innovation farm. Regional development, from professional as well as personal point of view, for me is highly satisfying. Connecting stakeholders is essential for them to grow into a tripe helix learning community.

The general results of the PV+ project

I very much appreciate what Doeke said about the value of strengthen permanent connections within the region. I'm very keen to cooperation with other professionals in the region. Today's students are tomorrow's professionals. Thus, the earlier we get to know each other the better for us and for the region.

The IOs and their contribution to further triple helix cooperation

I think, we can learn a lot from the IOs delivered form the PV+ project. In particular those who are working in the field of change management. Having said this, this brings us to what might be called an imperfection in the IOs. I'm afraid that only highly trained professionals are able to apply them in daily life.

Recommendations for further actions

Further to my previous remark I would very much appreciate if the IOs would be transferred into a more accessible approach. Perhaps in the form of a break down into smaller pieces, suitable also for stakeholders others than staff working at knowledge institutions.

Ms. Marjolein van Schoonhoven, Policy officer at municipality of Zuidhorn (Gemeente Zuidhorn).

The current and envisaged position and tasks of regional knowledge institutions

At the municipality of Zuidhorn from the very beginning we were closely connected to the operations within the Regional Cooperative of Westerkwartier. We have cooperated in many projects and processes. At the moment, at the four municipalities in the region of Westerkwartier we are preparing our merger towards one larger local administration. In our policy, we are investigating whether membership of the Regional Cooperative is feasible. From our view, increased cooperation with the senior secondary and higher vocational education institutions is essential for regional development. We need to improve the match between supply and demand for education and training. In addition we have to promote better access to lifelong training, especially in peripheral regions like ours. Agricultural entrepreneurship is in a changing perspective. Many new issues have to be considered, among which the regional food supply chains are a very important one, next to environmental and climate topics. Schools have to be prepared to gain and to share knowledge about these issues on a steady basis, which they can only realise in close cooperation with the regional stakeholders.

The general results of the PV+ project

In general, I'm very happy when EU cooperation project deal with regional triple helix cooperation. I have witnessed some of the project's regional actions as tot the short food chain. The results presented at the project's website are quite interesting. Although applicable in practice, from my personal view they are for the most part relevant to the schools themselves, rather than to the regional partners. Which of course is fine, as the project was directed towards the schools as the key players.

The IOs and their contribution to further triple helix cooperation

From my view, the IOs are quite complex and complicated. I think that schools for their internal process can apply very well many of the methods proposed. On the other side, many of the methods are applicable for other organisations as well. Perhaps it would be useful to draw the attention towards the potentials and benefits for other stakeholders and their organisations.

Recommendations for further actions

Following the previous, I would strongly recommend to elaborate further on the IOs and their value for regional organisations when improving their networking and cooperating capacities.

Mr. Bram Keuning, Owner/manager of BK6, advice and project management in the building, industrial and technical sectors

The current and envisaged position and tasks of regional knowledge institutions

I have been cooperating with the Regional Cooperative of Westerkwartier within the framework of diverse applications directed towards renewable energy and increased safety in residential housing. Next to this, I cooperated in developing the concept of "Innovation Farm" in the region of Westerkwartier. We mostly cooperated with HEI-



students from the institute of Built environment. We cooperated on an equal basis within a learning community which turned out to be very fruitful.

The general results of the PV+ project

I must admit that I have not been involved in the PV+ project. Probably this is due to the fact that the regional pilot was about the short food supply chain. When looking to the project's outputs, I think they are somewhat demanding, as far as people from the building industry are involved. However, I think that for the schools, the outcomes are very useful.

Recommendations for further actions

Perhaps it would be useful to organise a couple of meetings where we can transfer the results also to industries outside the agrobusiness.

Mr Frans Traa, Traa Interim Management & Projecten BV

The current and envisaged position and tasks of regional knowledge institutions

I have been working at VET for many years; followed by many interim and project management processes. From the very beginning I have been involved in founding and further elaborating the Regional Cooperative. I experienced that cooperation with the VET and HEI is essential and yet very complicated due to their current legal obligations. In my view, they have already managed to improve many processes as to regional cooperation. However, this is up to now for the most part related to the right person on the right place in the right time. I feel it is very urgent to transfer these competencies and processes permanent and structural into the school management systems.

The general results of the PV+ project

I think the importance of this and other similar projects cannot be overestimated. The single fact that partners from diverse EU member states have cooperated during three years on this subject is an encouraging signal to the schools and their partners in the region. There have been diverse meetings to draw the attention to these innovative processes, even if the audience not yet is overwhelming. On the other hand, we must be very careful in not entertain exaggerate expectations. Change and innovation processes need a very long time and successes will be realised in a piecemeal fashion.

The IOs and their contribution to further triple helix cooperation

I think that all the IOs are highly valuable, albeit in the first place for the schools involved. For me, they are perfectly suitable to bring the process further. They provide useful practical guidelines and methods to apply in the schools' management teams.

Recommendations for further actions

I would strongly advice to take the internal process further. At the same time involve the regional partners and transfer the IOs for them to be applied as well. In my opinion, building and guiding learning communities on regional subjects might serve as a vehicle for involving the main regional stakeholders.

Mr Kor Veldsema, Manager of a cooperative supermarket

The current and envisaged position and tasks of regional knowledge institutions

I must admit that for a long time I have not devoted too much attention to the role of knowledge institutions. However, in 2017 we agreed to closely cooperate with the Regional Cooperative of Westerkwartier. Since then, I am very happy to see the students and researchers of Hanze involved to support our local cooperative. Du to our double function as a supermarket and social enterprise, we need more insights as to new business models as well as retail innovations.

The general results of the PV+ project

I must confess that I did not know much about the PV+ project. When I took a look at the website, it is not immediately obvious for me what the project's results are.

The IOs and their contribution to further triple helix cooperation

The term 'intellectual output' sounds rather detached to me. However, for the schools these are very good and useful outcomes. As far as I am concerned, I will continue and even intensify cooperating with the schools.

Recommendations for further actions

I think it might be useful to provide a summary of the project's outcomes which is more tangible for the regional stakeholders and better grabs their imagination.

Ms. Maud Duijn, Graphic and web designer and graduate of Hanze UAS

The current and envisaged position and tasks of regional knowledge institutions

During my education I noticed how important it is for a student to work as much as possible in real practice. Up to now we do this far too little. I would like us to actually work most of our training for clients in the region. Our teachers can guide us and provide us with the necessary theoretical knowledge. If the school and the region are going to

increase their cooperation, this will give us more possibilities. It benefits the students as well as the entrepreneurs. We get to know each other and students find jobs much easier once they are graduated.

The general results of the PV+ project

I know the PV+ project because of my professional involvement in the project as a web designer. By the way, for me this job is one of the direct benefits of the cooperation between Hanze UAS and the Regional Cooperative of Westerkwartier. I think, the project's results are very interesting. However, you will have to spend some time to fully understand them.

The IOs and their contribution to further triple helix cooperation

The IOs are very relevant for the schools to implement. But they cannot do this on their own. They will need the support of their regional partners. To be honest, I think the regional partners themselves should apply the IOs as well. At least as far as they possibly could.

Recommendations for further actions

It is now time to implement the IOs which will probably take quite a time. As I already said, in my opinion the IOs are important to apply for the partner organisations as well.

Mr. Rikus Hagenauw, Area manager at Landschapsbeheer Groningen

The current and envisaged position and tasks of regional knowledge institutions

At Landschapsbeheer Groningen, we are one of the founding fathers of the Regional Cooperative of Westerkwartier. For us it is important to train today's students for tomorrow's jobs and let today's professionals keep improving their capacities and competences. I think these are the two most urgent demands in a rapidly changing world. The focus of VET and HEI should not be only on the design of initial education. They must connect with industry, governments, NGOs and citizens in a more intensive and permanent manner.

The general results of the PV+ project

What strikes most in the project is the partnership between the schools and the regional stakeholders. The cooperative model in which education institutions, local governments, citizens and entrepreneurs steadily collaborate within the Regional Cooperative one organisation – for me this is a wonderful new business model where education and research cooperates with many companies, civil society organisations and social organisations in the region.

The IOs and their contribution to further triple helix cooperation

I have the idea that the IOs are mainly designed to be applied by schools. Nevertheless, they are of equal importance for the other stakeholders and their organisations. Yet, they cannot be transferred one by one.

Recommendations for further actions

I would recommend to work out a method for the other stakeholders' organisations to apply the IOs as well.

Ms. Reina Boels, Rein Advies

The current and envisaged position and tasks of regional knowledge institutions

I have been cooperating within the Regional Cooperative of Westerkwartier in a frontrunner's project on Integrating sustainability and sustainability targets into the entrepreneurs' strategies and portfolios.

The general results of the PV+ project

At the moment we are going to start another frontrunners project in the eastern part of the region, on the subject of food. When cooperating with the schools, it will be a huge advantage for them and for us to draw on the experiences of the PV+ project.

The IOs and their contribution to further triple helix cooperation

Regarding the upcoming process, we will very carefully explore and apply all the IOs. I'm very glad to have this opportunity now.

Recommendations for further actions

Just like I said before, the IOs are delivered just in time for us to be applied and consolidated in the eastern area of our province.

Mr Willem Markensten, & Mr Nico Boele, Staatsbosbeheer (SBB) Groningen, the Dutch government organisation for forestry and the management of nature reserves

The current and envisaged position and tasks of regional knowledge institutions

There is a serious regional backlog particularly in rural areas. Therefore SBB in 2013 co-founded the Regional Cooperative of Westerkwartier. Amongst others, Hanze UAS and Terra VET are our their key partners in the Northern Netherlands. We have joined forces for an exciting new approach which brings together about 600 SMEs, diverse support organizations and regional public bodies – all cooperating on a regular basis in the regional Innovation Lab. We could not realise this without the schools participating. It requires schools to be flexible and responsive to the needs of labour market and the society in the short and medium long term. They will have to build a firm triple helix partnership and align their ambitions with the regional and local agendas.



The general results of the PV+ project

The challenge for educational institutions is to share education and create knowledge on a permanent basis with their partners in the region. The emphasis here is on 'permanent'. It makes no sense to cooperate in one project and then stop cooperating until the next project starts. In our view, the strength of the PV+ project is this focus on building permanent structures.

The IOs and their contribution to further triple helix cooperation

The project delivered diverse methods for preparing the schools to this permanent structures. However, we think it might take some time until everything is settled. Some patience will be needed.

Recommendations for further actions

Do not compel and do not become stressed. Just follow the path you have developed.

Ms. Annemieke Grimbergen, Stichting Versterking Landschap Middag HUmsterdam

The current and envisaged position and tasks of regional knowledge institutions

On a local level, I am engaged in diverse processes aiming at sustainable regional development. I see that, in order to build successful regional partnerships you need the participation of educational institutions. These schools will have to reposition themselves – internally with regards to their curricula, programmes, portfolios, timetables, organisation etc, as well as externally with regards to their network building, learning arrangements, agenda setting and regional programme building. In my view, this is a bilateral process, which should not only be delegated to the schools.

The general results of the PV+ project

As far as I can see, the schools are the key players in the PV+ project. As such, the main responsibility seems to be taken by the schools and the methods developed under the project accordingly are designed for the schools. But education institutions cannot simply be changed, nor are they the only ones with a need for change. We should all engage in a shared change process and not leave it to the schools.

Recommendations for further actions

Developing innovative ideas, seizing opportunities and grabbing them – this is a task for all of us. There is a need for closer triple-helix cooperation; for meetings, for joint learning, designing and utilizing our ideas and creating strong and feasible plans. So we should not sit back but take action.

Mr. Ruud Hendriks, Dorpsbelangen Niehove, a local citizens interest group

The current and envisaged position and tasks of regional knowledge institutions

Our interest group for the first time met with the Regional Cooperative of Westerkwartier when they guided our process to elaborate a shared vision on the future development of our village. In this process, we work together as a learning community. Once the first phase was finished, we entered into the process of further elaboration. Here we met the student, lecturers, researcher and teachers, who tried to integrate learning and working: all team members learn by performing authentic tasks supported by education interventions tailored to the learning individual.

The general results of the PV+ project

As far as I understand the PV+ project, the educational institutions have been working together within the framework of a regional pilot, together with regional stakeholders. At the centre of this regional pilot is the intention to learn and innovate. Partners from here developed their IOs.

The IOs and their contribution to further triple helix cooperation

It is not quite easy to quickly understand the IOs. They seem to be tailored more to the needs of the schools than the region's. That is not a problem, as long as the results can be adopted by the regional partners as well.

Recommendations for further actions

We now must ensure adequate embedding in all participating organizations and share the knowledge.

Mr. Harry Rook, SWGZ, Stichting Welzijn, welfare organisation at gemeente Zuidhorn

The current and envisaged position and tasks of regional knowledge institutions

At SWGZ, we offer interventions in various areas of life, for instance the family and the neighbourhood. We first cooperated with the Regional Cooperative of Westerkwartier on a project in one of our villages. In the social domain, cooperation is essential, in particular in times when public authorities are cutting into social expenditures. We all have to re-invent ourselves. Involving students, researchers and teachers in our processes opens up new perspectives. In our projects, we closely cooperate with Hanze UAS. These processes are always exciting, but they do not always run smooth, due to quite a different dynamics in the education processes or should I say: lack of dynamics?

The general results of the PV+ project

Much to my regret, I did not watch the project's rollout at close quarters. When looking to the results, from my view these are mainly the IOs. Especially as to network and capacity building it is very useful to take a thorough look at their application in other organisations outside the school.

The IOs and their contribution to further triple helix cooperation

Although the IOs are described in a practical manner, I have the feeling that they are representing a rather theoretical approach. I feel the need to break it down into the essential ingredients which then can be reapplied also by other stakeholders.

Recommendations for further actions

In fact what I just said would be my recommendation. I think this would be a productive exercise for many organisations.

Ms. Trudy Boéré, Ontwikkelbrigade, innovation and development advice and support

The current and envisaged position and tasks of regional knowledge institutions

In my view, projects always combine two aims: answering questions from local and regional entrepreneurs and generating added value for the region. Part of my work is located at the Regional Cooperative of Westerkwartier. I observe that Hanze UAS has started to reposition itself entirely within the region. They are a responsive and sometimes even anticipating knowledge partner committed to structurally and permanently bringing knowledge from the school to the region. It is a pleasure to work with the students. In some occasions, I would prefer even closer engagement of teachers and researchers.

The general results of the PV+ project

As to its regional pilot, the PV+ project was related to the regional food supply chain. I'm working mainly in the social domain and therefore was not closely involved in the pilot. As far as I could see, the pilot drew much attention in the region. Obviously, it is up to the regional SMEs to realise innovations. To achieve this, they need the schools to develop and implement relevant knowledge. Hanze UAS contributes in operating the regional Innovation Lab to stimulate, enhance and accelerate the innovative strength of the region.

The IOs and their contribution to further triple helix cooperation

It is not easy to get to the bottom of The IOs. In fact, they represent useful measures and methods for interventions at management level. They certainly contribute to triple helix cooperation. However, they are tailored to be applied in a schools' setting, which obviously was the purpose of the project.

Recommendations for further actions

9 I think there might be additional value in making them applicable for other organisations as well, in particular for self managing teams and for teams which are already working in a triple helix setting.

Ms. Esther Westenbrink, Westerworks Advice and management

The current and envisaged position and tasks of regional knowledge institutions

In my work during the past 15 years I have learned a lot about connecting different domains (such as education and culture, or care and economy). Education and research play an active role for better employment by responding in a flexible and constructive manner to questions from the region. This can only be done by keeping a close eye on their supply and by adapting curricula to current changes. It is obvious that they have to reform their curriculum: from linear to circular and offering the opportunity to integrate real life questions into the curriculum.

The general results of the PV+ project

From my view, the PV+ project demonstrated the school within a new playing field for learning, teaching and developing professional skills. It helps to develop students into young professionals with entrepreneurial and communicative capacities. The real life, real time cases represent a challenge for the students and the teachers to work on developing their knowledge.

The IOs and their contribution to further triple helix cooperation

The IOs may at first appear quite inaccessible. This is a pity, as they are quite a rich revenue. The only thing is that you have to take a close look at it and then figure out how they might be useful for yourself.

Recommendations for further actions

Anyhow the schools should continue on their path, together with the regional stakeholders. When looking at the IOs, perhaps it might be advisable to make a general introduction to each of them and then guide us through the application.

Mr. Harmen ten Brinke, Visscher Consultancy – Accountancy & consulting

The current and envisaged position and tasks of regional knowledge institutions

In my work I experience the triple helix cooperation on a day to day basis. My involvement with the PV+ project was mainly from the accountant's point of view. As a matter of fact, triple helix processes are not easy to control. Entrepreneurs are faced with state aid rules, some partners are subject to VAT, others are not. From my point of view, it would be very helpful if the complexity and diversity of all these obligations – in this case in different EU member states – could be reduced. I know, this is not a task for the schools, but it would ease their task.



The general results of the PV+ project

The project demonstrated the working of the cooperative model in which education institutions, local governments, citizens and entrepreneurs steadily collaborate. This is a business model where education and research cooperate with regional entrepreneurs and other regional stakeholders.

The IOs and their contribution to further triple helix cooperation

The model which were delivered are mainly developed for education institution. Much to my regret, I cannot assess whether they are helpful or not.

Recommendations for further actions

Perhaps it would be nice to make the outputs accessible for other regional stakeholders as well.

Ms. Inge Fakkert, ImProveZ Marketing & Communication

The current and envisaged position and tasks of regional knowledge institutions

I remember the start of the PV project as the forerunner of the PV+ project. There has been great progress since then. We are now able to work together in the social environment, to make plans together and to eventually realize them together. Of course, we all know that the culture and organisation of education institutions is completely different from the daily dynamics of citizens and entrepreneurs.

The general results of the PV+ project

The question is how to connect these two cultures. The only way to find out is practise, which for me is the main result of the PV+ project. The more you can cooperate, the better you can, in close consultation with each other, adapt the methods evolved.

The IOs and their contribution to further triple helix cooperation

It is difficult for me to evaluate the IOs contribution as to their value for further cooperation. They are very much 'school-system-tailored'. Not surprising, since this has been the purpose of the project. It seems to me that the IOs might be not too easy to apply.

Recommendations for further actions

I think it might be good to have a survey in, let's say, about half a year and look how the schools have applied the diverse methods.

Ms. Frony Babois, Legiorun, a regional runners charity event

The current and envisaged position and tasks of regional knowledge institutions

I am working in the field of positive health, which is to be understood as the ability to adapt and self-manage, in light of the physical, emotional and social challenges of life. This is quite a challenging new perspective for social and health studies. During the last year I have experienced cooperating with Hanze UAS on many topics of the social domain.

The general results of the PV+ project

In my view, residents and entrepreneurs gained confidence to influence their own future and that of their community. In addition, the students had a powerful and inspiring learning environment. This will certainly better equip them for their careers once they are graduated. Lecturers gain a powerful didactic tool, the support of community expertise. In the case of the PV+ project we could observe these processes related to the short food chain, but it also applies for many other domains.

The IOs and their contribution to further triple helix cooperation

Without any doubt the PV+ partners worked out some interesting output. However, I must admit I have some critical remarks concerning the IOs. They look to me quite complicated. Perhaps this is due to the fact that I cannot fully understand how they should be implemented.

Recommendations for further actions

In any case, the cooperating partners should continue their process. In my view, they are working on something very unusual and distinctive.