

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/334592074>

# The OPEDUCA Project Understanding the Transformational role of ESD

Article · September 2012

---

CITATIONS

3

READS

25

1 author:



Jos Eussen

Maastricht University

2 PUBLICATIONS 4 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Regional Centres of Expertise on Education for Sustainable Development [View project](#)



The OPEDUCA Project [View project](#)

## RCE Rhine-Meuse: The OPEDUCA Project Understanding the Transformational role of ESD



J.F.G. Eussen

Understanding the relevance, working and effects of human learning in a regional societal context seems essential to transform education and take it forward, moving from traditional, disempowering teaching towards entrusting young people with the ability and opportunity to learn for and change the future.

Developing relationships between schools, private industry, knowledge institutes and regional governments while encouraging a “flat” coordinating structure based on authentic action and learners’ ownership are two concepts at the heart of the OPEDUCA project. Defining and operating Open Educational Regional Areas (OPEDUCA) is a key goal of the project and, at the same time, an essential means for the project to realise education for sustainable development (ESD).

### RCE Rhine-Meuse

RCE Rhine-Meuse in the Netherlands has developed and implemented a vision of learning based entirely on ESD. Going far beyond short term projects or limited campaigns for ESD, the RCE uses ESD as the best strategy to realise learning, knowledge development and entrepreneurship on the most relevant themes and challenges of today and tomorrow. In RCE Rhine-Meuse’s vision of ESD, the ‘People, Planet, Profit’ mantra has been replaced by ‘Dimensions of Sustainability’ in which ecology comes first as the basis for well-being and welfare. Well-being, the second dimension, indicates the absolute necessity to achieve, at first, an acceptable level of living for all, especially globally in a globalising world. Only then can one accept – and will human nature ask for – the third dimension: accepting differences in welfare derived from excellence in skills, knowledge and competences<sup>1</sup>. Operating in the most southern cross-border region of the Netherlands, located only 20 miles from the borders of both Belgium and Germany, RCE Rhine-Meuse faces the challenges of a region of 4 million citizens suffering high unemployment rates, youth emigration and substantial pressure on scarce natural resources.

The strategy of the RCE, embedded in the OPEDUCA Project, was developed in cooperation with schools, companies, local government and science institutions, and it defines and enhances empowering alliances for learning. Aiming at lifelong learning processes and with a focus on the themes most relevant to the future, such as water, food, energy, sustainable building, and social cohesion, the strategy is translated into tactical instruments, with hands-on qualities and an effect that is visible in daily operational practice and action. The reorientation and transformation of curricula goes hand in hand with development of entrepreneurial skills and competences to turn sustainable thinking into action. ESD thus becomes the best means for societal transformation towards sustainability, directly raising societal awareness and behavioral changes in the fields of sustainable consumption, production and management of scarce resources, such as energy, food, water, minerals and air.

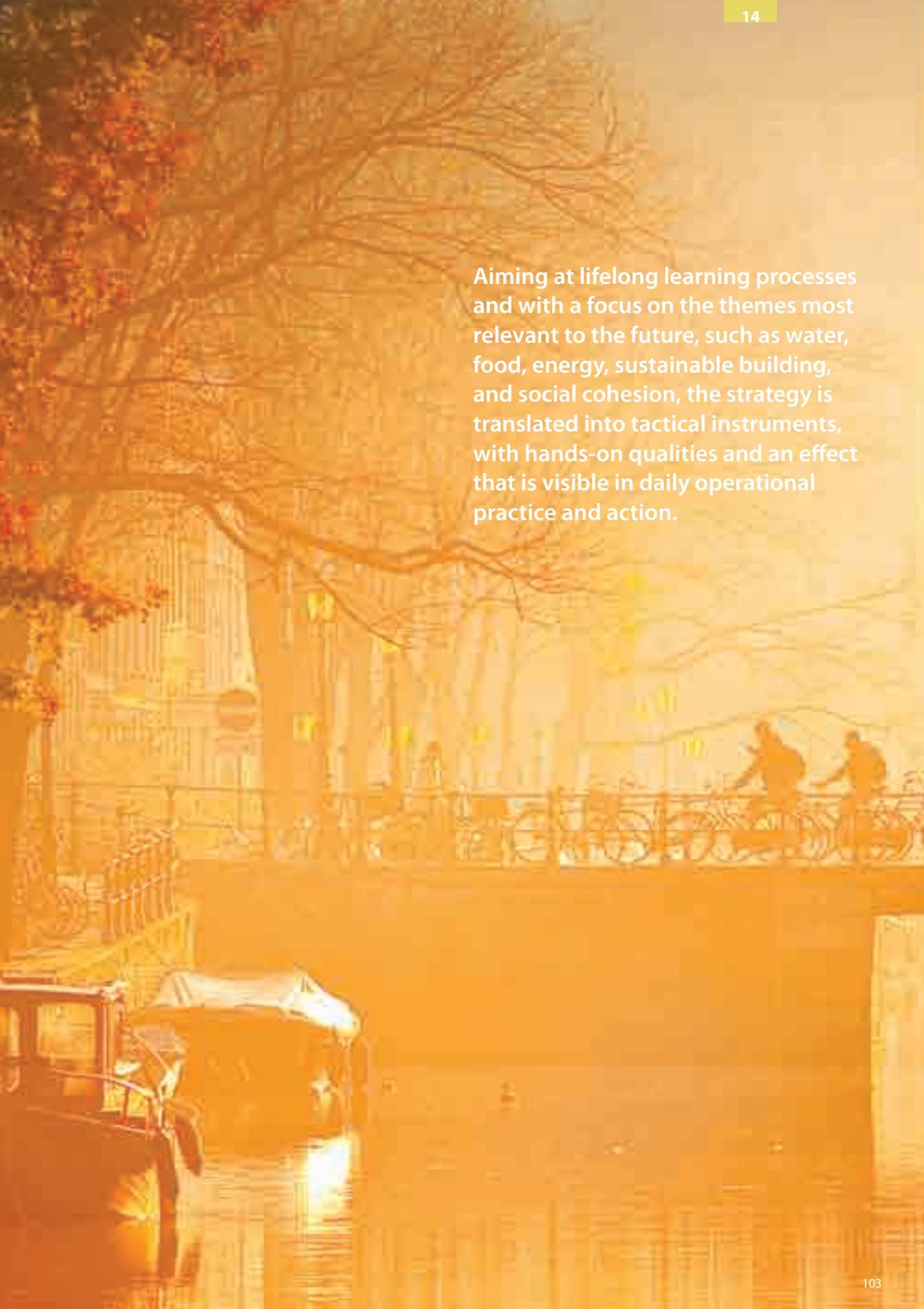
### Project Background and Results

The OPEDUCA Project brings together all forms of education – ranging from early childhood to further education – in such a way that both efficiency and effectiveness of individual learning processes are increased. The ongoing thematic learning lines, incorporating all subjects, shorten the time needed for instruction and offer more in-depth study opportunities for a variety of student talents. The project results in leaner, better and more efficient education.

Priorities in education (technology, language, math, citizenship, entrepreneurship) are merged through the effective instruments of the OPEDUCA Project, making ESD-based learning and schooling very attractive for schools to implement in times when resources (teachers, funds, materials) grow scarce.

Based on the logic of the ‘Dimensions of Sustainability’, the OPEDUCA Concept takes away the unworkable pressure of achieving the ‘People, Planet, Profit’ balance. The way the ongoing learning lines are constructed and operated

<sup>1</sup> Welfare then per definition only to be based on sustainable development in the dimensions ecology and wellbeing first - whereas ‘welfare’ in present day society is still based on inequality (‘the rich getting richer’ no matter how sustainable or not they are and act). Differences in welfare based on differences in positive societal impact however are part of human nature and a prerequisite for progress in a market driven economic system. The essence of this dimension in ESD is to accept welfare but only based on, derived and coming from, actions honoring ecology and wellbeing.



Aiming at lifelong learning processes and with a focus on the themes most relevant to the future, such as water, food, energy, sustainable building, and social cohesion, the strategy is translated into tactical instruments, with hands-on qualities and an effect that is visible in daily operational practice and action.

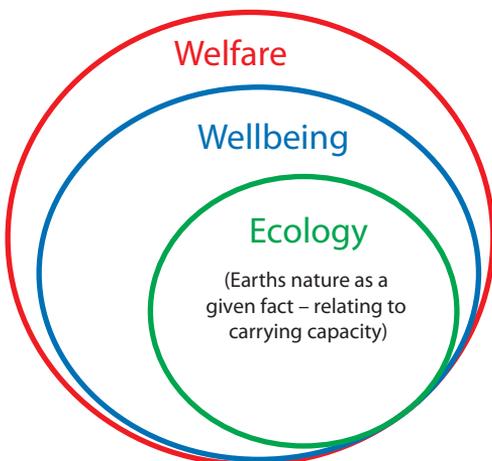
follows a more natural understanding of, first, learning about and cherishing ecology then striving for an equal spread of well-being and, furthermore, accepting welfare.

Inquiring, placing and using knowledge from industry and science appears to adequately increase behavioural change through learning to progress towards a sustainable society. The continuous entrepreneurial approach and presentation of all learning actions in OPEDUCA contributes to an entrepreneurial spirit that can generate ideas and turn them into action. This action- and result-driven quality of the project is not only important for the structural implementation of ESD but also interesting from an economic and employability point of view.

### The Open Educational Regions (OPEDUCA)

The holistic and practical approach of the OPEDUCA concept and project means that learning content and action towards regional sustainability are cooperatively developed and shared on a regional scale, allowing people to work in close contact with each other. Within and between such collaborative space, OPEDUCA schools (from primary to higher education) cooperate with diverse organisations, including science institutions, the business sector, municipalities, centres for environmental education, and libraries. A human-based approach and practice can be found in any culture and socioeconomic regional society; a mere global connection of such regions can bring ESD to the forefront of realising sustainability worldwide.

### Dimensions of Sustainability



RCE Rhine-Meuse acts as the catalyst to define and push the process forward until it gathers momentum. The RCE Secretariat, brought together and funded by the partners, spends a limited time acting as an office/secretariat and as much time as possible in performing and guiding project operations. The focus is on change and impact, not on the organisational aspects of the RCE (less than 15% of time is spent on meetings, steering groups, conferencing, travel, etc.). It is also for this reason that the cooperative term 'The OPEDUCA Project' is used as the common base for partners' communication and output-driven actions. RCE Rhine-Meuse went beyond the mere construction of a network through which organisations can find and meet each other. Through the OPEDUCA Project, a new reality is envisioned, defined, underlined and supported by partners, bridging vision and actual operations in learning and education. The OPEDUCA Project is what partners do together – their day to day practices and routines are not what is prominent, rather the added value of the new educational reality developed and operated together.

From an organisational point of view the RCE is fully independent, with no more than a handful of people to manage the RCE and an enormous range of partner organisations that act cooperatively. The entire output and value of the RCE is unique. It in no way incorporates results, projects or achievements of other organisations or stand-alone partners; it only shows new and real added value as a valid base for its cooperative actions and funding. Partners acknowledge their achievements in ESD to each other and to the group of stakeholders – through meetings and news bulletins for example – but also focus on what is truly necessary, which is a range of innovations. An example of this can be found in the continuous projects aimed at outside-in curriculum change.

This way of positioning and operating the RCE is most crucial as it is a highly effective way to realise ESD, especially when compared to RCEs or other similar network organisations that operate too often through the current activities of partners and spend significant time on coordination, governance, procedures and meetings. In those cases, the network organisations do not act as a change agent bringing added value innovations but instead find themselves stuck in the midst of a bureaucratic process, protecting interests and spending much time and energy in meetings and conferences.

While working with and on behalf of youth is a strategic choice of the RCE in realising ESD, OPEDUCA is not a youth project in the traditional sense. The concept involves all of society to achieve a transformation towards sustainability through formal and informal holistic learning.

Instead of relying on fixed curricula and textbooks, OPEDUCA is based on the unfolding learning process around themes relevant for our future. Learning processes and content are continuously and collaboratively constructed by teachers, pupils, students, scientists and staff from leading organisations. Learning in OPEDUCA takes place anytime, anywhere, with anybody and through any device, so called 'AAAA-Learning'<sup>2</sup>. It is open source, in reality and on the web.

By involving a multitude of parties, the development of OPEDUCA helps regions evolve into learning societies. In short, OPEDUCA is about:

1. The construction of on-going learning lines on sustainability issues such as food, water, building, transport and energy.
2. Forming regional networks of schools, knowledge institutes, companies and local governments to support collaborative learning for sustainable development.
3. Training of teachers and empowering schools as focal points in their own open educational region, as well as guiding and informing experts, managers and politicians in taking part in OPEDUCA.

The OPEDUCA Project uses a range of strategies to operationalise the concept and make the alliance work. These instruments include:

1. **Flight for Knowledge** – Ongoing interactive learning lines, from primary to higher education, on future relevant themes integrating formal and non-formal education, all school subjects and external sources of knowledge and experience.
2. **Business Class** – The promotion and enhancement of people's ability to turn ideas into action (entrepreneurship), training youth, teachers and public managers to become the entrepreneurs of a more sustainable future.

3. **Teacher Training** – Master classes and training to renew teachers' positioning in schools, develop their skills and competences to realise the OPEDUCA Project and enhance their professional skills and attitude.
4. **Educational Partnership** – Reconstructing private/human connections in local society to learn cooperatively, take action in the micro economy, and to re-establish the role of educators and parents.
5. **Internationalisation** – Balancing regional development and globalisation, operating all instruments and projects in OPEDUCA cross-border and globally, realising world citizenship, relevant insights and the sense of responsibility. Therewith bringing the existence and need for preservation of cultural heritage to the foreground.

These instruments present both a set of guiding principles and operational plans to develop OPEDUCA Regions and perform operations. Although each instrument can be considered separately, in practice they form one integrated continuous approach through which basic priorities in education (such as technology learning, reading, presenting, ICT), companies' corporate social responsibility and key societal aspects such as sustainable consumption and production are merged in one consistent and on-going action programme.

### Flight for Knowledge

One of the methodologies that RCE Rhine-Meuse has developed, tested and put in working practice is called 'Flight for Knowledge'. The name refers to the almost infinite access of the young and, through their learning, of society at large to sources of knowledge, practice and experience needed to become empowered and to facilitate broader societal development.

A Flight for Knowledge envisions the cooperative development of maximum knowledge on themes, like water, food or energy. It can be pictured as a logical, structured mind-map, growing, expanding, and deepening practical levels of knowledge, thinking and action.

An example of one of the many Flight for Knowledge good practices is based on the theme of water and comes from the Graaf Huyn College in the city of Sittard-Geleen.

<sup>2</sup> J.F.G. Eussen – 'A Flight for Knowledge', to be published spring 2013

The Sittard-Geleen region is still dominated by the effects of its former mining industry and it copes with a range of sustainability challenges in the fields of environment, employment, social cohesion, and building.

A group of 200 third grade students, aged from 14 to 15, started working on the theme in late 2011. RCE Rhine-Meuse connected them to more than 30 companies, several universities, knowledge institutes and government institutions to gather more knowledge about their self-defined research topics.

RCE Rhine-Meuse, in cooperation with the school, developed a timeline that fit exactly into the school schedule and programme, laying the basis for a smooth and structured process. The school teachers attended RCE-based Master classes in order to be able to implement the Flight for Knowledge in the most appropriate way. In a three day learning-by-doing process, they became acquainted with the philosophy, methodology and the process behind Flight for Knowledge, while meeting experts and practitioners from industry and government.

The teams of students explored the theme of water, performing extensive research and sharing and debating the answers they collectively found. Questions that remained unanswered were handed over to the RCE secretariat, partner companies and knowledge institutions. A phase of arranged visits from students to their “partners in knowledge” followed. These were full of guided tours, excursions, debates and experiments. Lessons learned during the visits were presented by students at the School Market, where the students presented their findings to peers, managers, parents, teachers and policymakers. This phase alone was a large happening and became a festival of learning for 200 students and around 300 visitors.

For schools, the Flight for Knowledge methodology appears to offer a well-structured and structurally implementable pedagogical approach that fully integrates science education, entrepreneurial learning, citizenship, and internationalisation. The essence of the approach is problem-based, inquiry-based, and cooperative learning by youth, empowering them to see the world through different perspectives.

Each Flight for Knowledge process grows into an ongoing learning line from primary to secondary and into higher

education. Such a result makes it possible for pupils and students to continuously learn in a realistic, cooperative, problem-based and science-based way, on the basis of real-life issues that can be shared, communicated and learned with many people within their reach.

In the Netherlands, where 40 pilot schools are working with Flight for Knowledge in daily practice, they gradually open their own geographical and virtual OPEDUCA through which in- and out of school learning merges into one dynamic, challenging and realistic learning space. Teachers repeatedly confirm that it is possible and desirable to construct each Flight for Knowledge in such a way that it fully integrates the curriculum. Indeed, students are now asking for much more than what current curricula offers, and both students and teachers understand that there is much more to learn and understand.

**The school teachers attended RCE-based Master classes in order to be able to implement the Flight for Knowledge in the most appropriate way. In a three day learning-by-doing process, they became acquainted with the philosophy, methodology and the process behind Flight for Knowledge**

The development of entrepreneurial attitudes and skills is essential to the learning as described here. Students are not only challenged, but also trained and educated to see themselves as owners and entrepreneurs of a more sustainable future in all Dimension of Sustainability. They learn and experience, for example, how society is structured and operates, and how powers rule. They go out in society, observe, interview, inquire, report, analyse, draw their entrepreneurial plans, map and calculate them. Competences such as achieving an open and critical view, expression, communication, and interest in today's challenges – actually all competences defined in the UNECE process of capturing ESD competences – are not only learned but also experienced, tested, and improved. The student actions also grow into full skill development on the economic and marketing aspect of

entrepreneurship, for they construct and present their future-based business cases requiring skills that go far beyond the curriculum connected to their grade (e.g. market analyses, investments, personnel, costs, pricing, sales, lending, shareholder values, etc.).

Involving individual youth and groups of students, teachers and industry experts helps realise a true peer-to-peer learning community across continents. The RCE opens up Flight for Knowledge across borders, meaning that the students' inquiry-based learning is expanded to regions and peers worldwide, positioning and empowering youth as world citizens, basing their actions and values in the local community yet having the world within their reach. Students are no longer being pushed to learn, but invited to develop.

Through the OPEDUCA concept, school education is now better adapted to developing the knowledge and skills that students will need in the future, while also better serving societal needs in the regions. Students are enriched through learning focused on real-life situations, while also identifying employment possibilities and areas for post-secondary study. Teachers are no longer seen as 'reproducers of inert knowledge', but as facilitators and guides for learning.



Although the route is long with many challenges still to be addressed the intermediary results of the OPEDUCA concept and project are most promising in delivering learning from a holistic, integrated perspective, combined with hands-on practice and measurable effects.

### Effective ESD: Learning Processes as Change Agents

The OPEDUCA concept, effectuated in the OPEDUCA project, brings about an implicit process of regional transition towards a green economy. Although there is a clear methodology behind it, the approach chosen allows and invites people to shape the process themselves, generating more ownership and thus lasting effects. It's untraditional approach and strict focus on learning as the best way to support societal transition seems to attract and involve organisations that willingly contribute and become crucial partners in realising ESD and its visible and lasting effect in a greener economy. The OPEDUCA processes unfold as processes of co-discovery and co-creation without restrictive goal setting, limiting organisational rules, processing without steering, and organising through a chain of cooperative relations.

The OPEDUCA concept and project are of value to the strategic priority of greening the economy. First, there is the renewed socialisation of learning through the approach, challenging youth and, therewith, adults. Compared to a more top-down approach governed by governmental or commercially-driven ESD campaigns, the more practical human-based (instead of organisation-centred) OPEDUCA approach unleashes local and indigenous knowledge, works with almost no threshold and no forced conviction and makes a greener economy a tangible belief. By bridging family life with life on the streets, working through schools, in regional businesses, with policymakers and regional government actors and by using qualitative insights of people in the region, participants become change agents themselves.

Second, modest local actions that result in both tangible and intangible positive effects of a greener economy, however modest, work better than passively watching a prophetic movie, the eight o'clock news or high-priced lecturing consultants. After all, most people would want fresh air when opening the front door, fish in their lake and less litter on the streets. Lifting the pressure on people to save the world – as sustainable development (SD)

promotions often imply – takes away a burden of guilt and frees the mind for direct action within one’s own domicile and local sphere of influence. Human development was part of ecology and a green economy for millennia and only during recent decades did people begin to focus their efforts on attaining fictional wealth through consumption and greed. Calling on society’s collective history of real needs will help people step back in order to move forward and create a more equal divide of well-being and a more sophisticated sense of welfare. The OPEDUCA project tries to reconnect people through local inquiry-based learning and experiences that lead to tangible and attainable results. Connecting this learning across borders will create global change towards a more sustainable future.

Thirdly, in the Open Educational Regions, the process of a cooperative society based on real-life learning brings behavioural aspects and responsibility to the forefront again. As the world learned in 2008 from the crises in the banks, an ever more complex globally interacted society cannot work in combination with impersonal and vague leadership influencing the course of our economy. Once globalisation is reconnected with regional culture, history, connected living and a renewed sense of responsibility and accountability, the basis for a green economy is there. Countervailing a common belief in SD debates that technical solutions take precedent over behavioural aspects, people are best served when they can consider and change their own behaviour and entrepreneurial attitude to make small changes where and when they can. This reestablishment and empowerment of the individual’s role and ability to turn ideas into action is crucial to a behavioural change that will transform the present day ‘welfare machinery for the few’ to a green economy for all. This is a common sense yet still ambitious goal of the OPEDUCA project: serving society through gaining better insight into the essence of SD, no longer accepting the trade-offs in balancing ‘People, Planet and Profit’ but gaining an in-depth understanding of the Dimensions of Sustainability where the health of ecosystems is the first condition required to create and maintain well-being for all, and that, in turn, sets the options for acceptable differences in welfare.





Human development was part of ecology and a green economy for millennia and only during recent decades did people begin to focus their efforts on attaining fictional wealth through consumption and greed. Calling on society's collective history of real needs will help people step back in order to move forward and create a more equal divide of well-being and a more sophisticated sense of welfare