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Real World Learning Network

Final Report

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Executive Summary

The Real World Learning Network was established to explore and share successful approaches to Real World Learning through the outdoor classroom that leads to action for sustainable development. It is a consortium of seven partners from six countries across Europe. During the project an additional 56 outdoor learning and education organisations joined the network in this exploration of effective outdoor learning.

The Network established four Working Groups to carry out the majority of its work, later supplemented by a Core Group which unified the work into a single model for outdoor learning. The Working Groups consulted widely in their work and through three European seminars for outdoor learning providers. A [website](#) was created to make all the results publically available.

The core achievement of the network was to synthesise learning and practical experience in outdoor learning into a unifying model – the RWL model. The model emerged from a need to create a coherent way to communicate the outputs and outcomes of the Working Groups. The RWL model brings together the elements of each Working Group into a meaningful whole, thereby providing educators with an overview of the components of outdoor learning and entry points to deeper understanding. When developing the model, the challenge of delivering learning that leads to sustainable behaviour change was held in mind. The results, therefore, is not so much a model for outdoor learning but a model for transformative learning.

The status and concept of outdoor learning varies between EU countries. One strength of the Network has been to bring together these differing approaches to outdoor learning so they can be shared, strengthened and developed. An example of this is increased resources for integrating science into outdoor learning which is weak in some countries. New work developed has been the use of value and frames, their role in behaviour change, and how to activate values through the learning process.

The Network shared, consulted and disseminated results widely. At the core of this were three European seminars held in the Czech Republic, Slovenia and the UK reaching 238 people. In addition the project website and national events and activities reached a total of 3659 educators and outdoor learning organisations. The results of the Network will continue through the work of the consortium partners and results remaining freely available on the project website.

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1. Project Objectives

The overall aim of the network was to explore and share successful approaches to Real World Learning through the outdoor classroom that leads to action for sustainable development. The network investigated different approaches to outdoor learning across Europe to explore and understand why they are effective and how they can be shared with others. The network had a particular focus on how outdoor science contributes to sustainability. The network provided support for organisations delivering outdoor learning through discussion groups, research, news and events.

Seven outdoor learning providers from six countries came together to start the network with the ambition to grow the network throughout the project period. The Real World Learning Network provided opportunities for organisations and practitioners to explore and share how outdoor learning is delivered and what makes it effective.

The network:

- Reviewed good practice across Europe.
- Developed criteria for successful learning outside the classroom.
- Provided model case studies that promote a first-hand experience of the natural world linked to action for sustainable development.
- Explored how outdoor learning promotes competencies for the green economy.
- Provided easy access to information, knowledge, expertise, guidance and resources.
- Developed a network of good practice amongst educators to continually share ideas and resources.
- Increased the profile of outdoor sciences across the partner countries and the EU.
- Developing a model for outdoor learning and behaviour change.

As a result of the RWL Network we planned that:

- More education organisations throughout the EU will gain access to a range of approaches to outdoor learning that promotes a first-hand experience of sustainable development.
- Resources are promoted with clear links between school based learning and the key skills to build a green economy.
- Pedagogical approaches to the teaching of sustainable development linked to developing key competencies for employment are shared.
- Criteria for delivering high quality outdoor learning are developed.
- Enhanced access to high quality and targeted information for practitioners is provided.
- Increased sharing of good practice takes place between teachers, schools and education organisations.
- Increased understanding of the benefits of Real World Learning to the development of the EU economy.

2. Project Approach

Our project approach sought to explore key issues in outdoor science and engage outdoor learning providers in rethinking what successful outdoor learning looks like and how it can be delivered. The proposed duration of the project was 36 months. The project was divided into three phases: 1) set up and development, 2) implementation 3) evaluation, wrap-up and sustainability.

The project approach was one of common ownership and shared responsibility. Considerable time was spent at the beginning of the project to define and confirm the goals of the project and ensure they have benefits for the partners involved and the wider outdoor education sector.

Establishing a clear purpose for the network from the start was a challenge given the diverse nature of the partners and diverse views on what outdoor learning is. The partners spent considerable time discussing that networks, unlike traditional projects, carry a higher level of risk. They are not focused around the development of a single agreed product; they depend on the cooperation of all partners to share their ideas and opinions. As such they can be less controllable in a traditional management sense, and less certain in their direction. Having confidence in the process a network agrees to, and the uncertainty that brings, is challenging.

We reviewed the different functions of a network and debated what goals we had for the RWL Network. The different functions of network are:

- The Debate Function – provide a common platform, forum or reference point for discussion, reflection, policy and research.
- The Dissemination Function – disseminate information and best practice generated by the partners.
- The Research Function – provide an overview of the network topic through comparative analysis and contribute to shared development.
- The Forecast Function – identify present, emergent and future needs.
- The Advocacy Function – promote the implementation of innovative results, insights and best practices.
- The Support Function – assist in the networking of projects which are related to the theme of the network.

It was agreed that the main functions of the RWL Network is to promote the debate, dissemination and research functions. Through these three functions we aim to forecast future changes and trends in outdoor learning. It is hoped that where appropriate this will lead to advocacy.

The RWL Network created opportunities for partners to share and discuss relevant ideas, engage in debate and learn from others. We published recommendations and good practice case studies. Through this we developed our understanding of outdoor learning, and hopefully met the needs of our own organisations and others to deliver high quality outdoor learning.

Project management and delivery was supported by face-to-face meetings between Country Co-ordinators and Working Group meetings. The RWL Seminars were used as additional opportunities to meet. The project used Huddle project management software to keep track of tasks, work plans and files. In addition, some of the Working Groups used Google Drive to enable real-time working on shared documents and Skype for meetings. Within the financial restrictions of the project it was not possible, nor environmentally desirable, to have frequent face-to-face meetings. The Working Groups made active use of Skype to meet online and discuss progress.

Stage 1 - Set up and development

Project partners met in January 2012 to clarify the aims of the project, analyse the project environment, confirm project roles and responsibilities, and plan the initial baseline research.

The project uses the term Real World Learning, considerable time was spent reflecting on what the term means within each country. Partners brainstormed RWL concepts and grouped these into themes. There was considerable discussion on what could be included as RWL – a very broad term – and what needs to be included in the project to create clear boundaries and ensure project delivery is realistic.

There was strong agreement that RWL needs to connect the location and learning through hands-on learning that connects to the learners own experience. Rather than discrete themes, patterns emerged as to what constitutes good RWL which were explored further in the Working Groups. There was also a discussion about the focus of outdoor learning being solution based, creating a sense of urgency in relation to the scale of environmental problems we face. Finally, there was a discussion about outdoor learning having a distinct goal of behaviour change in the target groups.

There was discussion on the definition of the term science. It was agreed to use the EU definition of science taken from 'Key Competencies for Lifelong Learning' (EU 2006) as follows:

Competence in science refers to the ability and willingness to use the body of knowledge and methodology employed to explain the natural world, in order to identify questions and to draw evidence-based conclusions. Competence in science involves an understanding of the changes caused by human activity and responsibility as an individual citizen.

Carrying out Country Status Reports

Partners planned and carried out country status research amongst outdoor learning providers. The research was based on a series of driving questions as follows:

- Are there quality criteria for success and assessment for learning in each partner country? If yes – what?
- How can outdoor learning contribute to science and sustainability?
- What are the pedagogical approaches to outdoor learning in each partner country?
- Are there career competencies for 'green' careers? Can RWL contribute to them?

The research was carried out through a series of questionnaires, interviews and desk-top research.

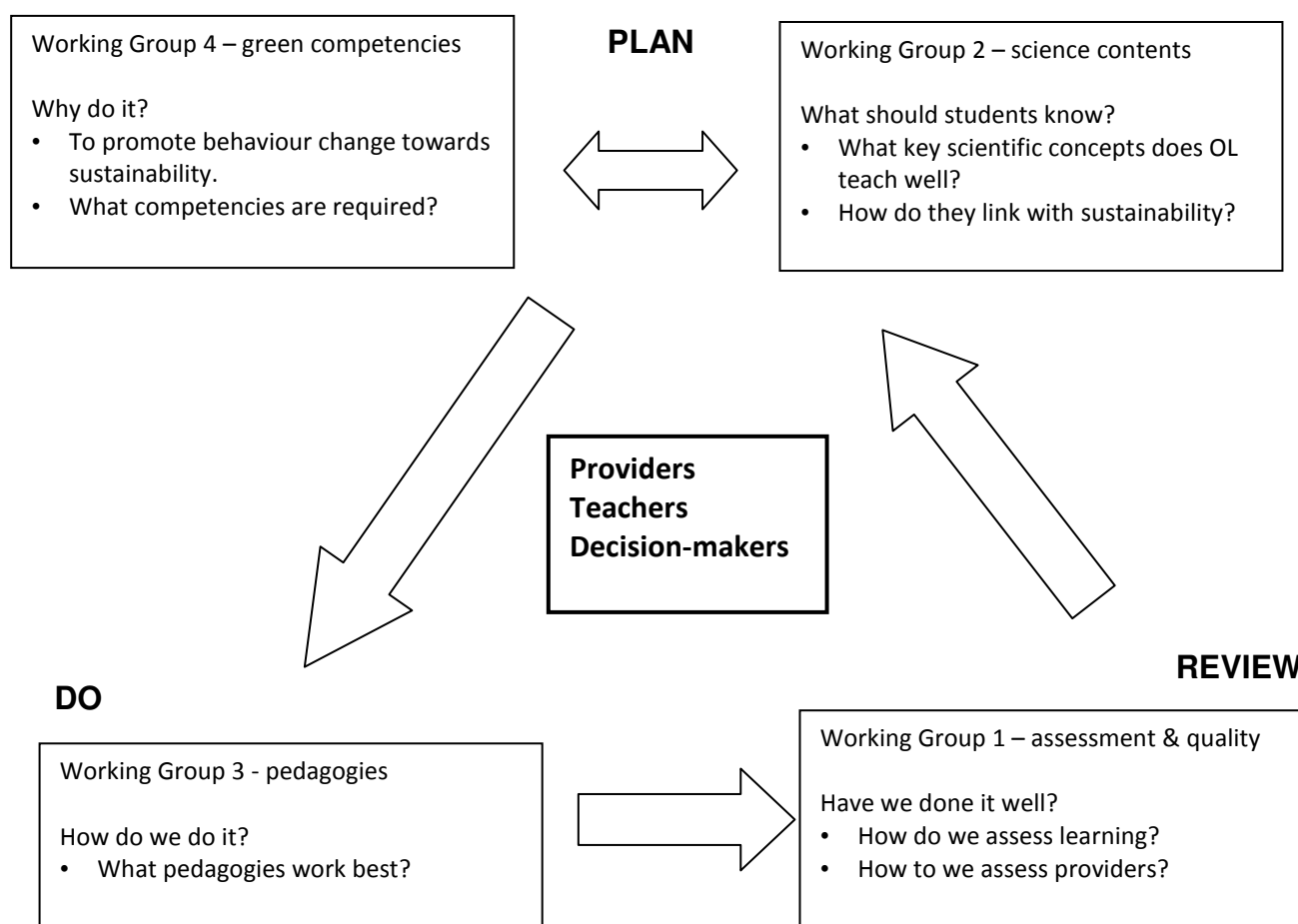
Defining Terms of Reference for Working Groups

Following on from the baseline research, the partners met to define the Terms of Reference for the working groups (WGs). The role of the WGs was to provide a forum for discussion, debate and research about key issues in outdoor learning, as a result of which the network will produce recommendations and guidelines for others.

In establishing the Terms of Reference for the working groups, partners reviewed the original proposal and reviewed the terms of reference against key questions:

- Do they have European value?
- Are they unique?
- Do the WGs investigate relevant topics: for providers, teachers and decision-makers?
- Can the WGs make a difference?
- Are the WGs interlinked? Supporting and building each other's work?
- Do they futurize? (provide results for now and the future).

Using the results from the baseline research and ideas from partners provided pre-meeting, we developed guiding questions, tasks and deliverables for each WG. In developing the details for each WG, synergies between each WG became clear and are shown in the diagram below.



It was agreed that WG4 and WG2 need to start their work before WG3 and WG1 can start theirs. In simple terms, WG4 and WG2 are the planning phase for outdoor learning in that they explore why it is important, and what are the competences and content. WG3 is the doing phase where learning is delivered, and WG1 is the review phase.

Project Website

The project website provides a focal point for all project activities. It is a public space to share and disseminate results.

Stage 2 - Implementation

Four working groups were established as described above. Each working group met at least twice during the project and had one RWL seminar dedicated to their themes. Each working group used Huddle, Skype and Google Drive to continue working between meetings.

The working groups acted as representatives for outdoor learning providers, whilst at the same time consulting with external partners and encouraging wide debate and discussion.

Working Group 1 – Quality and Assessment

This WG explored quality criteria and assessment tools for learning concerning a behavioural change towards sustainability. Existing criteria and tools were checked according to their fitting for real world learning. Criteria were reviewed to indicate whether the real world learning process strengthens competencies which lead to a behavioural change. WG1 worked in close relation to the three other WGs. Whereas WG2 and WG4 stand for the planning of real world learning and WG3 for “doing it”, WG1 stands for review and the question “Have we done it well?” The result of the WG1 working process is a set of European criteria to assess real world learning that supports sustainable behaviour.

Working Group 2 – Science and Sustainability

This WG looked at which scientific concepts are best taught in an outdoor environment and how these concepts could be useful to support sustainable thinking and behaviours. They reviewed current models of scientific understanding and chose the Planetary Boundaries model to frame the areas of scientific knowledge requirements. They then explored how science can be integrated into outdoor learning and developed guidance notes and a planning template to assist educators to integrate science into outdoor learning.

Working Group 3 – Pedagogical Approaches to Outdoor Learning

WG3 dealt with pedagogical approaches to RWL and outdoor science with a focus on linking learning to behavioural change promoting action for sustainability. It explored different approaches to the delivery of outdoor learning and how behaviour change models can be useful for outdoor learning. They researched case studies of good practice to demonstrate effective learning in action.

Working Group 4 - Real world learning and developing career competencies

WG4 explored the competencies required to effectively contribute to the green economy and how they could be developed through outdoor learning. In addition to competency recommendations they provided case studies of careers where green competencies are essential. They further developed their work by focusing on the values which support sustainable behaviours, work which was further taken up by the Core Group (see below).

Core Group

An additional working group was established after realising that the WG outcomes needed a unifying model to draw them all together. The Core Group (CG) worked with the results from all the WGs to produce a model for outdoor learning which realised the core elements from each of the WGs.

Stage 3 – Evaluation, wrap-up and sustainability

Dissemination & Exploitation

Partners actively promoted and exploited project activities through their own networks and events.

We held three European seminars. These were major events with participants from across Europe to consult, share and learn about the range of outdoor learning approaches used. At the last event we launched the RWL model which was the network's main output.

The partner's dissemination plans were based on the table below.

Topic	Information
Target groups / beneficiaries	Which groups are you aiming to reach? Why? What will they gain? How will they benefit?
Opportunities	What opportunities are there to reach your target groups (new and existing)? What should be disseminated/exploited and to whom (hard and soft outcomes)?
Tools/methods	What is the best way to reach and influence your target groups? How will you do this?
Actions & timetable	How will you reach your target groups? When? What will you need to do to be successful?
Resources	What resources will you need to achieve this? (people, travel, etc)
Measuring success	How will you know if you have been successful?

Monitoring and Evaluation

Monitoring was through the Country Coordinator meeting and 6-monthly verbal reports to the Project Manager. All project documents and tasks are shared on Huddle so progress can be assessed on a regular basis. An evaluation plan was developed (see below).

EVALUATION FRAMEWORK

<i>Level</i>	<i>Subjects and questions</i>	<i>Results M&E, example indicator</i>	<i>Method</i>	<i>Responsibility</i>
Input Societal context and issues; the means	Current trends in sustainable development such as climate change, biodiversity loss, renewable energy and green jobs whilst improving are not changing fast enough to prevent huge environmental problems affecting lives across Europe. There is a clear need to share new approaches to addressing sustainable development.	-	-	-
Throughput Processes	Project activities, cooperation between partners. <ul style="list-style-type: none"> Do project team members co-create a common vision? How do project team members deal with identified challenges? Are project team members inspired and challenged? 	Result: Description how project team members deal with identified challenges.	Review at Partner Meetings. Review at Working Group meetings and CoCo meetings through common checklist	Project Coordinator WG Coordinators
Output Deliverables: the products and direct effects of the project	Quality indicators: <ul style="list-style-type: none"> A wide range of quality criteria are available? A narrow set of quality criteria are agreed? New partners are interested in implementing quality criteria? A European-wide system for quality accreditation for outdoor learning providers. 	Overview <ul style="list-style-type: none"> List of criteria agreed. Enquiries from new partners to use criteria. Agreed European system (additional result not part of project). 	List of criteria available – wide and narrow. Evidence of interest from new partners – keep lists of distribution, etc. European accreditation system (additional result not part of project).	WG1 – supported by Country Coordinators.

	Science and sustainability: <ul style="list-style-type: none"> Are key science concepts identified? Has the relationship between science and sustainability been made? Are there guidelines to integrate science into outdoor learning? 	Results: <ul style="list-style-type: none"> Guidance for schools and outdoor centres on integrating science into outdoor learning. Framework of key science concepts that underpin sustainability. Case studies 	Documents available on project website. Evaluation from educators and different organisations in each partner country	WG2 – supported by Country Coordinators.
	Pedagogy, outdoor learning and behavioural change: <ul style="list-style-type: none"> Have effective pedagogies been identified? Do they support content (WG2) and competencies (WG4)? Has assessment been considered? 	Results: <ul style="list-style-type: none"> Review of pedagogies. Recommended pedagogies and framework for selection, including reasoning behind choices. Case studies 	Documents available on project website Evaluation from educators and different organisations in each partner country	WG3 – supported by Country Coordinators.
	Competencies for a green economy <ul style="list-style-type: none"> What models work? How does outdoor learning link with careers? Which competencies are best supported through outdoor learning? 	Results: <ul style="list-style-type: none"> Review of available models, recommendation for outdoor learning. List of recommended competencies for outdoor learning linked to green careers. Case studies 	Documents available on project website Evaluation from educators and different organisations in each partner country	WG4 – supported by Country Coordinators.
	Align outdoor learning with ESD	Results: <ul style="list-style-type: none"> Synopsis/diagram of competencies of outdoor learning and ESD. 	Synopsis made available. Synopsis peer reviewed.	ANU (Germany requested this)
	Do partners use the materials we produce?	Result: <ul style="list-style-type: none"> Partners use materials produced e.g. case studies, good practice recommendations. Seminars, conferences, events presenting and discussing materials. Downloads from the website. Number of comments, resource ratings, 	Questionnaires from educators and different organisations in each partner country Examples from partners work using	CoCo's supported by WGs.

		<p>user feedback.</p> <ul style="list-style-type: none"> Number of users using results. 	<p>RWL materials</p> <p>Evidence of RWL materials being promoted at seminars, conferences etc by each partner country.</p> <p>User feedback.</p> <p>Website statistics.</p>	
	<p>Network and partners:</p> <ul style="list-style-type: none"> Part of an alive network connecting outdoor learning providers. Partners working together. New partners joining. Support available for network members. Opportunities to share resources. 	<p>Results:</p> <ul style="list-style-type: none"> Number of partners in each country. New ideas and partnerships generated. Ideas shared on website. News, events and case studies promoted to support partners/network members. 	<p>Lists of partners.</p> <p>Active discussion forums, news, events and case studies.</p> <p>New project ideas.</p> <p>Evidence of active engagement from new network members from each partner country e.g. joining activities, using RWL materials, etc.</p>	CoCo's and Project Coordinator supported by WGs.
Outcomes Short term results of the output	<p>Change of behaviour of individual teachers/OLC staff:</p> <ul style="list-style-type: none"> Are learners/providers doing something different? 	<p>Indicators:</p> <ul style="list-style-type: none"> Assessment of learning outcomes and learning objectives which are related to sustainable thinking and action. Science Career competencies Etc related to WG aims. 	<p>Learning observation leading to a report.</p> <p>Questionnaire/ interview with organisations in each partner country.</p>	CoCo's and Project Coordinator supported by WGs.

	<p>Raise awareness of outdoor learning:</p> <ul style="list-style-type: none"> ▪ Raise awareness of the purpose of outdoor learning and make it real. ▪ Awareness of connection between science, outdoor learning, careers, etc. 	<p>Results:</p> <ul style="list-style-type: none"> ▪ Number of articles in specialist press. ▪ Distribution of leaflets, posters, exhibitions, etc. 	<p>List of dissemination results.</p>	<p>CoCo's and Project Coordinator supported by WGs.</p>
	<p>Improved understanding of what good outdoor learning looks like:</p> <ul style="list-style-type: none"> ▪ Clear idea on what good outdoor learning is. 	<p>Indicators:</p> <ul style="list-style-type: none"> ▪ Quality criteria are used. 	<p>Questionnaires and interviews with providers (network members).</p>	<p>CoCo's supported by WGs.</p>
<p>Impact Results on the long term, related to societal issue which is addressed</p>	<ul style="list-style-type: none"> ▪ Have conditions for impact been created? ▪ Will project partners continue their cooperation? ▪ Are there indicators that the results contribute to the societal issue at stake? ▪ Are there indicators that the results contribute to a societal change 	<p>Results:</p> <p>Example indicators</p> <ul style="list-style-type: none"> ▪ Other teachers, countries are enthusiastic and want to teach RWL: phone calls, questions. ▪ Social media attention continues or grows. ▪ New projects ▪ To see more students outside and less in the classroom 	<p>Have partners built results of RWL into their organisational work?</p> <p>Have non-RWL partners been influenced by RWL and made changes as a result?</p>	<p>CoCo's</p>

3. Project Outcomes & Results

The Real World Learning Network actively worked with outdoor learning providers across Europe, achieving results which are summarised below.

Objectives	Contribution of Activities
Review good practice across Europe.	<ul style="list-style-type: none"> • Country status reports produced. • Working Groups collected, analysed and published good practice examples.
Develop criteria for successful learning outside the classroom.	<ul style="list-style-type: none"> • Published criteria for assessment of outdoor learning. • Published RWL model to reflect on, plan and deliver effective outdoor learning leading to behaviour change for sustainability.
Provide model lessons and case studies that promote a first-hand experience of the natural world linked to action for sustainable development.	<ul style="list-style-type: none"> • Case studies developed and reviewed against the RWL model. • Additional case studies reviewed.
Explore how to ensure science appeals to a wide cross-section of learners, especially addressing the gender imbalance.	<ul style="list-style-type: none"> • Not fully addressed.
Explore how outdoor learning promotes competencies for the green economy.	<ul style="list-style-type: none"> • Role of values in developing green competencies explored. • Survey of green competency models in Europe completed. • Recommended list of green competences produced. • Green career profiles developed.
Provide easy access to information, knowledge, expertise, guidance and resources.	<ul style="list-style-type: none"> • RWL website and facebook page created. • Partner websites promoting project in each country. • Three European seminars delivered reaching 238 people. • 3659 educators from more than 15 countries reached through events and 27353 people via media.
Develop a network of good practice amongst educators to continually share ideas and resources.	<ul style="list-style-type: none"> • Fifty-six new organisations joined the network. • Over 100 organisations from more than 15 countries engaged. • Three European seminars delivered reaching 238 people. • National events reaching 3659 people.
Increase the profile of outdoor sciences across the partner countries and the EU.	<ul style="list-style-type: none"> • RWL seminars attracted 238 people. • 3659 educators from more than 15 countries reached through events and 27353 people via media.

RWL Model

A core achievement of the network was to synthesise learning and practical experience in outdoor learning into a unifying model – the [RWL model](#). The model emerged from a need to create a coherent way to communicate the outputs and outcomes of the WGs. The RWL model brings together the elements of each WG into a meaningful whole, thereby providing educators with an overview of the components of outdoor learning and entry points to deeper understanding. When developing the model, the challenge of delivering learning that leads to sustainable behaviour change was held in mind. The result, therefore, is not so much a model for outdoor learning but a model for transformative learning.

The RWL model uses the hand as a metaphor for first-hand learning. In the centre of the model are frames which play a powerful role in how we understand the world around us. For example when we hear the word ‘nature’, subconsciously a bundle of different memories, emotions and values are activated. Such associations, often leading to strong narratives under the surface of our awareness, are called ‘frames’. Arranged around the frames are five further elements:

- Understanding – based on the study of holistic science, understanding explores the processes and patterns of relationships that enable nature to sustain life. Scientific materialism has largely ignored these basic principles and led humanity towards ecological, and ultimately self, destruction. Recognising these fundamental causes of many of our global problems offers the hope for change. This is why a real world learning approach to science in and from the natural world is so important; for nature not only opens us up to our place in the world it also teaches us the principles for sustainable living.
- Transferability – when different areas of life are involved in a learning process, it increases the possibility that learners will then act in respect of them. Positive emotions play a big part in learning. Transferring knowledge into different areas of life can connect learners more emotionally with a certain topic.
- Experience – real experience in an outdoor setting is critical in terms of learning for sustainability. If people are to develop a love and concern for the earth, they need these direct experiences; otherwise, their knowing remains remote and theoretical and never touches them deeply. Experiential learning is particularly effective for developing action competences.
- Empowerment – brings the learners to the centre of the learning experience: it's about recognising and realising their own humanity and their own ability to take action for positive change. Empowering learners enables them to cooperate and to take ownership of their learning.



- **Values** – represent our guiding principles, our broadest motivations, influencing the attitudes we hold and how we act. It is therefore essential that we recognise the importance of values in our work as educators; and that we are very mindful about which values we wish to support and develop through our work.

To allow educators to dive into greater detail, the model proposes ‘ripples’ from each finger to give depth.



Visit www.rwl-network.org/rwl-model.aspx for a full interactive version.

The WGs aligned their results with the RWL model giving it texture and a practical depth to support the work of educators.

The model has been tried and tested in a number of different ways through the Network. Science in Cycles, for example, was an exciting and leading edge project that offered an opportunity to bring science learning into the open air through outdoor learning sessions in a woodland setting. The planning and delivery of the six day-long sessions was designed specifically to support positive thinking and action for sustainability. This collaboration allowed the first full programme trial of the RWL Model for delivering quality first-hand learning experiences in natural settings focused on developing positive action for sustainability through outdoor science. Their final report states that ‘This project has brought a new way of thinking about, approaching and delivering outdoor learning for the facilitators involved. The RWL Model has played a central part in this process, bringing a huge range of benefits not only to the learning process itself but also to the work and

lives of those involved.’ One participant commented that “I’ve recognized that this way of learning has helped me think much more outwardly. I don’t think the actual revelation moments have tended to be at the sessions, it’s been while I’ve been outside and something that had connected in the session would then connect with something that happened in my life.” A full report can be found [here](#).

Working Groups

The RWL model emerged from the work of the WGs, which in turn aligned their results with the model to provide both greater depth and breadth to support it.

Working Group 1 explored a set of [Real World Learning Quality Criteria](#) alongside the model. The six criteria refer to the six parts of the hand – the palm and the five fingers. The criteria are sub-divided into different sub-criteria which explain and define each criterion and into different indicators. Both the sub-criteria and the indicators should be used as a checklist by the provider or teacher to review his or her learning programme.

Working Group 2 started by exploring what we meant by ‘understanding’, coming quickly to the conclusion that it is not just all about scientific reasoning, the rational aspect of science. Although important, reason needs to sit alongside our emotions, values and humanity; this is where the true understanding emerges. Four holistic principles emerged that frame scientific understanding. These were integrated into a set of [guidance notes](#) to help educators improve their understanding and delivery of holistic science. To support deeper scientific research detailed [mind-maps](#) support educators.

The third Working Group commissioned research into [behaviour change](#) in outdoor learning and developed a range of [case studies](#) to illustrate good practice.

Working Group 4 set out to explore green career competences as the core of their work, producing a list of [competences](#) important for contributing to the green economy. From the beginning it became very clear that to explore competences meant to consider not only skills and knowledge, but also to engage with values. It was also found that by bringing together these elements of competences in the sustainability context means to empower people to be able to think and act sustainably. From this initial work, WG4 produce guidance for using [values](#) in outdoor learning.

The work of the working groups was drawn together by a Core Group who added the additional elements of frames and transferability into the RWL model. Guidance was developed to help educators transfer learning into different [areas of life](#). [Frames](#) act as the vehicle for embedding values structures in our thinking and behaviour, and they have been included as a core element of the RWL model.

RWL Seminars

The network held three European [seminars](#) throughout the project. These shared the work of the network widely across Europe and ensured the views of the outdoor learning community influenced the outcomes and results.

In addition to the RWL Seminars, the partners participated in a total of 99 events, workshops, conferences, seminars and meetings reaching 3659 people.



Impact on Target Groups

The partners assessed the impact of the project on their own work as well as with other outdoor learning providers. In Italy, for example, 36 educators explored the RWL model and reviewed its effectiveness. When asked about the most interesting part of the model the majority felt that the values finger is the one they are most interested in. Some of them think they need to put more attention to the values not only in the designing phase of new programs but even in the general mission of their institutions because sometimes there isn't consistency in the actions. Others appreciated the pedagogy and the possibility to examine others case study and best practice. Everybody thinks that they will need to try the model many times to understand the real possibilities enhanced with the use of the hand model.

In Hungary, a survey of 33 educators found that the biggest effect on them was the finger about the experiences. The reason was mostly its importance in teaching and learning, as: 'this is the foundation'; 'one gram of experience worth more than a ton of theory'; 'what we experience once we will never forget'; 'this is what children's lives lack the most'. Based on the responses we can say that the respondents understood the importance of the fingers. There was no big difference between the number of responses that each of the fingers received. This fact underlines the importance of the model's openness as different educators and learners approach the same questions from very different background and interest.

Analysis in the UK found that the majority of educators questioned found that most agreed the RWL model is logical and accessible, and influences their thinking about outdoor learning. Comments from people experiencing the model included:

- 'There are so many opportunities for me to use this in my teaching! Very exciting but also overwhelmed by all the ideas.'
- 'To look behind a task for the reasons why it's done and what else can be gained from it e.g. why we make the decisions we do.'
- 'Thinking of new ways to engage students with skills/subject that extends beyond (frames).'

The FSC have developed internal guidelines for applying the RWL model with their staff and for redeveloping course programmes.

In February 2015, Slunakov held a two day conference to share and explore the RWL model. Many of the participants had used the RWL model for some time and were able to provide feedback based on their experience in using the model. Overall there was strong support for the model, however, there was also concern that the model requires significant time and reflection before it can be used effectively.

The project has had an impact on both the partners and target groups. Partners report that:

During the 3 years project, our organization had the opportunity to share our experiences on ESD and in outdoor education with different providers around Europe. This opportunity has given us the chance to exchange, to make links and new collaboration with different ESD providers from Italian and European context and to better understand the importance of a network. Another important aspect is about the important issue addressed by the RWL project: how can we be more effective in the educational project that we developed? During the project this question has become more and more interesting and graspable and we had the opportunity to develop an internal debate on our own actions and learning programmes. We have also developed a new program to experiment with the collaboration of some primary

teachers the advantages of the outdoor learning approach towards behaviour change on the renewable energy issue. (CREDA, Italy)

We learnt a lot about RWL: understanding of sustainability related education and RWL had deepened, especially concerning involving holistic, complex approaches into education. Our view on educational approaches and systems in the partner countries got wider and we have good relationships with the partner organisations. (HSEE, Hungary)

During the project, we started to ask some important questions about the sense of our educational programmes. Are our overall aims the ones which really influence children's behaviour in their future? These questions and open debate help our tutor team to consider our educational programmes from more perspectives including the scientific content, transferability and empowerment which have not been so much underpinned in the Czech Republic. These processes help both with undergoing programmes and their slight modifications and with the creation of new programmes. (Slunakov, Czech Republic)

The network provided staff with opportunities to extend their usual understanding of outdoor learning. The use of values and frames challenged our usual perceptions of both the goal and effectiveness of the learning we provide. The project has opened up new avenues for planning and delivering our courses in the future. (FSC,UK)

CSOE learned about innovations and efforts of other countries in the field of outdoor learning pedagogy which led staff to upgrade their methods and forms of teaching, gradually leading to higher quality programs for pupils and students. (CSOE, Slovenia)

As the outdoor education sector is very diverse in Germany and there was a strong educational focus on the UN-Decade ESD in the recent years it was challenging and rewarding in one to reflect upon and bring together these different approaches in the RWL model. A discussion within ANU is going on, if the RWL model is supporting the ESD approach enough. On the other hand RWL has highlighted outdoor education once more and strengthened the visibility and necessity of learning outside the classroom. (ANU, Germany)



Finally, the RWL model was launched at the final RWL seminar. Evaluation from participants reports that:

- I've realised that the hand model is really very inspirational for everyday work of tutors and verifying what we are already doing and planning for our centre's future
- I changed – Thoughts, Relationships, Self –Reflection; probably there was change in everybody. Great inputs from other people and land that made me change. I'm inspired to do big changes back home, hoping that the ideas will not just be dreams but come to life. But as these ideas are really big scale projects I'm quite afraid of the dimensions
- I have greater understanding of the model in terms of the research behind it. I have been impressed by the case studies, the creativity and the open hearts of the others here. I see my own practice differently and I can see that I must add more meaning to my own frame of myself as a person or "teacher", a "learner" and an educator

- I've known about frames before, but during the conference it finally hit me how important and useful their use could be. If I start thinking about activities I lead in terms of frames, I think the teaching might get more meaningful and more purposeful.
- I gained a deeper understanding of how to connect science, outdoor education and environmental education. Collected many skills that will be helpful to kindle the fire
- New insights into making scientific studies more relevant. Continued awareness of how much enthusiasm and good practice has developed throughout Europe. Recognition that we cannot use the tools of a capitalist consumer society to change that society. We must use new methods that reflect helpful values.



4. Partnerships

The RWL Network was a partnership between seven outdoor learning and environmental organisations. Each partner is either a network in itself or connected to a strong network. For example, Slunakov is an environmental education centre and member of the Pavicuina network of 36 centres in the Czech Republic. ANU is affiliated to the German League for Nature and Environment (DNR), which is the umbrella organization of German conservation and environmental protection organizations. It currently has 98 member organizations.

The partnership brought a number of strengths and some difficulties. With partners across the breadth of Europe the network truly represents outdoor learning providers from a range of educational perspectives. For example, the FSC has a strong focus on outdoor science whereas CSOE have a strong adventure element. This ensures that partners can learn from each other and share their experiences. This benefit also creates difficulties with partners situated in different educational systems and funding methods. This can create challenges in finding common points of view.

The RWL Network aimed to explore how outdoor learning can effectively support behaviour change for a sustainable future. Such changes are best explored at a European level, in fact for change to be successful it will need to take place at a European scale as well as at a national, local and personal level. Outdoor learning providers need to work together and share positive European-wide approaches to the learning and action required for real sustainable development. The result can be a shared collective response, and the feeling that people are not alone in tackling sustainability issues. Sharing best practice in how to achieve this is essential.

All the RWL Network partners worked hard to engage a wider community of educators in the project: outdoor centres, environment centres, teachers, universities. The Network set a target of achieving 20 new members during the project; in fact 56 new members joined. Through other activities we have reached 27353 people through media activities, 3659 people through events.

5. Plans for the Future

Each of the core partners has developed their own plans for using the results of the RWL Network. On a European scale the website will continue to be made available and all resources free to download free from copyright. The ongoing use of the results of the network testifies to the sustainability of the results.

CREDA

CREDA will keep on with teachers and operators' training on the RWL model and the organization of workshops on RWL and the value perspective for behaviour change. With the national WWF educational board CREDA plans to go deeper in the value and the frames for environmental actions and wish to establish a working group that will supervise the translation of some of the Public Interest Research Centre work and test it on the Italian context.

At the beginning of 2015, the Government announced its willingness to establish in the school curriculum a new study objective dedicated to environmental education. If this would be the case, CREDA would like that the RWL project findings to be considered.

CREDA itself will continue working with and trialling the RWL model, and using it to update and create new programme.

HSEE

HSEE would like to spread and use the RWL outputs, first of all, the RWL model. They plan to hold more trainings on the RWL model not only for environmental educators in centres but teachers of other subjects as well. They would like to have the hand model to be integrated into the Hungarian EcoSchools Network.

HSEE plans to improve and enrich their own existing training programs on outdoor learning methodology by integrating the values and other elements of the RWL model.

Slunakov

For Slunakov, there have been two important aspects of the Real World Learning project. The first one is the network, the network of European organisations dealing with topics with similar content (outdoor environmental education) though with slightly different approaches and methods. This diverse mosaic is a source of inspiration. Furthermore, our personal contacts with other organisations are very valuable and we would appreciate further exchange of experience regarding RWL.

The other aspect is the RWL Model. This tool is surprisingly multidimensional. Slunakov are happy to use this tool for both planning of educational programmes and adopting the existing ones. The model will be presented to their external tutors and teachers of lifelong training programmes.

The RWL Model was accepted very positively – by tutors from eco-centres and by academics, and university researchers. Academics already have their own plan of working with the RWL model. At the end of the year 2015, the whole number of magazine called *Envigogika* will deal with the theme of the RWL model and individual papers will be based on this issue.

FSC

The FSC is already using the model to redevelop its courses. The UK is undergoing a large curriculum change which has presented opportunities for revisions to their courses. In particular, the values, frames and understanding elements of the RWL model are being integrated into FSC courses. On a larger scale, organisational values are being discussed within the FSC with the RWL values approach providing a framework for this ongoing discussion.

To date four training events have been held for FSC staff using the RWL model. It is anticipated that this will continue.

The FSC is integrating the results into other projects at a European level including the Schools for Resilience (Spain, Denmark, Latvia, Ireland & UK) project and Danube Kids in Romania.

CSOE

Activities CSOE has implemented as short-term targets will be continued in the long-term. In CSOE's opinion, students of pedagogical faculties should also be included and informed on learning in the real world, so they learn to accept new approaches better. In this manner, CSOE will adapt and/or change patterns of the science of teaching. CSOE's goal for the future is also to include kindergarten teachers in education on learning in the real world and on RWL model usage. CSOE wants to develop the RWL model in a way that includes social sciences and sports too. CSOE intends to organize one national conference and two seminars on this subject annually.

ANU

The next steps for ANU will be the further dissemination and exploitation of the RWL model and the values and frames topic. ANU is a broad network of institutions and persons from different backgrounds and stakeholders in environmental education and ESD the reception and adaptation of the hand model is varying. Some outdoor educators and ESD practitioners have started to work with the RWL model. The German RWL team plans to apply for project funding to realize a series of workshops about the RWL model, values and frames and further development of the hand model idea.

In Germany the 16 different federal states' ("Länder") governments are responsible for education policy. Through various round tables, advisory boards, committees ANU regional associations and members are involved in the development of future policies and programs. Some of these experts learned about the RWL model at the annual ANU national and regional associations meeting and will keep the RWL model ideas in mind in their lobby work. The RWL model ideas fit to the priority action areas to some extent.

Another strong policy development branch is the integration of ESD in national and federal states strategies on sustainability, biodiversity etc. ANU is for example directly involved in these processes in the federal states of Hesse and Rhineland-Palatinate.

6. Contribution to EU policies

RWL supports the delivery of key international, European and national strategies. The UN Decade for Education for Sustainable Development has been a key driver globally to increase the quantity and quality of learning and has developed some quality criteria. The 2009 review of the EU Sustainable Development Strategy identifies links with the Lisbon Strategy to ensure long term growth through learning. There is a call for a rapid shift towards a more sustainable economy with learning a key tool in achieving this. This learning is supported by the European Key Competences for Lifelong Learning including competences in science, learning to learn, civics and a sense of initiative. RWL addresses all these.

RWL contributes to a number of key EU policies. The Europe 2020 Strategy places a strong emphasis on sustainable growth. In meeting the goals of a competitive low-carbon economy and protecting the environment, there is a need for employees with an understanding of science and sustainability. RWL helps outdoor learning providers consider how they can integrate green career competencies into their programmes and meet the need for green skills for employment identified by CEDEFOP in Skills for Green Jobs.

Science is a cornerstone for meeting the challenges of sustainable development. PISA reports that across the EU the average achievement in science has fallen from 2006 to 2009, and only four countries are meeting their target to reduce low achievers in science to significantly below 15% (Eurydice 2011). Without a strong scientific base Europe will not be able to meet its Europe2020 goals of smart and sustainable growth. RWL has a focus on teaching science that will provide the understanding and competencies to contribute to sustainable development both socially and economically.

The Council of Europe Conclusions of Education for Sustainable Development (2010) highlights the eight key competencies adapted by the European Parliament and the Council. RWL supports the key competencies for lifelong learning outlined and is mutually supportive of skills such as critical thinking, problem solving, creativity, initiative taking and decision making, all of which are essential for achieving the objectives of sustainable development.

Understanding of science practices and processes is essential to engage with many of the issues confronting society. Even for pupils not considering science as a choice in higher education, the ability to reach evidence based decisions is important in all areas of life. Yet in recent times fewer young people have opted to study science subjects (High Level Group on Science Education). There is a clear need for new ways to re-imagine science education. The 2008 report by the Nuffield Foundation called Science Education in Europe stressed that 'more attempts at innovative curricula and ways of organising the teaching of science that addresses the issue of low student motivation are required.' The recent report produced for the EU Directorate General on Research, Science, Economy and Society argued that a 'reversal of school science teaching pedagogy from mainly deductive to inquiry based methods was more likely to increase pupils interest and attainment while at the same time stimulating teacher motivation.' RWL supports new and innovative ways of teaching science, and promoting these to outdoor learning centres. As such, RWL contributes to encouraging more pupils to study science and reach EU targets on science literacy (EU target of reducing low achievement in science to significantly under 15%).

Finally, RWL addresses elements of the Comenius policy context, namely 'education for respect of the environment and of intercultural competencies should be enhanced as well.' It also supports 'finding ways to enhance the teaching and learning of transversal key competencies that foster initiative and entrepreneurship, creativity, innovation and adaption to the rapidly changing world of work.'

