

## **Towards a workable set of educator competences in education for sustainable development: the RSP project**

*Education for sustainable development (ESD) is becoming more important in school curricula globally. To work effectively on ESD teachers need appropriate skills, knowledge and experiences. Existing competence frameworks for ESD (e.g. UNECE 2011) have proved to be too complex to put into practice. A revised, accessible set of competences is presented in this article.*

### **Introduction – our rationale**

In 2015 UNESCO launched the Global Action Program (GAP) on ESD linked to the 17 Sustainable Development Goals (<https://en.unesco.org/gap>). The 'Education for All' and the 'Education for Sustainable Development' agendas came together in Sustainable Development Goal 4, '*Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*'. Under SDG 4 there is, of course, a specific reference to ESD in target 4.7: "*By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development...*" As stated by the International Network of Teacher Education Institutions (INTEI), ESD is essential for achieving not only SDG 4, but also all of the other 16 SDGs. All work related to education, public awareness, understanding and training should contribute to making progress towards all of the SDG's (INTEI 2018).

### **Developing teacher competences in ESD**

Some years before launching the GAP, models for teacher competences that supported ESD had been published. Probably the best known is that of the United Nations Economic Commission for Europe (UNECE 2011). This model presents 39 competences in a 3x4 matrix with the three columns headed: Holistic Approach, Envisioning Change, Achieving Transformation. The four rows are based on the Delors publication, *Learning the Treasure Within* (UNESCO 1996) and are entitled: Learning to know, Learning to do, Learning to be and Learning to live together.

The UNECE competences, although clearly defined and well underpinned, are not easily put into practice. Three reasons for this being: there are so many of them; some are rather abstract; they are not all applicable to every teaching context. One reason for this may be that there was no opportunity test the competences in practice before they were published; as a result, they cannot be readily implemented. Similarly, another well-articulated model, (Sleurs 2008), is simply too complex for application in most settings. For teachers already facing a heavy workload, time for additional experimentation and translation into practice is simply not available. Since 2012 several attempts have been made, for example under the UE4SD project (<https://platform.ue4sd.eu/>).

The challenges listed above were faced in practice by lecturers of ESD, coordinators of sustainable development at teacher education institutions (TEIs) and promoters of ESD, e.g. the Dutch NGO, 'Duurzame PABO' ('Sustainable TEI'). Attempts to overcome these challenges were met with frequent requests from colleagues and students for simplification such as, "*Please can you summarize and simplify this on one side of A4?*" So, it was that the competences were debated in many meetings with TEI colleagues (e.g. Toronto 2011,

Nagoya 2015); and several meetings of the Learning Teacher Network (e.g. Lissabon 2012 and Istanbul 2014).

In the Netherlands, Duurzame PABO published a translation of the UNECE competences for primary school teachers and teacher education students (De Hamer & Leussink, 2012). The translations were specific to the teaching profession and were provided with relevant practical examples. Still, the teacher comments remained: 'too complex, too many competences'.

### **Towards a revised set of ESD competences: the RSP project**

In the Erasmus+ project 'a Rounder Sense of Purpose', six partner organisations, the University of Gloucestershire (UK), Frederick University (Cyprus), the Hungarian Research Teachers' Association (Hungary), the Italian Association for Sustainability Science (Italy), Duurzame PABO (The Netherlands) and Tallinn University (Estonia) have been cooperating in order to seek solutions for the challenges mentioned above. The three-year project comes to an end in 2018.

The starting point for thinking of the project team was the UNECE (2011) competence framework. Niko Roorda, who developed the *RESFIA+D* competence model (Roorda 2012), shared his expertise at several early meetings and other competence models were discussed such as that developed at Arizona State University (Weik *et al* 2011) as the project team worked its way towards the final outcome of twelve draft competences. Once agreement on the framework was achieved, the project moved to the testing phase. This article covers just one of the approaches taken by the Dutch partner, Duurzame PABO.

### **Delphi research among peers**

In The Netherlands the testing was done using a Delphi-research procedure (Van Aken e.a., 2011), in which individual contributions are shared among participants in order to evaluate the results and formulate next steps. This was done until the diverse participant's results lead to a level of consensus.

In the first stage of this Delphi research project partners discussed the concept of the twelve competences with experts in the field, mostly lecturers, managers and coordinators. This was done on several occasions and *content*, *comprehensibility* and *applicability* were all major issues.

An added complication was that the competences were originally drafted in English so they had to be translated, which can lead to subtle differences in interpretation and meaning. This was unavoidable and was considered acceptable provided the result reflected the spirit of the original text and that the competences remained usable. The results were discussed over two rounds of engagement leading to adjustments in the competence statements, guidelines, levels and assessments.

### **Delphi research among students**

In the second stage of testing the draft RSP competences were used with students in the final year of their TEI study. After presenting the competences and discussing it, students

worked on activities to improve specific competences by themselves with the support of their peers. During these lectures the competences were discussed again. The results of these sessions were discussed among the project team. The Delphi research led to improvement of the text (clarification), adjustments to make the text easier to understand (simplification) and highlighted the very important notion that schools, institutes and nations differ. Therefore the procedures, guidelines and assessment strategies had to avoid being too context specific.

### **The final draft**

The resulting framework (Fig. 1) is further sub-divided into learning outcomes (available on the project website) but it was decided not to break this down further into skills, values, knowledge, etc. for two reasons. Firstly, this would atomise learning into discreet components that appear meaningless in the context of sustainable development and undermines the notion of holistic thinking that underpins ESD; secondly, there is no Europe-wide agreed format for such qualifications, rather each national qualification framework uses its own template for itemising assessable learning outcomes, therefore defining the award at this level of detail would make it more difficult to apply across Europe.

Rather than giving a detailed breakdown of attributes, this framework provides twelve sets of underpinning components linked to the learning outcomes of each competence. The RSP website ([aroundsenseofpurpose.eu](http://aroundsenseofpurpose.eu)) also provides a growing number of suggested and tested training activities that will help to develop the underpinning components and learning outcomes of each competence. Many of these activities have been developed by teacher education students.

The RSP competences can be applied to various International Standard Classification of Education (ISCED) levels. RSP partners have already tested programmes from Levels 4 (first year undergraduate) to 7 (Masters). At any given level there are three stages, which might be defined as 'degrees of engagement and development'. The first of these *stages* is simply an acceptable level of participation in any given training programme related to the framework, the second stage requires a demonstration of some practical application of the competences while the third stage calls for an effort to facilitate change in others or within one's work setting.

In order to make the set understandable at a glance, a 'simplified' set, based on the final concept has been drafted in English and Dutch (Fig 2) in which acceptability, comprehensibility and applicability are seen as critical. In this version, getting the process of ESD started, or moved to a higher level within individuals and institutes is given priority over precise scientific terminology.

The final result (Figs. 1 and 2) are shown below together with the broad assessment criteria (Fig. 3) that may well be used as a self-assessment instrument in many settings.

### **Ways forward**

Now that the competences have been proven to be useful and workable, the next challenge is dissemination, i.e. integrating the framework into the curricula of as many TEI's as possible around Europe and beyond. To this end the RSP partners are attending conferences, school

meetings, national level meetings and international gatherings including the OECD and a return to UNECE. Partners and supporters are also preparing publications, websites and taking every opportunity to have the competences discussed and considered seriously in as many contexts as possible. We hope you will share in this vital work.

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<b>Thinking Holistically</b>	<b>Envisioning Change</b>	<b>Achieving Transformation</b>
<i>Integration:</i>		
<p><b>Systems</b></p> <p>The educator conveys an understanding of the world as an interconnected whole; they help learners look for connections across human and natural worlds and consider the consequences of our actions.</p>	<p><b>Futures</b></p> <p>The educator uses a range of techniques to help learners to explore alternative possibilities for the future and go on to consider how our behaviours might need to change.</p>	<p><b>Participation</b></p> <p>The educator contributes towards changes in education that will help sustainable development.</p>
<i>Involvement:</i>		
<p><b>Attentiveness</b></p> <p>The educator alerts learners to fundamentally unsustainable aspects of our society and the way it is developing and conveys the urgent need for change.</p>	<p><b>Empathy</b></p> <p>The educator is considerate of the emotional impact of the learning process on their learners</p>	<p><b>Engagement</b></p> <p>The educator works in a committed manner, based on personal beliefs and values and encourages their learners to do the same.</p>
<i>Practice:</i>		
<p><b>Transdisciplinarity</b></p> <p>The educator acts collaboratively both within and outside of their own discipline, role, perspectives and values and encourages their learners to do the same.</p>	<p><b>Innovation</b></p> <p>The educator takes an innovative and creative approach using real world contexts wherever possible</p>	<p><b>Agency</b></p> <p>The educator focuses on the development of learners' critical thinking skills and helps them to become active members of society.</p>
<i>Reflection:</i>		
<p><b>Evaluation</b></p> <p>The educator helps learners to critically evaluate the relevance and reliability of assertions, sources, models and theories.</p>	<p><b>Responsibility</b></p> <p>The educator acts transparently and accepts personal responsibility for their work.</p>	<p><b>Decisiveness</b></p> <p>The educator encourages learners to act in a cautious and timely manner even in situations of uncertainty.</p>

Fig. 1: RSP Competences: Standard version

<i>Understanding connections</i>	<i>Making change positive</i>	<i>Making change happen</i>
<i>Integration:</i>		
<b>Systems...</b> I understand and help learners to see that everything is connected, that in some way, everything we do has a result somewhere, which in turn has an impact for how we live together.	<b>Futures...</b> I can describe, and can help learners imagine, different possibilities for the future; I help learners to describe the consequences of these futures for different people.	<b>Participate...</b> I collaborate with others in my work to improve opportunities for people to live and learn together in different ways; I encourage learners to do likewise.
<i>Involvement:</i>		
<b>Awareness...</b> I can discuss and encourage learners to research real life issues that affect us all and discover ways in which they can be improved; I share the importance of the need for such improvements.	<b>Empathy...</b> I can see situations as others see them and can help learners to put themselves 'in other people's shoes'; I understand that learning is affected by our emotion and share this understanding with others.	<b>Engaged...</b> I work from 'who I am, as an authentic person' and recognise my values; I encourage others to do the same and recognise the values held by others.
<i>Practice:</i>		
<b>Together...</b> I work together with people from different backgrounds and walks of life to help us learn to live together and I encourage learners to do the same.	<b>Change...</b> I consider new ideas carefully while learning from the past and I help learners to do the same when considering ways of improving their society, the environment and the economy.	<b>Action...</b> I am, and help learners to be, active in society; I help learners to learn and grow in confidence by getting involved in meaningful, real world issues in our community.
<i>Reflection:</i>		
<b>Check...</b> I think critically and encourage learners to do the same, to ask why things are as they are, to check sources, statements etc. and recognise that there is more than one side to every story.	<b>Responsible...</b> I work in a way that everybody can see and understand what I am doing; I feel personally responsible for my work and help learners to be the same.	<b>Decisive...</b> I act and encourage learners to act decisively and in good time, even when faced with dilemmas or other situations of uncertainty.

Fig. 2: RSP Competences: Simplified version

<b>0</b> I don't do anything with this.
<b>1</b> <i>Classroom teacher</i> : I work as much as possible with these competences in my own classroom.
<b>2</b> <i>Inspiring colleague</i> : 1 + I work on these competences in a team, with colleagues.
<b>3</b> <i>School innovator</i> : 1 + 2 + I am the initiator and stimulator of school/educational change; I bring in new plans and ideas based on the competences and I take care of implementation of these throughout the school and –if possible- beyond.

**Stages used in The Netherlands**

<b>Stage 1</b>	Participation in a given programme
<b>Stage 2</b>	Demonstrate engagement with each of the competences in practice.
<b>Stage 3</b>	Show either: a) How you have brought about change in others and/or in a place of work b) A series of critical reflections on the ESD competence framework.

**Stages used in England**

Fig. 3: RSP Stages of (self)assessment