

## Real World Learning: a critical analysis

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### Abstract

This paper analyzes the so called “Hand model”, invented as a part of the international The Real World learning project. The aim of the model was to provide guidance for outdoor environmental education programs. It is suggested in the analysis that the model suffers from inconsistency in its efforts to establish quality criteria consistent with self-directed, emancipatory learning, and its instrumental ambition to promote behavioral change. On the other hand, the model provides a new point of view on outdoor environmental education programs, namely on the values and frames communicated by the programs.

### Key words

Outdoor education, environmental education, quality, values, behavior change

### Abstrakt

Článek analyzuje tzv. „model ruky“, který byl vytvořen jako součást mezinárodního projektu Real World Learning (Učení se ve skutečném světě). Cílem modelu bylo nabídnout zásady pro zpracování programů outdoorové environmentální výchovy. Provedená analýza dokládá, že model trpí jistou nekonzistencí mezi snahou vymezit kritéria kvality podporující emancipační, žáky řízené učení, a svou instrumentální ambicí rozvíjet odpovědné environmentální chování. Na druhé straně model nabízí nový pohled na programy outdoorové environmentální výchovy, především na problematiku hodnot a rámců komunikovaných programy.

### Klíčová slova

Outdoorové vzdělávání, environmentální výchova, kvalita, hodnoty, změna chování

## Introduction

Although no other discipline is as close to environmental education as outdoor education, there is also a long-term tension between the two of them (Thomas, 2005). Looking back at the roots of outdoor education, it can be interpreted as one of the antecedents of environmental education and which merged with nature studies in the late 19<sup>th</sup> century (Adkins & Simmons, 2002). A plethora of studies have provided evidence of the positive impacts of outdoor programs on environmental sensitivity, attitudes, and awareness (Rickinson et al., 2004; Thomas, 2005).

However, it is also clear that outdoor education has its own foci and professional community (Adkins, & Simmons, 2002). Often, outdoor education programs focus mainly on personal or social skills development, while the environmental agenda is limited. As Kellert (1998) demonstrated in his comparative evaluation of three different outdoor programs, differences in the way nature is framed in the programs may influence their possible outcomes on environmental attitudes. When a program highlights personal growth, nature may be framed as a kind of playground, a source of challenges that should be surpassed. As a result, such programs could be highly effective in stimulating personal capacity but have no effect on people's environmental awareness.

The importance of overcoming tension has been stated by a number of scholars. Priest (1986) suggested reframing the concept of outdoor education with the tree metaphor, when two major branches grow from the main trunk (outdoor education). One of them, adventure education, focuses on intrapersonal and interpersonal relationships, while the other, environmental education, on ecosystemic and ekistic relationships. However, his concept contradicts the interpretation of outdoor education as a close but different field with respect to environmental education, which is more common in the environmental education movement (Adkins, & Simmons, 2002; Disinger, 2005).

Another approach is presented by Nicol (2003), who suggested the concept of "outdoor environmental education", a kind of outdoor education "delivering outcomes relating to sustainability education, sustainable living or environmental education" (p. 24). This kind of outdoor education should contain a combination of four types of learning: experiential, presentational, propositional, and practical.

The concept of merging outdoor and environmental education is sometimes based on cultural traditions. The Nordic concept of "friluftsliv", traditional nature-based outdoor recreation, is associated with shaping a personal life-style in a deep, multi-faceted way, including developing personal environmental connectedness (Beery, 2012). In this concept, "going outside" has traditionally been considered in Sweden as having both instrumental (as a method for developing bodily and mental health) and intrinsic (in the contact with nature) value (Sandell, & Öhman, 2010). The borders between both fields also merge in further free-choice educational movements, like Scouting or Woodcraft. As an example, in the set of guidelines for Czech scouting leaders we can find special guidelines for outdoor environmental education (Klapste-Hribek, Ruzicka, Zeisek, Dvorakova, Slechtova, & Sedlbauer, 2008). The aim of The Real World Learning international project was to find common ground between both disciplines. The goal of this paper is to briefly introduce the project and then to analyze its main output, a model of quality criteria for outdoor environmental education programs.

## The Real World Learning Project

The aim of the project was to establish a network to “explore and share successful approaches to Real World Learning through the outdoor classroom, which leads to action for sustainable development” (Real World Learning, 2015a). The network consists of seven non-governmental organizations that usually represent national networks of centers focused on environmental or outdoor education. Besides the founding organizations from the United Kingdom, Germany, Italy, the Czech Republic, Hungary, and Slovenia, there are also more than thirty other partners, including non-governmental centers and universities from Nigeria, Latvia, Netherlands, Poland, Spain, Turkey, and Croatia (Real World Learning, 2015b).



Image 1: Real World Learning Model (2015c).

The main output of this network has become the “Real World Learning Model” (also called the “Hand model”), published in late 2014, which defines what is supposed to be “a holistic and flexible approach to outdoor learning for sustainability” (Real World Learning, 2015c). According to this model, there should be five important elements in a sound outdoor environmental education program. All of them are symbolically framed as a hand, where each of its fingers and its palm represent different quality categories (see image 1).

The model was published as a result of a more than 2-year discussion between the project partners. It was highly influenced by both the practical experience of the project partners and research-based knowledge discussed with university scholars involved in the project.

As one of the scholars who has been asked for feedback and elaboration of some of the model's elements, I must admit that my position is not completely neutral, even if I did not take a full part in the project. Because of this, I would like to encourage readers to take this paper as just one of the possible perspectives aimed at initiating an in-depth discussion of the theoretical assumptions behind the model and to provoke further analysis of its elements.

## Model analysis

### Introduction

If we analyze the model as a whole, we can find an interesting contradiction in the way it expresses its aim. In the introduction, it is suggested that the model tries to help in preparing a deeper and more meaningful learning experience in outdoor environmental education programs (Real World Learning, 2015c). This rhetoric, highlighting the word “experience”, might be interpreted as an effort to provide a set of quality criteria, independent of any particular outdoor environmental education program (OEP) goals. However, the model also seems to be influenced by another perspective, calling for effectiveness in providing behavioral modification towards sustainability. According to the Project report, “behavioral change is the key goal” (Real World Learning, 2013: 7). In the same way, the project partners’ ambition to provide programs promoting behavioral change appears to be one of the aims of the project.

It might be assumed that the project team was influenced by two competing paradigms in the field of environmental education. According to the first, the ultimate aim of environmental education is behavior modification (Hungerford, & Volk, 1990). To achieve this, programs should be designed on the basis of sound behavioral change theory, such as Stern’s (2000), Ajzen’s (1991) or other models. From this perspective, a program might be seen as a logical chain of casual links between activities and outcomes, when the measure of its quality is its effectiveness in achieving a pre-determined set of goals.

According to the second perspective, moving students towards a pre-determined set of behavioral goals contradicts the democratic nature of education (Jensen, & Schnack, 1997; Wals, 2010). Rather than a pre-determined program theory, teachers should focus on establishing conditions for quality learning when the quality can be assessed with a set of indicators (Wals, 2010).

By providing a set of quality categories, rather than recommending any particularly causal links between goals and means, the Hand model seems to fit better with the second environmental education paradigm. However, its implicit ambition to promote behavioral

change opens it up to an internal inconsistency. This can be made evident if we investigate its inner elements in more detail.

## Understanding

The “little finger” of the Hand model is called Understanding. This category suggests that it provides “a sort of scientific understanding that we need to help develop thinking action for sustainability” (Real World Learning, 2015d). Such an understanding is synthesized in four ecological principles, i.e. cycles, change, stability, and energy flow (Real World Learning, 2015d).

The role of ecological knowledge can be seen as one of the on-going themes of environmental education. This category seems to assume a causal link between this kind of knowledge and pro-environmental behavior. However, such a theory is questionable as responsible behavior is supposed to be developed as a result of many interconnected variables and no particular set of knowledge has been identified as more important than others (Hungerford, & Volk, 1990; Bamberg, & Möser, 2007; Heimlich, & Ardoin, 2008). Paradoxically, based on the considerably more important roles of environmental sensitivity or emotional affinity with nature in environmental behavior models we can suggest that an emotionally-oriented environmental education program may have greater impact on participants’ behavior than a program designed according to the Hand model.

It may also be mentioned that the model presents knowledge as scientific “truth”. However, such a positivistic assumption is just one of the possible perspectives as the ecological concepts may be also seen as socially constructed and sometimes ill-defined (Dreyfus, Wals, & Wellie, 1999).

It seems to be reasonable to suppose that the Hand model was influenced by the original, nature-studies tradition existing in both the outdoor and environmental education fields and that this focus was seen as crucial for some of the organizations which cooperated in its design. As a result, the model represents one of the possible points of view on the role of ecological knowledge in environmental education, while neglecting others.

## Transferability

The second category, transferability, represented by the ‘ring’ finger, calls for involving different areas of life in OEP. The model assumes that “when different areas of life are involved in a learning process, it increases the possibility the learners will then act in respect ...our vision is that through examples or discussion it would be possible to get the learners thinking about transferring what they have learned to another context” (Real World Learning, 2015e). Because of this, the model recommends linking different areas of life in the program, including self, the natural world, local community, and global society.

These assumptions are hard to contradict, even though it is also difficult to find empirical support for such a claim. The involvement of different areas in the learning process is also recommended by other authors (Eilam, & Trop, 2010), while the theory of inter-contextual transfer is still a matter of investigation (Priest, & Gass, 2005; Sibthorp, Furman, Paisley, Gookin, & Schumann, 2011; Mughal, & Zafar, 2011).

## Experience

The middle finger stands for Experience and it highlights the importance of providing learners with experience in order to be in touch with outdoor settings (Real World Learning, 2015f).

The model gives four reasons for providing experiential learning:

- because direct experience is crucial for developing environmental sensitivity,
- because it promotes general well-being and health,
- because learning real-life phenomena in direct outdoor settings is sensually rich and promotes deep understanding, and because
- it is effective for developing action competence (Real World Learning, 2015f).

As I originally reviewed this part of the model and helped to formulate some of its rationale, I must leave this area to other, more independent reviewers. No doubt all of the assumptions mentioned above might be the subject of thorough scrutiny.

### Empowerment

The index finger is for Empowerment. This category points out the uncertainty of the competence needed by the future world, and because of this it defines a comprehensive set of competences that should be promoted by OEP, organized into a few “ripples”: interconnectedness, creativity and flexibility, cooperation, participation, learning in a self-directed way, dealing with emotions, reflective and critical thinking, and taking ownership for the learner’s own learning. The set is linked to an existing list of competences recommended by UNESCO, OECD, the European Union, and other international organizations. Moreover, the list was prepared during the process of interviewing experts and outdoor professionals through workshops and conferences (Real World Learning, 2015g).

The competence approach clearly corresponds with the pluralistic, emancipatory approach which is critical of the behavioral change oriented paradigm (Jensen, & Schnack, 1997; Wals, 2010). In light of this, this part of the Hand model may contradict its other elements, namely Understanding. The clash between the content-oriented and the competence-oriented approach means that the model defines what should be taught when it calls for learning directed by learners themselves.

### Values and frames

The thumb calls for the promotion of self-transcendent values in OBE (Real World Learning, 2015h). The Hand model relates to Schwartz’s (1994) theory postulating a set of universally shared values divided into a few basic categories. On this basis, the Hand model establishes a link between promoting so-called self-transcendent values (e.g. universalism and benevolence) and pro-environmental behavior (Real World Learning, 2015i).

The way to promote self-transcendent values is expressed by the last category of the Hand model, Frames, encapsulating all the previous categories with its metaphorical connection to the palm (Real World Learning, 2015j). In the model, both categories are presented very close to each other as they are based on the research work of the non-profit research organization The Common Cause Foundation (2015). According to this, the way in which environmental messages are communicated is associated with a set of memories, emotions, and values that are called “frames”. In the Hand model, frames should help teachers and learners to shape the learning process, and provide “a deeper meaning for the learner, revealing single facts as parts of a bigger story” (Real World Learning, 2015j, k). Because frames evoke various sets of values, the model calls for choosing such frames that

promote self-transcendent values, rather than hedonism, power, achievement, etc. (Crompton, 2010; Rea World Learning, 2015k).

It should be mentioned that the concept of frames is well known in environmental communication theory (Cox, 2012), and the original research of The Common Cause Foundation (and WWF) focused on an analysis of the frames communicated by British conservation organizations (Crompton, 2010). The idea of integration of the whole educational program around a central message is not a new one in environmental education and might be traced to a broad variety of different approaches, including thematic interpretation (Ham, 1992), integrated thematic instruction (Kovalik, & Olsen, 1994), the 4MAT model (McCarthy, 1990) and other approaches applying a "big concept" as a central point of a curriculum. Regardless, the concept of values and frames presents a new (and still unproven) point of view on OEP.

In the same way, the concept opens up an area for further questioning. There are two possible rationales for its application in practice: instrumental and intrinsic. Surprisingly, the Hand model explains the reasons for "values and frames" in an instrumental way: as a means for promoting pro-environmental behavior and avoiding the opposite. Such a claim is difficult to sustain when no research investigating these concepts in the field of environmental education has been done and its central theoretical support, Schwartz's norm activation theory, presents only one of several competing behavioral change theories which do not regard human environmental behavior as the strongest by way of explanation (Bamberg, & Schmidt, 2003).

Regardless of the aims to modify human behavior by "good" frames, we might assume that communicating self-transcendent values is an intrinsically good way for OEP, as we may feel it is more moral to promote benevolence, tolerance, or empathy, than greed, narrow-mindedness, and egoism.

In light of this, we can find both interconnected categories challenging and inspiring, both in their research and in practice.

## Discussion

It might seem that the model is stretched between the quality based / emancipatory and behavioral change / instrumental approach, which causes inconsistency between its specific elements, means, and rationale. It also might be said that the model chooses some of the options in the field and promotes them as quality categories while ignoring others. Furthermore, some of the claims are not adequately based on research, and so competing and unspoken theories are in play.

To overcome these shortcomings, the model might be made more consistent with the emancipatory approach that seems to be more suitable with its prevailing logic. In practice, it means stepping back from its ambition to identify strategy for behavioral change in favor of providing model guidelines for quality outdoor environmental education. Such a recommendation is not based on my belief that the emancipatory approach is necessarily better than the instrumental one (as I believe they complement each other). However, such a change would increase the model's internal consistency. There are many different models in the landscape of outdoor, sustainable, and environmental education, and challenge and enrich each other. For the promotion of such diversity, no perfect or catch-all model can really exist. Neither can the Hand model play such a role and it would be more beneficial to draw fully from one paradigm and not partially from both.

Besides removing instrumental rhetoric, I would consider re-elaborating the Understanding finger. Although it is not necessary to avoid any content specification in the emancipatory approach (Wals, 1999), such a specification might be broader and more open to different perspectives. Such a recommendation does not imply that the positivistic approach in science education is out-of-date, but it is meant to express the fact that a) other content areas important for outdoor environmental education not mentioned here have the same importance (e.g. environmental sensitivity), and b) non-positivistic perspectives may be more consistent with the rest of the model and it would be worth supporting them in the model.

Although the analysis focused mainly on the Hand model as a construct, it should be mentioned that it is the implementation which is crucial for influencing outdoor environmental education practice. Considering the emancipatory features of the model, it calls for teachers to respect an indirect way of teaching without predetermined fixed content, and to be open to providing their students with the opportunity for shaping their own learning. Regardless of any possible discussions with respect to when such an approach is (or is not) appropriate, communication of what it does (not) mean in terms of empowering students will likely face misinterpretations based in the deeply rooted belief in the dominant role of the teacher. Such a misinterpretation was documented in the field of environmental education in formal settings (Cincera, & Kovacikova, 2014). However, it may be in play even in less formal outdoor education, considering some of the leaders ("instructors") interpret outdoor programs as "pieces of art" controlled by "chief-instructors" (Valenta, 2010), even if adjusted to participants' needs (Martin, Leberman, & Neill, 2002). To sum up, to be properly implemented, the Hand model needs teachers who are familiar with its associated concepts and open to sharing their power with students, at least in a mixture of instrumental and emancipatory strategies (Wals, Geerling-Eijff, Hubeek, van der Kroon, & Vader, 2008). It may call for additional examples, training courses, online platforms, or other ways of promoting an appropriate interpretation of the Hand model in the real world educational environment.

This criticism is not meant to reject the model that provides a useful guide for outdoor environmental education practice. Definitely, the admirable efforts of the whole project team are worth popularizing and studying in both the outdoor and environmental education discourse. In the same way, the model should be interpreted as just one of the possible models that guide practice and its underlying assumptions are still to be investigated by further studies.

## Conclusion

The paper analyzed the model aimed at providing common ground for programs that merge the fields of outdoor and environmental education. It could be summarized that the model provides a set of quality categories for OEP that are supported by some of the existing theories and that might be useful for OEP practice. In addition, the model provides a new point of view on the theory and practice of OEP by highlighting the importance of self-transcendent values and associated frames.

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