

Defining Environmental Communication – a Practical Model

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Abstract

Definitions of environmental communication are still rare. Existing definitions are usually rather broad and hardly applicable for practical or research contexts. Environmental communication in this article is considered to be an applied science in the context of environmental politics.

The following article defines environmental communication from a semantic point of view and introduces a practical model of environmental communication with references to environmental education (formal, non-formal and informal), environmental marketing, eco-counselling, educational eco-counselling and environmental journalism. These fields of activity in environmental communication are embedded in environmental communication research.

The supposed overall goal of environmental communication is to help people live more environmentally friendly and to help individuals and groups begin a self-directed, lifelong learning process. The first goal, to help make life more environmentally friendly, is truly motivated by the specification “environmental”. The second goal, supporting self-directed learning, can be considered to be universal in the discussion about different categories of learning and/or education.

The model presented is intended to add to the general discussion on diverse learning strategies.

Keywords: model of environmental communication, environmental communication, formal/non-formal/informal environmental education, environmental marketing, eco-counselling, educational eco-counselling, environmental journalism, learning strategies, learning categories

Introduction

Present models and definitions for environmental communication are rather general and broad. Without empirical support for this conclusion, the following definition seems representative:

We define environmental communication as the communication of environmental messages to audiences by all means and through all channels. Environmental communication may be considered a process which involves both communicators and audiences and is achieved through effective message delivery, interactive listening, and public discussion and debate. We envision such communication as the foundation for establishing relationships between people and the environment and as a means for enhancing environmental literacy and sustainable environmental practices

(ECRC 2005).

It is suggested that such definitions or descriptions of environmental communication are neither helpful in theory, nor in practice. While the overall goal of environmental communication is formulated, the approaches that may help to achieve those goals are not specified. For example, from a transaction analyst's point of view, this could lead to confusion concerning terminology or methodology and in the end lead to activism characterized by action with very little outcome.

Semantic derivation

For the purpose of the model presented in this article the term environmental communication was derived semantically. First of all, environmental communication is considered to be a *generic term for various fields of activity* for these reasons:

1. The word "environment" comes from the French word "environ" which means "to surround" with the impression of "surroundings", "country around" or "neighbourhood". It is suggested that such a term is rather general.
2. The word "communication" is derived from the Latin word "communicare" which means "to communicate", or in other words, "to

impart news, information or knowledge". Again, this is rather general.

3. Thus, the term environmental communication *could* simply mean all kinds of news or information about everything surrounding us. I would like to suggest that this is how the term is often used and that, as seen in the given example above, it is insufficient.

If we now consider the semantic change the terms "environment" and "environmental" have undergone, at least in the perception of the industrialized western societies since the 1960s, then it seems plausible to suggest that environmental communication can be considered to be communication about environmental *problems* or environmental *protection*. In English, the ecological significance of the word "environment" was first recorded in 1956 and of the word "environmentalist" in 1970 (OE 2005).

Similar semantic derivations can be made in other languages, see for example, the German word "Umweltkommunikation" (Terolog 2005). "Umwelt" means environment, which comes from the Danish "omverden" and meant, until the 1960's, "the surrounding world/land". "Kommunikation" obviously means communication and has the same semantic roots as the English term.

So, it was only during the 1960s when terms like "environment" became popular in their respective languages. When we talk about environmental communication we are actually talking about *environmental problem/ protection communication*.

The term environmental communication, being attached to social connotations like environmental *problem* or environmental *protection*, needs to be seen in the context of environmental politics of which communication, though very important, is just *one* part (see figure 1).

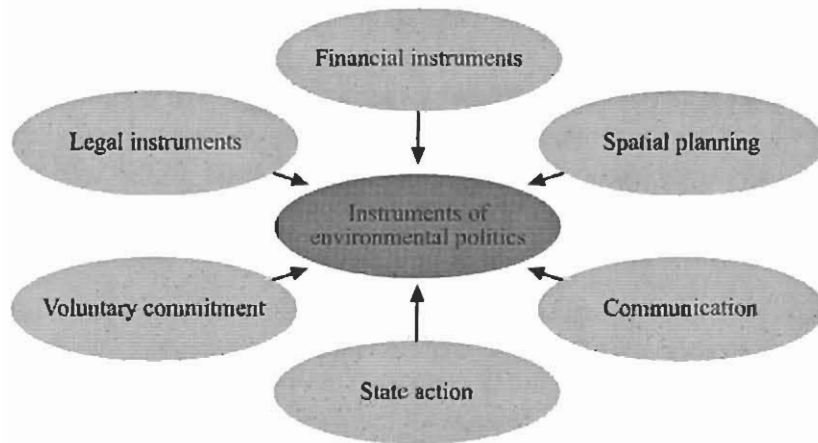


Figure 1. Environmental communication in the context of environmental politics (Zimmermann 1995).

Environmental communication is an applied science that depends very much on *how* it is applied. It therefore contains, references to sociology, various fields of psychology (social, cognitive and mass), information theory and system theory. Environmental communication research is basically about good communication where the objectives are sustainable environments based on healthy eco-systems.

The model

The following model of environmental communication is split into various fields of communicational activity and shows how these fields interconnect (see figure 2). The overall goal of environmental communication (see middle of model, figure 2) is assumed to be:

- a. to help individuals, groups and societies live more environmentally friendly
- b. to help individuals start their own self-directed, life-long learning process.

We will work clockwise in describing the model, starting at the bottom, with the rather traditional field of environmental education.

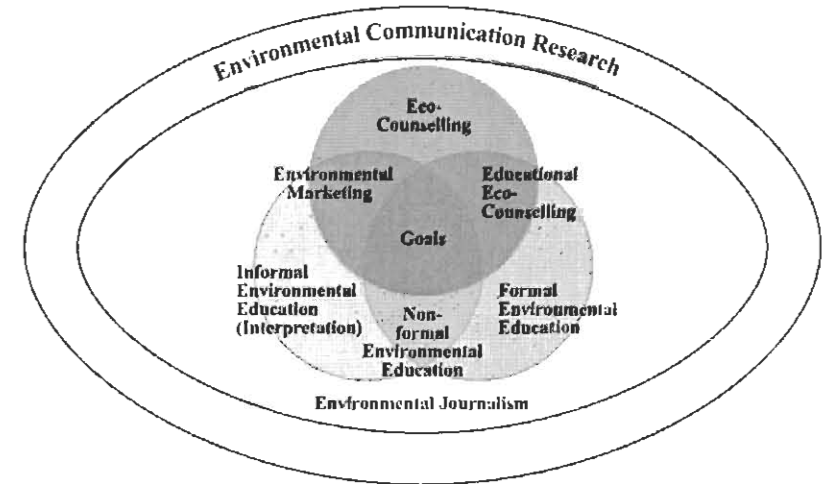


Figure 2. Model of environmental communication.

The tripartite categorization of education

The idea here, of breaking down education and/or learning into three distinct fields of activity (formal/non-formal/informal education/learning), is similar to approaches usually found in other literature, as formal education alone is considered to be insufficient. It began in the 1960s, when a discussion was started concerning the educational crisis at that time (see Coombs 1968).

The conclusion was that formal educational systems had adapted too slowly to the socio-economic changes around them and that they were held back not only by their own conservatism, but also by the inertia of societies themselves. If we also accept that educational policy making tends to follow rather than lead other social trends, then it followed that change would have to come not merely from within formal schooling, but from the wider society and from other sectors within it. It was from this point of departure that (...) a distinction between informal, non-formal and formal education was made

(Fordham 1993, 2).

Around the same time this tripartite categorization of learning systems was also used by UNESCO (1972). The idea was to reach for the overall goal of lifelong education and learning societies.

Formal, non-formal and informal education

So far definitions on formal and non-formal education are rather similar. According to Torres (1990), "formal education comprised 'regular school and university education'; non-formal education comprised 'out-of-school and continuing education, on the job training, etc.'".

On the other hand the term informal education still rejects a more or less agreed upon definition which might be due to the rather broad definitions that were set forward at the beginning of the discussion. Take for example, Coombs, Prosser and Ahmed (1973) who defined informal education as a *truly lifelong process whereby every individual acquires attitudes, values, skills and knowledge from daily experience and the educative influences and resources in his or her environment—from family and neighbours, from work and play, from the market place, the library and the mass media.*

Such broad descriptions of informal education probably contributed to a still confusing conception or very broad idea of what informal education is and how it can be supported (as an example for Germany, see Dohmen 2001; for the European Union, see European Commission 2001).

As stated by various authors the integrating element, in the discussion about the various facets of informal learning, might be to seriously consider the individuals' *intention* to learn (Evans 1981, Reischmann 1995, Overwien 2004, Straka 2004, based on Colardyn & Bjornavold 2004). In this context an adapted categorisation of learning settings, according to Evans (1981), may be considered helpful for the discussion (see table 1).

Evans (1981, 28) defines informal education as: "*learning that results from situations where either the learner or the source of information has a conscious intent of promoting learning—but not both.*" While the definitions for incidental, non-formal and formal education are rather straight forward, it is suggested that Evans's definition of informal education actually combines *nvo* definitions. For the purpose of a clearer understanding, these have here been divided into *informal* and *self-directed* education.

Unlike Evans, I am *not* suggesting that **self-directed learning** is part of informal learning. Self-directed learning is exactly that—self-directed. Thus it is not useful to set it apart as an educational learning strategy on its own although, as mentioned earlier, it is an overall goal useful in motivating and enabling self-directed learning strategies.

Table 1. Categories of educational settings (adapted and expanded by Evans 1981, 28).

Formal (school) education – located within institutions called schools, which are characterized by the use of age-graded classes of youth being taught a fixed curriculum by a cadre of certified teachers using (more or less standardized) pedagogical methods. (examples: most schools).

Non-formal (out-of-school) education – any non-school learning where both the source and the learner are consciously intent on promoting the learning process. (examples: on-the-job-training, also often used for various educational activities in so-called Third World countries).

Informal education – results from situations where the intent of the source is to consciously promote learning, whereas the learner may not have the same intent (examples: mission-driven leisure activities¹, social work).

Self-directed education – results from situations where the intent of the learner is to consciously promote learning, however the source may not have the same intent (examples: learning in environmental or social action movements, recreational activities that include learning).

Incidental education – learning which takes place although the source is neither conscious of attempting to present information, nor is there a conscious attempt to learn on the part of the learner (examples: dishwashing, individual crisis).

¹ In environmental communication the communicational activity of informal environmental education is often referred to as environmental "interpretation" which is a more philosophical term that refers to informal education offered in mission-driven places such as museums, protected areas, botanical gardens, planetariums, etc.

Similar arguments can be found concerning **incidental learning**. Either it is incidental or it is not. If an organisation tries to promote individual learning and the individual is not intent on learning then the learning will be either informal (intended by the source of information) or eventually self-directed (intended by the learner), but not incidental. Any other definition leads to a hidden formalisation of informal and especially of self-directed learning. Therefore it is also suggested that it is better to exclude incidental learning while discussing formal, non-formal and informal learning.

As a result, the model of environmental communication only comprises the formal, informal and non-formal educational learning strategies.

The overlap between formal and informal education is thus non-formal education. This is because on one hand it is formal, since the learners and the source of information know that learning is supposed to happen. On the other hand the learning process happens outside of traditional school settings, which applies to informal education. In other words, non-formal education is mainly a matter of *location*.

Environmental marketing

With reference to the overall goal of environmental communication as mentioned above, environmental marketing is about convincing certain target groups within the general public to behave more environmentally friendly and to begin with other forms of learning. Marketing instruments mostly have mass media character (advertisements, events, point-of-sale and public relations).

The mass media character of informal environmental education on one hand and of environmental marketing on the other hand explains the functional overlap between marketing and informal education. These two fields of activity have similar mass media functions (see table 2).

Table 2. Functions of mass media and informal education (adapted from McQuail 1987, 72ff).

Information	<ul style="list-style-type: none"> ◆ Finding out about relevant events and conditions in immediate surroundings, society and the world (...) ◆ Satisfying curiosity and general interest ◆ Learning, self-education ◆ Gaining a sense of security through knowledge
Personal identity	<ul style="list-style-type: none"> ◆ Finding reinforcement for personal values ◆ Finding models of behaviour ◆ Identifying with valued other ◆ Gaining insight into one's self
Integration and social interaction	<ul style="list-style-type: none"> ◆ Gaining insight into circumstances of others; social empathy ◆ Identifying with others and gaining a sense of belonging ◆ Finding a basis for conversation and social interaction ◆ Having a substitute for real-life companionship ◆ Helping to carry out social roles ◆ Enabling one to connect with family, friends and society
Entertainment	<ul style="list-style-type: none"> ◆ Escaping, or being diverted, from problems ◆ Relaxing ◆ Getting intrinsic cultural or aesthetic enjoyment ◆ Filling time ◆ Emotional release (...)

The overlap between marketing and counselling is because counselling partly depends on marketing activities (see below).

To sum up, we can see that both fields of activity, informal education and counselling, partly have similar functions and also depend on marketing activities. In other words, the overlap between informal education and counselling within the field of marketing is mainly a *methodological* one.

Eco-counselling

Eco-counselling is about helping individuals or groups to solve concrete (here: environmental) problems themselves, so-called "help to achieve self-help". This specialized field of activity in environmental communication is necessary because citizens of industrialized western countries nowadays are flooded with all sorts of information everyday:

1. We are faced with a multitude of marketing information.
2. At the same time we are embedded in an extreme amount of mobility options geographically and socially. First of all, historically considered, in most western countries we are free to go and/or live wherever we like (geographical mobility). Second, there are very few barriers in terms of our social mobility. For example, we can marry into another milieu and we can choose to take up any employment we desire, provided we full fill the cognitive and physical prerequisites. In other words, we are hardly restricted when it comes to our location or our place of employment. We can go wherever we want and we can choose our own profession. However, should we desire a change in milieu, job, etc. we usually need to gather a lot of information in order to orient ourselves in our new surroundings.

To summarize, we are faced with a historically unparalleled multitude of information

- a) because of the marketing activities of various companies
- b) because of our social and geographical mobility.

In this situation eco-counselling organisations try to get their extra environmental information out to certain target groups. To do so, focused activities are necessary. What we need are organisations that focus exclusively on the task of conveying problem-oriented environmental information to individuals or groups. Eco-counselling is not about general environmental issues like biodiversity, environmental concepts, environmental politics, etc. but about present-oriented, concrete, solution-oriented knowledge that is easily available and understandable. Eco-counselling needs an organised approach in

order to be able to supply the general public with the information necessary to change unsuitable environmental consumption patterns.

In order to be able to reach a wider audience, eco-counselling partly depends on marketing *methodology*, which explains the overlap between marketing and counselling (see above).

Founded in 1991 and located in Vienna, Austria, Eco-Counselling Europe aims at establishing a European-wide network of eco-counsellors. Besides this organisation there is no other international organisation that focuses exclusively on the task of information transfer concerning environmental consumption patterns.

Educational eco-counselling

Last but not least, counselling is set apart from education due to the *kind of knowledge* that is conveyed. Counselling-knowledge is about concrete, present-oriented problems (Ertelt & Schulz 1997), while educational knowledge is universal, future-oriented and meant to provide the learner with knowledge and attitudes to be able to cope with his or her life in general. Nevertheless, the kind of knowledge conveyed in environmental education, is often rather counselling-knowledge—concrete and present-oriented in order to deal with identified environmental problems.

Thus far there have been very few studies on the kind of educational knowledge that is conveyed in environmental education. This is considered to be crucial because the question; "what do we want our learners or participants to learn?", also touches the very heart of environmental education.

Take for example a qualitative study by Kozar & Leuthold (1994). They examined non-formal environmental education in Austria and their starting point was to clarify the kind of knowledge being transmitted. They distinguished environmental education as being:

- ◆ value education,
- ◆ eco-counselling and
- ◆ environmental enlightenment.

This distinction was very valuable for the evaluation process. Based on an extensive introduction into Kozar & Leuthold's perception of value educa-

tion, eco-counselling and environmental enlightenment, a major finding of their study was "that hardly anything labelled environmental education actually contains education" (Kozar & Leuthold 1994, 11). As a result of their study we can now speak of educational counselling (here: educational eco-counselling) as being about counselling-knowledge conveyed in educational settings. Examples for educational eco-counselling at schools are (see Rode 1997, 331):

- ◆ Energy: calculating the use of energy in school, discussing options to save energy
- ◆ Waste: recycling of materials, waste avoidance, introduction of environmentally friendly writing materials
- ◆ Water: investigating water saving potentials and devices
- ◆ Poisons and chemicals: treatment of chemicals during classes, types and uses of detergents
- ◆ Diet: investigating breakfast habits of teachers and pupils, introducing ecological products

Like Kozar and Leuthold, Rode was also able to show in his study that educational eco-counselling is popular among teachers.

Environmental journalism

Environmental journalism is part of the mass media system and therefore influences all of the communication activities mentioned so far. Environmental journalism activities contribute to an individual's ability to judge environmental incidents and topics in general (for example: oil-spills, nuclear power issues, traffic problems, etc.). Some authors suggest that journalism might be even more influential than education and counselling (e.g. Schleicher 1997). Since journalism affects us somewhat automatically in everyday life, it therefore embraces the other fields of activity as presented in the model.

Environmental communication research

Finally, environmental communication research embraces all of the communication activities mentioned above due to its scientific character. As already stated, environmental communication is considered to be an applied science, thus there is no real end or beginning to the research it involves. It all depends on the specific application. It can be applied or basic. The latter is theoretic research that aims at improving environmental communication in general without starting with an application-oriented goal.

Conclusion

The purpose of the model presented is to enrich the theoretical discussion and the practical use of environmental communication. Based on general fields of communication activity (formal, non-formal and informal education, marketing, counselling, etc.) the model has been specified for the environmental field.

It is assumed that the model will benefit the following three elements:

1. **Self-concept:** Strengthening self-conception of individuals and organisations who work in or with the field of environmental communication.
2. **Structure:** Representing a structured framework for communicating the need for and the methods of environmental communication towards the scientific community and towards potential private or public sponsors.
3. **Development:** Developing comprehensive concepts of environmental communication for various levels (e.g. countries, cities, organisations).

There remains, however a need for further research because of the often biased orientation of environmental communication on formal environmental education and because of the need to do a more detailed investigation on the interdependencies within the model.

References

- Colardyn, D. & Bjornavold, J. 2004. Validation of formal, non-formal and informal learning—policy and practices in EU member states. *European Journal of Education*. 39 (1), 69–89.
- Coombs, P. 1968. *The world educational crisis*. Oxford: University Press.
- Coombs, P. H., Prosser, C. & Ahmed, M. 1973. *New paths to learning for rural children and youth*. New York: International Council for Educational Development.
- Dohmen, G. 2001. *Das informelle Lernen. Die internationale Erschließung einer bisher vernachlässigten Grundform menschlichen Lernens für das lebenslange Lernen aller*. Bonn: BMBF.
- ECRC. 2005. *Environmental Communication Resource Center*. School of Communication, Northern Arizona University. Definition. 05.08.2005. <<http://www.nau.edu/~soc-p/ecrc/>>.
- Ertelt, B.-J. & Schulz, W. E. 1997. *Beratung in Bildung und Beruf – ein anwendungsorientiertes Lehrbuch*. Leonberg: Rosenberger Fachverlag.
- Europäische Kommission, Generaldirektion Bildung und Kultur, Generaldirektion Beschäftigung und Soziales. 2001. *Mitteilung der Kommission: Einen Europäischen Raum des Lebenslangen Lernens schaffen*. November 2001. Brussels: Commission of the European Communities.
- European Commission. 2001. Communication from the Commission—making a European area of lifelong learning a reality. 07.12.2005. <http://europa.eu.int/comm/education/policies/lll/life/communication/com_en.pdf>.
- Evans, D. R. 1981. *The planning of nonformal education*. Paris: UNESCO.
- Fordham, P. E. 1993. *Informal, non-formal and formal education programmes*. London: YMCA George Williams College.
- Kozar, G. & Leuthold, M. 1994. *Es grünt so grün – eine qualitative Untersuchung zur außerschulischen Umweltbildung in Österreich*. Wien: WUV-Univ.-Verl.
- McQuail, D. 1987. *Mass communication theory—an introduction*. 2nd ed. London: Sage.
- OE (*Online Etymology Dictionary*). 2005. Environment. 23.08.2005. <<http://www.etymonline.com/index.php?term=environment>>.
- Overwien, B. 2004. Internationale Sichtweisen auf „informelles Lernen“ am Übergang zum 21. Jahrhundert. In Otto, H. & Coelen, T. (eds.) *Ganztagsbildung in der Wissensgesellschaft*. Wiesbaden: Waxmann, 51–73.
- Reischmann, J. 1995. Lernen „en passant“ – die vergessene Dimension. *Grundlagen der Weiterbildung – Zeitschrift für Weiterbildung und Bildungspolitik im In- und Ausland* 6 (4), 200–204.

- Rode, H. 1997. Möglichkeiten schulischer Umweltberatung. In Michelsen, G.: *Umweltberatung – Grundlagen und Praxis*. Bonn: Economica Verlag, 330–338.
- Schleicher, K. 1997. Öffentliche und veröffentlichte Umweltwahrnehmung. In Schleicher, K. & Möller, C. (eds.) *Perspektivwechsel in der Umweltbildung*. Hamburg: Krämer, 23–24.
- Straka, G. A. 2004. *Informal learning—genealogy, concepts, antagonisms and questions*. Institut Technik + Bildung (ITB), Forschungsberichte 15/2004.
- Terolog—environmental communication office. 2005. Umweltkommunikation. 09.08.2005. <<http://terolog.de/modules.php?name=Content&pa=showpage&pid=13>>.
- Torres, C.A. 1990. *The Politics of Non-Formal Education in Latin America*. New York: Praeger.
- UNESCO. 1972. The Edgar Faure Report. *Learning to be: the world of education today and tomorrow*. Paris: UNESCO.
- Zimmermann, M. 1995. *Einführung in die Umweltberatung*. 1. Studienbrief Fernlehrgang Umweltberatung. Berlin: BUND & Verbraucherinstitut.