

SNOW AS AN INSTRUMENT OF PEDAGOGY AND SELF-ACTUALIZATION

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ABSTRACT

The potential of snow in the field of pedagogy and self-actualization has long been neglected. While snow and ice have been used in Arctic areas to produce human and animal figures, the snowrelated aspects of human culture have remained elementary. As societies in the so-called developed world have become more individual-oriented and free time has increased, need has arisen for new materials and methods for people to tell about themselves and their feelings. Indeed, at present snow and ice competitions are arranged all over the world. Although not all activities are of a permanent nature as yet, it can be said that interest in exploring the potential of this revolutionary material is great. Snow and ice are readily available and easy to work with, a circumstance which guarantees everyone virtually unlimited opportunity to employ them. The castles of fairy tales can become reality in the form of snow castles. In the field of education as well, snow and ice offer new possibilities. In teaching, demonstrations have until now been carried out using various small-scale models. Relating such miniatures to reality seems to be particularly difficult, especially for children. Using snow one can describe and present the true scale of things being taught, quite artistically in fact. In the long run, extensive use of snow will presumably tap the reserves of talent people have for design and art. As a renewable, cheap and ideal material, snow offers opportunities for trying out the feasibility of landscape and environmental planning before final implementation. In this respect, snow and ice also involve economic benefit.

1. Introduction

Most people dwelling in the Arctic have an ambivalent attitude towards snow. Childhood memories of the first snowfall, snow castles, snowmen and snowballs as well as of winter ski trips are pleasant ones; yet snow and snowstorms are considered inconveniences. There are a number of natural explanations for this attitude. Despite the fact that snow is abundant, snowrelated culture is generally poor and in totally lacking in practice in many regions.

It is difficult to find the reasons why snow is not put to use, but in any event this natural resource, which is free and available in virtually limitless supply,

is still waiting to be discovered. It is our intention to present some of the possible uses of snow; we direct our attention to its educational and recreational use of particular interest is the connection between snow and education, for this provides new perspectives on education in practice and poses challenges for the development of schools and educational research. Our paper is based partly on experience gained in snow sculpting and partly on the ideas and insights gained from snow sculpting activities in schools and in extension courses in esthetics arranged for teachers.

2. The position of esthetics in education

No unanimity exists on what is to be subsumed under the phenomenon we call education. There exist such great differences of philosophy and principle as regards the various definitions that no reconciliation is possible. The only consolation is that researchers, despite their divergent views, are able to classify certain things as being related to education, they are able to say what is education and what is not. In the present case, it is neither possible nor necessary to compare the definitions of education. It will suffice to describe how the definitions of terms is carried out. In educational literature, an author generally presents his definition in a sentence or two; phenomena are not usually characterized in any greater detail. This means of defining phenomena, in which the common characteristics of objects are distinguished (mentioned in the definition) and named, is characteristic of empirist thought (represented by Locke, Berkeley and Hume), which has dominated in the Anglo-Saxon research tradition favored by European researchers.

This tradition is characterized by an atomistic conception of reality, ie. the objects of thought are broken down into separate components which are then organized in different hierarchies (Dobrick 1985). One upshot of this approach is that we generally speak of physical, music and art education and of youth, special and adult education but we are rarely interested in just what education is. Answering this question is, however, the focus of all educational thought. A totally different approach to defining education can be seen in the so-called rationalist tradition. Its better known representatives (Dilthey, Weniger, Spranger, Schleiermacher) are from continental Europe. In recent years, this approach has attracted the interest of many contemporary researchers and has experienced a comeback. Finnish scholars worthy of mention in this regard are J. W. Snellman and, in particular, J. Hollo. The latter's work "The Theory of Education", published in 1937, is, in the main, still relevant today. However, an empirist researcher may find it difficult to accept due to its intellectual approach. If one can overcome such a reservation, the work offers researcher and education alike a more readily accessible treatment of the phenomenon of education than that provided by the dominant school of thought today. Hollo searches for the true nature of education in his presentation.

Hollo's concept of education can be characterized briefly as follows:

1. Education and growth closely are linked to one another; they are different aspects of the same phenomenon. "Growth and education signify one and the same phenomenon of social life, viewed on the one hand from the individual perspective and on the other from the social". (Hollo 1937, 63). The close link can be illustrated best using a coin, where heads is education and tails growth.

2. Education is an event in which intellect (logic), ethics and esthetics combine to form a whole. "It is obvious that there neither need be nor should there arise any tension of conflict among these different directions in education. Indeed, they are different aspects of the same motive life which can well coexist harmoniously.... only in combination can they appeal to the spiritual sounding board of the educational event, only in this way can education be true education which affects the entire person" (op. cit. pp. 112-113).

Esthetics, which Hollo emphasises in his studies to a considerable degree, must be incorporated into education. In this sense, his approach is quite like that of Steiner pedagogy (cf. Steiner 1979, Carlgren 1978 and 1981). Obviously, in the present day school, esthetics has been neglected, for discussions in recent years concerning the curriculum have called for an increase in subjects involving art and practical skills.

Both a practical and theoretical distinction between esthetics and art must be made, however, for esthetics in education and the teaching of arts are not the same thing. Esthetics refers to the way a person experiences phenomena and is not confined to art. In principle, all observational activity and human communication and interpretation may involve esthetic experiences (Otto 1980, 172). It ought to be pointed out, however, that fine arts in school represent one of the few areas in which an attempt is even made to provide the pupil with esthetic experiences; it can probably be said that instruction in the schools offers far too few such experiences.

3. Use of art in education and teaching

The subject of art education and the training of art teachers was dealt with in a

publication of the university and scientific department of the Finnish Ministry of Education at the end of 1985. Researchers and educators from various fields expressed their concern over the state of fine arts teaching in day-care centers, comprehensive schools, teacher training colleges and higher education in general. According to the publication, one cannot even speak of deficiencies at the secondary school level, for hardly any esthetic training exists there. Raija Miettinen and Pirkko-Liisa Kuhmonen maintain that in Finland at least there is a belief that esthetic experience is innate and that the school system should therefore concentrate on imparting theoretical knowledge. The reality around us, inasmuch as it is concrete and sensory, can, however, be experienced and changed. This esthetic alternative is equally capable of providing experiences, guiding feelings and shaping personality. Only when the esthetic aspect of education is included alongside the intellectual (logical/theoretical and ethic as well) can one speak of a balanced development of the pupil's personality and of the creation of the proper circumstances for his growth.

Providing esthetic experiences - at least at the comprehensive school level - is not exclusively a matter of the number of hours and the curricula. What is needed is a new approach. Esthetic experiences can be offered in all instruction and need not be confined merely to fine arts, music and/or handicrafts. Fine arts is no longer merely drawing, as it was at one time. Drawing along with painting and sculpting represent only one part of pictorial art; pictorial art, in turn is only one field within the fine arts.

There is good reason for the concern educators feel about preserving manual skills. Formerly, the nature of human work was such that selfactualization took place largely through the use of the hands. The comprehensive work methods guaranteed a multi-dimensional perception and experience of reality. Now that the significance of manual work has diminished as result of advances in technology, the opportunities for such experience have dwindled as well.... This situation poses new challenges to the school system (Gerbaulet 1983). Although art instruction has diversified, advertising, television and video outside of school offset this in that they reinforce a two-dimensional way of perception (the time dimension present in a movie, however brings in an additional dimension when compared with a drawing or

photograph). The technological developments in our culture also mean that the hands are now freer than before to actualize the human being's innermost character and develop his emotional and intellectual side (cf. Rauhala 1983).

An old saying has it that drawing is seeing and sculpting experiencing. Through the sense of touch, the hands bring a new dimension to sculpting, the ability to "see" behind an object (cf. Rumpf 1983). The image conveyed by the eye is essentially two-dimensional despite the impression of depth it incorporates. This means that if the teaching of art confines itself to drawing and painting, there exists a danger that the pupils will not experience anything through the sense of touch, which in turn will have a negative effect on the development of their egos (cf. Karg 1985).

Sculpture has only been represented in school curricula to a miniscule extent, the commonly cited reasons for this being that the materials are too expensive and difficult to work with. Heretofore, however, a cheap, simple and superb raw material has been overlooked, ie. snow. Ice is also practicable to a certain extent. They can be used not only in art education but also in various circumstances requiring illustration and demonstration. For example, proportion and dimension can be illustrated by building objects of true-to-life size from snow.

Considerable powers of abstraction are required of a child when he is asked to imagine what a life-size blue whale (30 metres long and 3 metres high) looks like based on a miniature drawing in a textbook (cf. Aebli 1983). Snow offers an easy solution: sculpt a whale life-size in the schoolyard. The sculpture can be made into a slide by icing the back, thereby providing the child with an opportunity to experience the joy of physical activity using something he himself has created. Mathematics is another field where snow could be used in teaching. Correspondences between measurements of volume and capacity can be easily demonstrated with the help of snow. Cubic and cylindrical molds of varying sizes can be fashioned out of snow and then filled with snow using a measure. This procedure cannot, of course yield exact results, but will produce nearly exact, adequate ones. We hope that these two examples serve to point up the possibility of producing learning through doing, enactive learning

as Jerome Brunner (1960) has termed this means of acquiring knowledge (cf. Huber-Mandl 1980).

4. The tradition and technique of snow sculpting

The Japanese and Canadians have used snow and ice in sculpting for decades in the winter events they have organized. Noteworthy, too, is the rich snow-related culture of the Eskimos (buildings, language). The greatest snow event in the world, the snow festival in Sapporo, Japan is still a model for others on how to use snow and ice. The festival was established 37 years ago to brighten up the severe winter on the island of Hokkaido; the opportunity to advance art and culture afforded by the event was quickly realized. A similar lack of winter activity gave rise to the snow festival in Quebec, Canada. Cortina d'Ampezzo, Italy, Rovaniemi, Finland and in other communities around the world. The common feature of all these events is an international snow sculpting invitational contest for professional artists.

The purpose of the contests is to further sculpting, increase international cooperation among sculptors and demonstrate to the general public the value of snow sculpting as an art form and vehicle of esthetic experience. The contests have established rules. Sculptures are made as team work in public places using pre-cut and hardened cubes of snow (eg. 3 m x 3 m x 3 m). Support structures are not allowed. The criteria by which the works are judged and the classification of competitors may vary from contest to contest. The public has an opportunity to follow the progress of the sculptures, which makes the contests an instructive display of an alternative form of recreation and self-actualization.

The experiences gained to date have proven the value of snow as sculpting material. The Sapporo Festival is the premiere example of how sculptures can be put to use in esthetic education and international cultural exchange. The subjects for the works at the festival are collected during the winter from the Japanese comprehensive schools. The motifs are from both domestic and foreign cultures. Although snow sculpture contests have been arranged for almost ten years, snow sculpting has remained relatively unknown to the public at large. Pedagogical applications for snow are lacking as well.

In 1985 and 1986, the Center for Supplementary Education at the University of Lapland has organized seminars in esthetic education for teachers. These have pondered the use of snow, with the resulting ideas being tried out in certain schools. Snow sculpting has been found to be valuable from the point of view of the following:

- diversifying the fine arts curriculum in schools
- integrating fine arts with other subjects
- social skills
- the development of pupils' personality.

No special tools are required in snow sculpture; any that the sculptor might want, he can make himself. Modest preparations, such as the provision of hardened cubes of snow, can make sculpting interesting, easy and safe.

The ease with which snow sculptures can be produced, the creation of large works and other related experiences yield pleasure. Like other forms of art, snow sculpting can be thought as having therapeutic value. Social skills are almost always involved, as the sculptures are usually produced as team work. In carrying out snow and ice sculpture projects in schools, we have noticed, the opportunities for integration these offer. Without the atmosphere being at all forced, one learning situation can include physical education, fine arts, physics and history (eg. building a Stone Age village).

Snow is a material that suits all ages. Depending on the age of the contestants, the goals of snow sculpting can range from spontaneous self-expression to more demanding artistic and pedagogic aims. At present it seems that we have a revolutionary new element for modern education, which merits further development and the interest of researchers and educators. In the long run, extensive use of snow will presumably tap the reserves of talent which people have for design and art. As a renewable, cheap and ideal material, snow offers opportunities for trying out the feasibility of landscape and environmental planning before final implementation. In this respect, snow and ice also involve economic benefits.

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