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(Doing) art as an interdisciplinary didactic principle

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Abstract

It is common to introduce works of art into lessons in primary and secondary schools in order to mediate ideas and theories about subjective realities. Pictures, sculptures, installations are understood to represent insights and imagination, or illustrate shared realities. In this paper we interpret art works as translations of subjective intentions, even theories, in particular experiential settings. An artwork or artistic action that emphasizes its object character as a central theme is especially open to this kind of interpretation. It can serve to generate theories revealed through the senses. In principle, art could be used in schools whenever interdependencies and contexts are the learning focus. In order to show this approach is not dependent on the age range of pupils, this paper offers two practical examples. One took place in the eighth grade of a secondary school, one in the third grade of a primary school.

Keywords:
Artworks, learning environments, displacement, situated learning, competencies

Introduction

National curriculum reforms in Germany in 2000 have led to fundamental changes in the education system. The ultimate aim of education has been redefined as acquisition of competences rather than knowledge. As a consequence, the attainment of subject knowledge for its own sake has been superseded by acquisition of useful skills for everyday life. (Böhle, Pfeiffer & Sevsay-Tegethoff, 2004). Above all competencies are understood as facilitating active, open-minded, exploratory, dialogical and empathetic approaches to particular challenges in society, school and private life. The most important competence in this respect is ability and willingness to learn from personal experience. This presupposes individuals have awareness of self, are sensitive to what happens in their everyday lives and can learn from this. According to this educational goal, any approach to learning a subject can become a central theme. In classes of up to 30 pupils this is a big challenge for a single teacher.
Böhle, Pfeiffer & Sevsay-Tegethoff (2004) argue that developing competencies parallels artistic practice. They write: ‘When the epitome of professional knowledge and ability becomes increasingly independent of mastery of certain techniques and fulfils fixed obligations and is task and situation oriented, it approaches an artistic paradigm of action’ (Böhle, Pfeiffer & Sevsay-Tegethoff 2004: 67 - translated by the author). To draw a first conclusion: developing competencies that facilitate active, open-minded, exploratory, dialogical and empathetic responses to varied but specific challenges is comparable to art practice.

I assume this paradigm shift entails revision of means of instruction and learning; a kind of iconic paradigm shift is necessary. Accordingly, the practice of depicting or illustrating subject matter and at the same time keeping it abstract is no longer foregrounded. In pedagogy, representations of abstractions are being replaced by an emphasis on learning contexts and planning learning settings that are far removed from a teacher facing a class of pupils sitting in rows. This is not to suggest that abstractions no longer have a place, rather that with competencies it is more important to develop instructional approaches that evoke ambiguous, open-ended and contingent individual learning. At the same time, this kind of pedagogy has to provide a structure for personal experiences and ways of presenting them that can be demonstrated and assessed.

To summarize: in order to evoke and at the same time structure pupils’ individual experience, there has to be an iconic paradigm shift in instruction and learning. Considering the argument so far, I now propose my leading hypothesis: that the ambiguous, open-ended and contingent aspects of individual experiences and competences can be tracked and structured by a learning environment based on artworks and artistic principles.

This hypothesis challenges the use of verbal language that dominates teaching and learning in German schools. However, teachers of all school subjects use works of art, sometimes to represent subjective insights and more often they use images as illustrations. Niehoff (2003) has criticized the poor quality of these reproductions and argues that the superficial way they are presented glosses over their artistic function and context. The positive effects of the ‘flood of pictures’ are more or less ignored in the context of formal schooling.

The ‘flood of pictures’ idea has been debated since the 1970s, mainly from a modernist critical perspective and in relation to ‘high culture’. However, more recent debates about the ‘iconic turn’ (Boehm 1995) have yet to penetrate educational discourse in any meaningful way. The ‘iconic turn’ is linked to the idea that an icon takes on human form or becomes a framework for action. Icons we have perceived or produced are thus present in our gestures and we cannot but act them out somehow. In stressing the relevance of art for cultural orientation and diverse forms of communication, Friedrich Bollnow states: ‘We live in a world that has taught us to perceive’. (Bollnow 1988: 33 -
translated by the author.) Following this argument about the ‘iconic turn’ leads to the conclusion that art works can be interpreted as translations of theories realised through bodily experience in particular settings, including schools. In the rest of this paper this idea will be developed by following two lines of argument. The first relates to the role of the spectator in the field of visual art. The second concerns how pupils construct sense through formal learning.

First I shall concentrate on installations, performances and other artistic activities/styles dependent on an audience for completion. In other words the artist is not the sole creator and the spectator realises the final form of the work. In this sense Umberto Eco (1989) developed the concept of ‘open art work’. According to him, every work of art refers to an open field of meaning that is an internally dynamic, psychological (and also physical) form of engagement rather than a fixed expression of meaning. He described reception of art as active experiencing of reality. Martin Seel (2002) developed this idea further when he spoke of the ‘staging’ character of artworks; works of art bring particular realities to light thereby intensifying real things, actual facts and topics. They not only present unfamiliar constellations, but also show something not yet noticed, or not previously in view. So in a way they ‘produce visibility’. Hence, in a field of open, internally dynamic, psychological engagement, works of art can make something visible that was invisible before.

The second point is that scientists and practitioners agree that effective learning is predicated on a complex interrelation between the learner, the learner’s motivation and the topic to be learned. However, it is impossible to plan for the myriad ways in which individual learners construct sense. This raises the question of how to take unforeseeable circumstances as a starting point in planning curricula. In order to answer this, it is necessary to examine this idea that sense making is unpredictable in more depth.

The unpredictability of sense-making can never be traced to a single cause. Thus, for example, on the one hand the meaning of a word could be defined a certain way; on the other it could be understood differently. It has temporary, conditional and multifaceted aspects dependent on situational factors such as the identity of the speaker or a group of people, the very circumstances etc. According to Waldenfels (2002), cognitive sense experiences like ‘Eureka moments’ cannot be abstracted from experience in the real world. Sense-making is thus a complex meshing of borders, contrasts and metonymies characterized by ambiguity, and simulations coming from an abundance of colour, sound, light, space, language, feelings etc. Boehme (1986) describes this as follows:

Our eyes are not the opposite of objects, they are not only scanning them, our eyes are of the things and the things are of them. Images not only sketch a world of objects at a distance, but also a world in which the emerging reality becomes visible,
defining itself as a kind of subject. [...] We live in the world and not in front of the world’ (Boehme 1986: 293 - translated by the author).

The measures, meanings, coherences, as well as the qualities and values of given facts, derive from coordinations of internal and external realities. Meaning or sense is produced through this kind of immersion. When a perception makes sense to individuals, it includes cognitive elements as well as diverse elements of the perception itself. This kind of sense-making invokes an apprenticeship by corporal means of understanding and at the same time is the source for generating theories. To sum up the argument when it is understood phenomenologically, sense is a complex mesh of internal and external, material, corporal and mental realities. Sense is nameless but at the same time describable. It is perceived corporally and is the source of cognitions and reflections.

To return to the hypothesis about verbal language and images in German schools, I propose that in principle the appealing qualities of art could be used in any case where learning deals with interdependencies and contexts. Some school subjects may be learned more easily this way than by conventional approaches.

Besides the stimulating aspects of art described above, there is an irritating one. The interpretative function of art usually includes a more or less alienating effect. Take ‘Land Art’ as a point of reference and based on the principle of reciprocal interpretation of art and situational contexts, Brohl (2003) has developed an instructional strategy of displacement based on the principle of reciprocal interpretation: displacement in art refers to the way interpretations of works and their situational contexts are on one hand reciprocal and on the other differ slightly. Via this reciprocity, art interferes and intervenes in actual discourse and current semantic fields. The strategy of ‘displacement’ (which is at the same time a teaching principle), as Brohl has shown, allows novelties to merge into familiarities; or to use Waldenfels’ words, the ‘extraordinary’ seeps into the ‘orderly’ (Waldenfels 1999: 167). It happens like this: in discerning a work of art, a moment of intense or slight disorientation can arise. At such a moment, a person’s pictorial knowledge and viewing habits are in a way suspended. Waldenfels (1999: 226) calls this ‘iconic epoché’); in the process of restoring iconic order, subjective imagination and links between given facts become possible that did not previously exist. Art interferes with and intervenes in actual discourse and current semantic fields.

Regarding the hypothesis that it is possible to reconstruct, structure and further, ambiguous, open-ended and contingent aspects of individual experience and competences in learning environments based in art, I concluded that an iconic paradigm shift in learning and instruction is crucial. Following Bioeme (1986), Eco (1997) and Brohl (2003) I referred to the ‘iconic turn’, ‘open artworks’, the ‘staging character of art’ and ‘Eureka’ experiences. Works of art can be understood as translations of theory in special learning environments that facilitate corporal experiences. Open to interpretation and discerned through the senses, they influence our way of being in the world. Art can bring
something into appearance that was hidden. Brohl calls this a strategy of displacement, applied implicitly in processes of art-making as well as active reception. By using art works, this strategy of ‘displacement’ can be implemented within interdisciplinary projects in schools.

**Examples of practice**

Let us look at two examples: *Sensible Schwelle* (Sensitive Threshold) an experiment I carried out that shows art can be used educationally in many of the respects described above. The example of the film *Rasender Stillstand* (Restless Stagnation), by the artist Mariana Vassileva, applies specifically to safety education.

![Image](image)

Fig. 1a  Anja Kraus: “Sensible Schwelle” (2005) screenshot (© Stefan Loehr)

![Image](image)

Fig. 1b  Students moving on “Sensible Schwelle” at the Rütli-Schule in Berlin, foto (© Judith Bauch)
(1) *Sensible Schwelle* (Figure I a and b) refers, on one hand, to the idea of a radio drama or an audio-guide in a museum used to make topics such as history, politics, culture, and sports, audible by means of spoken text and sound. On the other hand, it refers to the fact that nowadays it is easy to move in virtual realities, by touching a sensor with a fingertip, walking or raising a hand. Both audio-guides and virtual reality merge into the concept of the sound installation *Sensible Schwelle*. A camera records six areas near the entrance of a school. When people step inside sound files are activated. The combination of different sound files activated by different people, generates a kind of audio-guide. By fitting this installation with sound components and getting learners to evoke sounds by moving their bodies, they can grasp a topic in emotional, imaginative, and/or cognitive ways. Since July 2007 *Sensible Schwelle* has been introduced into schools and evaluated scientifically. The experiment described in the following section of this paper took place with eighth grade students in a secondary school (Hauptschule) in Berlin. The pupils were about 14 years old. *Sensible Schwelle* was installed in the foyer. The project was organized thematically in various school subjects, but was always structured the same way:

**Phase 1:** Learners analysed aspects of a given topic chosen by themselves or the teacher.

**Phase 2:** They researched ways of making them audible. They worked out how to arrange a composition using different sounds to express the chosen topic. And, they reflected on their own faculties of expression (like voice modulation or audible movements).

**Phase 3:** Learners were instructed in how to record and collect sounds using the Internet or an MP3-Player, and how to charge them digitally. They received technical instructions in how to combine and to save a composition etc.

**Phase 4:** While choosing, collecting, testing and rethinking the sound files at hand, they considered how best to present topics. They tested different ways of expressing them using different literary forms: drama, a poem, short story or lecture. By combining different spatial acoustics, they checked out the effects of diverse audible expressions at distinct levels (like changes of content, technical effects, atmospheric effects).

Working with *Sensible Schwelle* facilitates acquisition and mediation of knowledge about a culturally significant topic or issue without over-stressing adult perspectives – which is what normally happens. Furthermore, transforming learning content into sound facilitates diverse learning processes. Thus, there is space for what John Dewey (1934) called transformative artistic learning: for example, an idea may serve as a basis for a narration that is itself transformed into ambient noises and human voices. A feeling could be transformed into body language, i.e. voice modulations, noises of corporal movements etc., or could be transformed into music or sound. Complex cognitive contexts could be
transformed into a kind of audio book. Possibilities for sense making are broadened through working with these and other transformative processes. This is what Kay O’Halloran means when she states that:

[...] the potentials of the language, the symbolic and the visual presentation can be used and combined, in a way the semiotic expansion is wider than the sum of the significations deriving from each of these resources standing alone (O’Halloran 2005: 16).

Transformative learning processes were evident in this experiment, not only for the pupils in charge of the installation, but also for those entering the school foyer. By evoking sounds moving in the foyer, they picked up the topic in emotional, imaginative, and/or cognitive ways. One girl who participated in the project was rather bewildered when she suddenly heard her own voice: ‘Oh, that´s me, I can’t believe it. It sounds so different! I am a superstar!’ When a boy from another grade activated his classmates’ voices miming stones at the seaside clinking together, he said he loved collecting seashells. The imagination and associations of audiences can serve as a basis for further learning processes: for example, in the context of free writing in mother tongue lessons or second language learning. To sum up the argument, in transforming one medium into another individuals gain new perspectives on a topic, themselves, other people, nature and culture and/or technology etc. Furthermore, presenting a topic as a sound carpet arouses multimodal associations.


The second example, Mariana Vassileva’s black and white film Rasender Stillstand (Restless Stagnation), shows it is possible for schools to adapt works of art so as to discover subjective experiences related to a subject, or to create them in ‘displacement´ mode. From this example, it is clear that it is the artwork that enables subjective experiences to emerge in a structured manner, thereby making it possible to generate theories about a topic (in this case: road traffic, processes of filming, being an artist etc.).
There is a sequence in the film *Rasender Stillstand* (figure II) depicting a person walking in the middle of a congested street. Viewers see a person’s lower legs, moving rapidly, filmed from the walker’s perspective and hear loud traffic noises. The white median strips passing swiftly under boot soles seem to be sucked up by the rapid walking. The cars and other means of transportation passing by are invisible, but at the same time very much present as noise. *Rasender Stillstand* communicates twin themes of traffic and spectatorship through a complex mixture of movements, tempos and interests. The fact that the fast monotonous movements being filmed obviously belong to the camerawoman herself conveys a self-reflexive dimension: what role does a spectator of everyday life play as an artist in society? Where do the benchmarks of artistic autonomy (the camerawoman) come from? Is her view of reality changed by the act of filming or making art? If yes, what kind of influence takes place? How are artists exposed to social conditions and norms? What kind of subjectivity do they stand for? etc. There are obvious parallels between the position of the artist shown in the film and children as road users. The road user, shown in Vassileva’s film, is acting speedily, riskily, he/she seems very fragile and at the same time self-assured. He/she appears to be safe but this is deceiving. Considering the typical behaviour of children in general and the high percentage of child traffic deaths, this film appears to show the mindset of a child road user or is at least comparable.
In contrast, photographs in primary school textbooks typically illustrate traffic scenes simplistically (figure III). The majority present an overview: for example, an image of a green traffic light and smiling children crossing a street. The message they communicate is: safety is guaranteed by the adhering to the following rules. In reality, situations are much more complex: parked cars may block a street view; drivers often go too fast; it may be the case that a car driver or motorcyclist suddenly and unexpectedly accelerates a vehicle. Moreover, one cannot always anticipate their routes. The same can be said for cyclists: sometimes people cycle on the sidewalk, sometimes they come out of a doorway at top speed; pedestrians may act carelessly; a ball may roll out or a dog runs into traffic. Children tend to follow instantaneous impulses. One cannot deny the important role human appetites, desires and drive, play in road traffic accidents, not only with children. This also depends on cultural factors. Often, it is just carelessness that causes an accident. In order to develop the competencies needed to act circumspectly in traffic safety education, primary school teachers must start by referring to the experiences of children themselves, especially the different feelings they have in traffic. To behave and react circumspectly in traffic, people need to have a repertoire of ways of acting at their disposal. They need to know how to deal with personal feelings and communicate constructively with others about different prevention strategies. After viewing Vassileva’s film in the classroom, the following kinds of questions can be discussed: who is taking part in traffic (cars, bicycles, pedestrians etc.)? What kinds of interest might they pursue? What kinds of streets are they? (For example motorways, country roads, sidewalks, bicycle lanes, traffic-calmed streets, pedestrian zones, traffic islands, special safety zones etc.)? Why are they zoned? Why are there traffic signs? What do the most common ones stand for? What are the main traffic rules? Are there other kinds of signs such as gestures, glances, etc. that may attract attention.

This is not to suggest the simplistic images in school textbooks are useless - children obviously like them. Denying the principle of reducing complexity is stupid since
it plays a very important role in facilitating learning. In this article I am campaigning for another way of structuring learning, starting with the filmed scene and following this with classroom questions and discussion. I tried this out with 3rd grade primary school pupils (aged about eight years). First we looked at the film Rasender Stillstand together. Hereafter, the children freely voiced their associations, impressions, feelings and insights. They posed all the questions themselves and their ideas were systematically listed on the blackboard:

<table>
<thead>
<tr>
<th>Road users</th>
<th>Interests the road users might pursue</th>
<th>Differen t zones in the streets</th>
<th>For what are these zones serving ?</th>
<th>Traffic signs</th>
<th>What are the traffic signs serving for?</th>
<th>Traffic rules</th>
<th>Gesture s that may draw attentio n</th>
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<td>...</td>
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After this, the children worked in groups of three to formulate a specific traffic problem and solution. They were free to draw the situation or act it out in groups in front of the class.

They discovered the advantages of reduction and simplification when dealing with personal feelings: various possibilities for communicating them with others and different ways of avoiding danger. At the same time, it emerged that a sense of individual responsibility is what really counts in complex situations.

This paper proposes an active, open-minded, exploratory, dialogical and empathetic approach to situational challenges in society, school and private life; and recommends using artworks to facilitate general competencies. Experiments in schools showed that they stimulate and further pupils’ ability and willingness to learn from their own experience. Whereas the artworks motivated and engaged the pupils, some of the teachers who participated in the experiments experienced difficulty adapting to the openness of art-supported teaching and learning.

Works cited


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