# Media Change How Schools Instruct

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#### Abstract

Instruction is impartment of information and is structurally bound to media; this is why schools should teach how to use media, including its own, in an active way, taking care not to exclude any of its forms. Information technical media alone are able to influence instruction because by using them possible methods of impartment can be determined and forms of interaction and communication can be changed. The information monopoly of schools and their claim to be the standard socialization institution for cognitive development is being contested by the media outside of schools. This is why schools should take it upon themselves to provide those skills and modes of behavior which can not be imparted by the media because they can not be performed even by new technical developments.

Two obviously important fields of the relationship between media and schools will be considered. The reflections concerning the first complex of problems will deal with the wide-spread reproaches against the media. One reproach is that the media blur the boundaries between fiction and reality so that one loses the ability to distinguish between them. Another reproach is that media mislead into believing in their imparted messages and create appearances either to distract from reality or to cover it. A common aspect of these reproaches seems to be an uneasiness about the disproportion between imparted and direct experience. In our society, reality imparted by media contributes to a larger degree to communication, to the formation of judgment and opinion, to experiences and to the basis for behavioral patterns than directly experienced reality. Additionally, in this disproportion an apparent deficiency is revealed in exhausting the opportunities for meaningful experience of reality as well as a moving-away from formerly prevalent natural and direct spheres of experiences. This type of experience must be regained without, against or despite the media.

The basic attitude implicated in this criticism refers not only to school in its substance but every form of education, instruction, teaching and learning. Naturally human learning takes place that is not imparted but achieved through direct sensory perception. Teaching and instruction are forms of impartment, which means they are medial. Of course they are formally different to imparting by media but structurally bound to them. Thus, learning in school is imparted. Certainly some learning in every classroom takes place that goes above and beyond the intended material. It must be said that the general criticism that the reality imparted by media replaces experience made on one's own strikes the teaching method taken for granted by schools in its very substance.

The reproach that this contains hardly seems to have been noticed by schools. There is an obvious distinction made between the media which impart a didactically correct reality and those which, for whatever reason, do not. This differentiation has continuously characterized schools from time immemorial. More than 200 years ago even Campe¹ wrote excellent children's books and books for young people which were read again and again. These books were intended for school instruction. Simultaneously, however, Campe condemned the younger and elder generation's craze for reading which read everything they were offered without judgment. Today the criticism, of course, is only in the rarest cases directed towards books, rather towards media outside of school, as had been the case with Campe.

Additionally, the tradition of school reforms has shown that the dependence on media for the transfer knowledge is felt to be a shortcoming. Every reform emphasizes the advantages of direct experience for learning. Pestalozzi² based fundamental parts of his theory of visualization as a principle of instruction on the learners' direct access to objects; he inveighed against book knowledge. Still he wrote a series textbooks which he employed in lessons and which greatly contributed to his influence as an educationalist. The tutor of Rousseau's Emile³ knew very well how to arrange, if not manipulate, the natural environment where his pupil grew up so that experiences adequate to his age could be imparted to him. There we also find a criticism of media in the form of a refusal of book knowledge in favor of direct experience.

This general tendency of recurring attempts at reform carries on into the present. This indicates that organized learning constituted by school and teaching is an illusion without media. Whether the teacher uses himself personally, his gestures, his voice, his rhetoric or whether he prepares a seemingly natural environment for experiences, whether experiences are enhanced or replaced by books, films or illustrations, the necessity for

impartment and its organization remain decisive. In every situation there will be an imparting body placed between object, topic, reality and the pupil that is supposed to learn. The criticism of media refers only to the form of impartment because impartment itself can not be questioned. The criticism always refers to medial imparted contents if these do not correspond to the didactically organized process or do not appear to be usable to that end.

It follows almost inevitably that criticism of media is directed at media outside of didactically controlled learning processes but not at medial imparting within this process. Thus arise reproaches of diversion, lack of concentration, the burden of unnecessary knowledge, age disproportionate knowledge etc. which are supposedly caused by media used in leisure time, that means outside of school.

The distinction between media which could be accepted and those which should be refused from a pedagogical point of view has three predominant consequences:

- 1. It places schools in a constant defensive position towards an essential field of experience for children and adolescents. This defensive stance usually is in vain, as the history of integration of media into schools has shown beginning with books and continuing with films, newspapers, comics and pocket calculators.
- 2. It does not promote the development of a critical attitude towards the possibilities of imparting reality by media because this ability of the media is only granted when it can be established with pedagogical or socially acceptable reasons.
- 3. It does not help either the child or the adolescents or, for that matter, the adults to develop the ability to process experiences directly, because the distinction between correct and incorrect medial impartment is made in such a way that no critical distance, at best with certain sorts of media and their various forms of knowledge transfer, is created.

Thus, the necessary changes in instruction should consist in accepting that schools can achieve experiences that are dependent on their active participation i.e. that in two respects they should not be considered neutral mediators. Namely not only on the part of those who produce and present such experiences but also on the part of every recipient that experiences media in an individual biographical context. For schools it is important to recognize that on the one hand teaching is a kind of medium just as school itself as an institution and naturally also the teachers as human beings. On the other hand it is important to recognize how differently, that is to say, individually and by no means homogeneously, they are experienced. So it is impossible to proceed neither

from linear instruction formed by the media nor from a homogenous or even standardized recipient's experience with its corresponding behavioural patterns. Even with the strongest discipline or standardization it is impossible to eliminate this subjective and therefore liberating aspect of individual experience.

Media always bring an unpredictable element into planned proceedings. The same applies to instruction because the media evoke subjective experiences and therewith individual learning processes. The use of media therefore implies activity. Media consumption is always critizised just because of the "non-use" factor, implying passivity, regardless of the kind of medium. This attitude of passive consumption can be applied towards books as well as towards television. It must be stated that a medium is not responsible for the way it is used. Whether contact with the media leads to use and further to experiences and activity, depends on socialization and education, and schools must take responsibility for a great part of it. It is important that medial education should not lead to a critical attitude towards certain media, at the moment especially towards the computer and television, video and the like, but to a critical attitude towards medial impartment in general, that means towards impartment by teachers, instruction and textbooks etc.

Schools establish a basis for an uncritical attitude towards medial impartment if they do not regard themselves as a medium, if they ignore a critical distance and do not consider the media used in lessons to be just as susceptible to a loss of reality and passive consumption as the media outside of school, thereby establishing a distinction between media not subject to criticism and other forms of media that are fundamentally subject to criticism. The media are neither responsible for the way they are used nor for the contents they convey. There are no contents typical to media, rather only typical forms of impartment. Therefore it could be possible that one-sided use of a medium leads to a limited experience. If we hold the media responsible for contents like the representation of violence and discrimination etc., we effectively release producers, users and social-political decision makers from their responsibility, we take responsibility away from human beings. This could easily result in feelings of helplessness and vulnerability.

What should schools do? Schools must teach how to use various media, even their own, in an active way, making sure not to exclude any form of media. School is the only atmosphere in which the active and creative use of the media can be tested and organized without pressure of time, without sanctions and without any external intention of utilization. This objective demands action oriented forms of learning and teaching that change the role and the functions of teachers. These approaches create would fields of interaction marked by an

equality of the participants and should include currently accepted fields of time and communication organization that to present have been considered extracurricular.

Nevertheless, it should not only be a question of organization and use of medial impartment but also of its effect. The fact that power is exercised over objects and people through the organization and dissemination of the media, creating a social reality which affects the individual, is an indispensable component of a learning field in school which not only imparts a necessary acceptance but also a critical distance and opportunities for resistance and defense against media. Certainly this demands from school a readiness to take risk that has not been displayed to date. Intentions of this sort can fail because, for example, the learners might feel pleasure or satisfaction towards these powerful medial forms. This risk, however is not avoidable. School can only decide whether to integrate them into their educational task or not. Children and adolescents know very well that engaging in the use of media and the acceptance of a medialimparted reality as a binding reality involves a risk. By analyzing mediabiographical interviews Thomas Voß-Fertmann (1994) determined that this is a basic attitude of children and adolescents. He then used it as a main theme throughout his dissertation.

On the other hand, to accept the media means also to recognize their necessity because of the limits of one's own ability to experience. Human senses are not sufficient to perceive the development of a bud to a flower, the flapping of the wings of an insect or the communication system of plants. Media are able to impart all this. Schools regard these possibilities primarily as a sort of illustration enhancement. But schools should use them to show the limits of one's general human ability to visualize things. This is a fundamental experience necessary for the understanding of the ability to act in long-term global developments that will perhaps go beyond our own lifetime and which we are beginning to come into contact with in the form of consequences of technology. Therefore media education must lead to the recognition of the limits of one's own sensory perception and its relationship to perceivable space and experienced time, as well as to the resulting ability to act in the present.

The second complex which seems to be important in connection with school and media is the field which could be described by the keywords computer, information technology and communication technology.

Information media and communication media can intervene in a way that changes schools because they could not only determine the content of learning and impartment opportunities but also could change the forms of interaction and communication. They are not only employable in all school subjects and in

vocational education, but are removed from the control of schools and educators because they are mobile, transportable and have unlimited network capacities. For this reason they are impossible to integrate into the form of school to which we are accustomed.

A look at the historical reasons behind the creation of schools as a public educational institution will help to illustrate just how fundamental the possibilities for change are. The public school is not only a child of Enlightenment but also of the civil liberties revolution. From the beginning, public schools were required to impart training, science and education to everyone by guarantee of the state. Contents and courses of education were therewith placed under control of the public, effectively putting them under state control - a condition that exists to the present. This development has now become reversible, through private and political initiatives.

It is not a matter of a single computer and its software in the classroom or at home, although these computers represent a series of opportunities to facilitate the schools' work with learning and acquisition of knowledge aided by computer programs. The point is rather the possibilities resulting from the interconnection of these computers with their communication an interactive information systems. These developments are still in their beginnings, allowing schools the chance to be prepared for these expected changes.

Some illustrations of the developments mentioned above are:

- Systems of homework and controlled learning and interactively and communicatively accompanied learning with the computer at home that are already established in vocational training and further educational programs,
- projects carried out at several American universities in an attempt to reduce the presence of professors and students at the university,
- and current preliminary studies at the Correspondence University at Hagen to enable, with the aid of interconnected systems, the communication and cooperation among students and, more importantly, between students and professors.

These examples make clear that these developments will pass schools by and their established function will be questioned if they do not utilize the time at their disposal wisely.

The monopoly of information taken for granted by schools, which, until about twenty years ago, was nearly undiminished, and their claim to be the authoritative institution for socialization at least in the field of cognitive development, are still considerable factors. Both are increasingly questioned by the media outside of school. A great part of the pedagogical criticism of media

could perhaps be justified by the insecurity caused by the fact that schools must compete with other information providing institutions. Schools were able to ignore them or partially integrate them because, unlike the media, they provided a field of interaction and communication. The information providing media are able to perform as well as a result of their connection to technical communication systems, creating a new situation outside of school.

It has been for some time now senseless to expect, even of younger pupils, that homework be done in a classical way, i.e. an individual effort. Cooperation and data exchange are now possible at any time with btxmailboxes, telefax, e-mail, internet and data bank connections. Even a professional market is being established. In the meanwhile software is available for nearly every subject as major educational publishers are participating in their development and production. This software can be used in instruction, but is used outside of school mostly as a sort of tutoring or coaching. These computer programs, however, are still considered inferior to school lessons. The few studies on the use of these programs seems to indicate the contrary; that a use at will and repetition without sanctions, the ability to control the speed and the mostly playful form of impartment are seen as a consideration of individual needs which is lacking in schools. This market is already well established in vocational training and further education. It is only a matter of time until this will be the case in the general education sector as well, only there it is of minor importance if it takes place in cooperation with schools or

The same question as above can be asked, what can schools do? It must be clear by now that schools can not defend themselves against these developments. It must also be obvious that, in the long run, schools would lose in a competition for knowledge impartment. The collective structures of schools which, in the end, only aim to measure output are inferior to the possibilities of individualization of computer programs which, as is known, are more and more being developed with an orientation towards dialogue ability. If schools want to persist they will have to concentrate on what can not be programmed, on what is within their abilities, but has been formerly considered peripheral or extracurricular. Schools do not need to adapt themselves in the process to the media, rather they should get rid of the ballast that other media may be capable of imparting even more effectively. Educationalists and teachers should pay special attention in their research and education to the construction of diverse media and their knowledge impartment and they should try to influence them, as they have long practiced, in the sphere of school.

But schools should make those competencies and actions their goal which media in the long run could not necessarily accomplish as a result of limitations on what can be performed by new technical developments alone. This has to occur in consideration of or with resistance to the media. The aims could be, for example, to impart the need for cultivated speaking and writing beyond the direct exploitation of language, to arouse a readiness for sensory perception and respect for contents perceived in this way, to practice behavior in a social context and to develop the willingness to take responsibility and to further the idea of time as something individually structurable and something to be experienced individually.

There are enough examples to illustrate that even today schools accomplish these and similar objectives. The modification consists in focusing on the transmission of these aims which at the same time become their raison d'être. There is no other institution which could perform this task. If schools do not take these tasks upon themselves, they will remain unrealized.

# Notes:

- 1. Campe, Joachim Heinrich (1746-1818): Jugendbücher: Robinson der Jüngere, 1779 Entdeckung Amerikas, 1782; Pädagogische Schriften: Theophron, der erfahrene Ratgeber für die unerfahrene Jugend, 1777 und 1783; Väterlicher Rat an meine Tochter, 1789.
- 2. Pestalozzi, Johann Heinrich (1746-1826): Pestalozzis Brief an einenFreund über seinen Aufenthalt in Stans (1799) in: Heinrich Pestalozzi: Gesammelte Werke in zehn Bänden Zürich 1944 (Rascher), Bd. 9; ebenda: Wie Gertrud ihre Kinder lehrt (1801); ebenda: Geist und Herz in der Methode (1805).
- 3. Rousseau, Jean-Jacques (1712-1778): Emil oder über die Erziehung (1762).

## **Bibliography**

Voß-Fertmann, T. (1994). Synthesis und Wechselspiele - eine neue Sichtweise der Mediennutzung Jugendlicher und ihre Entfaltung in zwei Fallstudien Unpublished thesis, Faculty of Education, University of Hamburg.