

Emotions, the person and the “lived body” – learning experiences and impacts from the “pedagogical orientation”

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ABSTRACT. In the study at hand, about 200 participants answered a questionnaire on own previous learning processes covering the areas of learning as change, as a personal process and as a process being situated in the life-world. The aim of the paper is twofold. First it shall give evidence that such a concept of learning is not only fruitful within a theoretical debate, but also renders accessible in terms of empirical research. Secondly, it shall give an insight into empirical results of this research covering as well general issues of learning as issues which are related to different educational orientations of the participants. The general results on learning particularly focus on the three dimensions of the above-mentioned concept of learning, the results with respect to educational orientation distinguish between a subgroup of participants, which are affiliated to Waldorf-Steiner education, and a comparison group. The paper provides a brief theoretical framework, states nine hypotheses, describes the research process and ends with a presentation and discussion of the results.

Keywords: learning research, concept of learning, pedagogical orientation

ZUSAMMENFASSUNG. Für die vorliegende Studie haben etwa 200 Teilnehmerinnen und Teilnehmer einen Fragebogen zu eigenen, vergangenen Lernprozessen ausgefüllt, der Aspekte des Lernens in den Bereichen Veränderung, persönlicher Vorgang und Lebenswelt abdeckt. Der Beitrag verfolgt zwei Ziele: Zum einen soll er zeigen, dass ein solcherart gefasstes Lernkonzept nicht nur theoretisch fruchtbar sondern auch empirisch zugänglich ist. Zum anderen soll er einen Einblick in empirische Ergebnisse dieser Forschung geben, die sowohl allgemeine Aspekte des Lernens als auch das Lernen von Menschen mit unterschiedlicher pädagogischer Orientierung betreffen. Die allgemeinen Ergebnisse zu Lernprozessen betreffen unmittelbar die drei Dimensionen des oben angesprochenen Lernkonzeptes, die Ergebnisse mit Blick auf die pädagogische Orientierung unterscheiden zwischen einer Teilgruppe von Teilnehmenden, die besondere Nähe zur Waldorfpädagogik aufweisen, und einer Vergleichsgruppe. Das Papier beginnt mit einer kurzen Darstellung des Theorierahmens, benennt neun Hypothesen, beschreibt den Forschungsprozess und schließt mit einer Präsentation und Diskussion der Ergebnisse.

Schlüsselwörter: Lernforschung, Lernbegriff, pädagogische Orientierung

Introduction

Is “learning” a basic concept of pedagogy? While nobody would deny that it is one of the core *processes*, educational sciences and pedagogy are interested in, one can still observe that there is a certain reluctance to conceptualise it from a severe pedagogical perspective. Instead, learning is usually regarded as a mental process and thus discussed in terms of cognitive psychology or modern concepts of behaviourism. Particularly this holds for the discussion in German speaking countries as there (among others) the concepts of education and “Bildung” are regarded as more appropriate or even dignified in pedagogical contexts (cf. Göhlich & Zirfas 2007, 87f).

However, the recent years have brought forth a variety of educational approaches to learning which take into account that the learning situation usually is defined by the presence of a more or less heterogeneous group of learners (e.g. a class), a particular material environment (e.g. a classroom), a particular socio-cultural context (e.g. a school which is embedded in a society) and the presence of one or more people who take over a *professional* role in the overall setting (e.g. teachers). Together, those characteristics

are typical for formal teaching and learning and thus render at least most of the laboratory research on the issue rather abstract if not aloof. On the other hand scholars like Ference Marton (1992), Knud Illeris (2007), Peter Jarvis (2006) or Käthe Meyer-Drawe (2008) aim to conceptualise learning in a way which is applicable to such conditions (cf. Pätzold 2008, 2011). Partly they are based on extensive empirical research (e.g. the concept of phenomenography, originally coined by Marton), others are rather conceptual contributions which review the discourse on learning (Meyer-Drawe), rearrange, amend and expand recent findings from psychology with particular respect to education (Illeris) or open up different streams of philosophy and social sciences to amalgamate a comprehensive approach towards learning (Jarvis).

One aim of the research presented in this article is to explore if the according concepts of learning are manageable in terms of empirical research. The next section therefore briefly presents a research design based on a questionnaire to investigate on past learning episodes which has been answered by about 200 respondents. It basically addresses learning as the change of a person in the life-world (Pätzold 2008 with particular references to Jarvis 2008).

Among those approaches phenomenography plays a special role. It can be regarded as one of the most fertile contributions to contemporary learning theory in education, and, even more important, it started by distinguishing different *types of learning* according to what the learner actually *does* in cognitive as well as strategic terms. It distinguished several types of learning within the general discrimination of deep approaches and surface approaches (Coffield et al. 2004, p. 65). While empirical research has proven that learners may very well be distinguished according to those approaches, they may also differ with respect to their *general* concept of learning. This is the focus of the second part of the study. Therefore the respondents are distributed into two subgroups of which one consists of participants of different courses which are related to Waldorf-Steiner education, allowing to apply mean comparison tests to find differences according to the educational orientation.

Hypotheses

As a meta-hypothesis we may regard the question if learning can generally be analysed according to the definition given above, i.e. if the questionnaire is applicable to shed light on differences in the categories *change*, *person* and *life-world* with respect to individual learning processes. By now this question is dealt with in a rather exploratory way. The analysis shows that there is a considerable variety in the different dimensions of the learning process as it is modelled with this definition; however, the sample size does not allow undertaking any in-depth testing of the questionnaire itself, regarding e.g. the reliability of the scales. Thus, this paper will merely touch this hypothesis as side effect of the following considerations.

General hypotheses on learning

Hypothesis 1: Further hypotheses refer to aspects of learning within those three categories. In this article we will emphasise on particular aspects which are considered relevant for education. The first addresses the relationship between knowledge and ability. Theory on competence development right from the beginning emphasised on the difference between both (cf. Heysel/Erpenbeck 1997, p. 48), stating that the impact, knowledge has on ability is rather overestimated. However, practitioners often report that knowledge of different kinds, ranging from tacit knowledge to systematic knowledge on a scientific subject, is of fundamental importance for competent action which may mean that the differentiation between both, while being comprehensible from an analytical point of view, does not reflect the situation of the whole person which integrates both. The according hypothesis is to expect a strong correlation between knowledge and competence.

Hypothesis 2: The next hypothesis addresses motivation and interest. Several theorists (e.g. Jarvis 2009, p. 147; Krapp 2006) state that motivation in formal learning processes is closely linked to interest. Some qualitative and quantitative research results (e.g. Straka 2005, Pätzold 2007) underpin the idea that motivation should generally be regarded as a dependent variable, i.e. a close investigation of influences on one's learning process would probably reveal that motivation to a large extent can be explained by other variables. The study at hand does not allow to identify *causal* relationships between variables, yet the hypothesis would be supported by a strong correlation between interest and motivation.

Hypothesis 3: It is claimed that an important difference between school education and other types of formal or informal education lies in the fact that school is not attended voluntarily. Often this is considered to be a disadvantage of learning in schools. Accordingly one would expect that voluntary learning is less coincidental and more successful. On the other hand considerations like the one above on the importance of interest suggest that voluntariness may be too rough a category to really explain learning outcomes. To analyse this relationship, I correlate the voluntariness of the learning process with the outcome. The expectation is that the correlation is rather weak. Further there should, according to the hypothesis, be no strong correlation between voluntariness and motivation.

Hypothesis 4: Among other topics the recent debate on educational technology has continuously pointed out the importance of new technology as an enriching factor of didactic design. While there are no general objections against the use of technology within arrangements of learning and teaching, some questions regarding the social side are still unresolved. Observing a learning group, one may recognise that the learners relate to each other not only within certain methods (like group discussion) but also as a general recognition of others who participate in the same process or ‘walk in the same direction’. In fact recent approaches towards social media more and more try to emulate this. Yet, I suppose that the felt presence of the other as a part of the life world is of importance even when this other is not taking over the role of a teacher or a partner in learning. This hypothesis would be underpinned if the rating of the according item is considerably high.

Hypothesis 5: Another main topic of the recent educational debate was the reflection on the emotional side of learning. A huge amount of books and articles have been published to bring into focus that any teaching effort should consider the emotional aspects of the process, preferably on both sides, that of the learner as well as that of the teacher. While this doubtlessly has been an important step towards a less technical view, instead fostering a more holistic perspective, one may raise the question if not the same negligence which happened to emotions two decades ago still concerns the bodily aspects of learning. While there are some approaches to integrate this perspective, particularly in educational practice, there still seems to be a lack of theoretical and empirical insight into the body’s importance¹. A strong hint to its meaning would be if the body is not only regarded as important as with respect to bodily learning tasks (like sports etc.) but also with respect to tasks which are usually regarded as purely cognitive (e.g. maths, logical thinking etc.).

Hypotheses with respect to the educational orientation (Waldorf-Steiner oriented or not)

The hypotheses above are rather related to any learning process. However, the second aim of this study is to explore differences between two groups – on the one hand those who are engaged in educational courses which are oriented at mainstream educational thinking, on the other hand those who choose courses which are particularly related to Waldorf-Steiner education. The general assumption is that there are differences between both groups which correlate with certain general assumptions on learning according to the respective educational approach.

Hypothesis 6: Arts are an important factor in Waldorf-Steiner education. Not only are they regarded as an important subject, but they are also seen as a facilitating factor in learning processes, e.g. in form of artistic drawings on the blackboard or as a factor in designing learning media. It is not likely that a study like the one at hand would be able to prove or disprove hypotheses on the impact of aesthetical characteristics of the learning process with respect to the learning outcomes. However it might show if there is a significant difference between the groups concerning the *meaning*, the participants assign to it.

Hypothesis 7: As Steiner-Waldorf education claims to provide a holistic approach towards learning and teaching (Lindenberg 1992), one would expect that the participants of the group of Waldorf-Steiner affiliated learners will regard emotional and bodily aspects more important than others. This hypothesis would be underpinned by accordingly higher agreement with the respective items.

Hypothesis 8: Above, in hypothesis 1, it was presumed that the difference between knowledge and abilities is overestimated. While there is no hint that this aspect should differ between the two groups, one may still expect that the person-oriented approach of Waldorf-Steiner education should result in a generally higher estimation of the learning outcomes’ contribution to personal development. This would be supported if the average estimation of the according items would be higher in the Waldorf-Steiner group.

Research design

In this study 199 people who attended a variety of courses related to educational tasks were asked to respond to a questionnaire dealing with a variety of aspects of learning processes. The participants are adults from about 19 to 50 years; most of them share an academic background.² Their task was to chose a certain learning matter (ranging from shoe lacing through fractional arithmetic to sports and board games) which they have been dealing with in the past and then answer questions on this particular learning process. The questionnaire consisted of eleven overarching questions, mainly addressing the above mentioned aspects change, person and life world. Each of them was covered by a series of items which should be rated by a 1-5 response scale

1. The term body actually can only serve as a kind of abbreviation of a far more complicated concept. It would be necessary to differentiate further between the physical body, body-related aspects of the self-concept and many other aspects. Using the German term ‘Leib’ (or the common translation as ‘lived body’) would be a step into the direction. However, from the researcher’s perspective it would raise a difficulties to cover such a concept within a questionnaire. Therefore at this stage of the research I confine myself to ‘body’.

2. The questions were restricted to the topics covered by the research aims. Questions of age and gender were not addressed, therefore the according variables are not in the data set.

(with 48 items in total). There were further possibilities to give additional text annotations and to estimate for each item, how secure one was with his or her answer.³

The data was collected in several waves from 2008 to 2010. It was recorded as a spreadsheet and analysed with the “R” software environment (see <http://www.r-project.org/>). Due to the size of the sample, primarily elementary methods (analysis of correlations, frequencies and comparison of mean values) were adopted. The following results refer to the sample of 199 participants. The comparison of the group of Waldorf-Steiner affiliated participants to the others is done by separating the group according to the criterion “attends a Waldorf-Steiner related course while participating in the research”. From the totality, 29% (58) are regarded as Waldorf-Steiner affiliated due to this criterion while 71% (141) are not.

Results

The first hypothesis addressed the relationship between knowledge and ability. The questionnaire put two according items: “The abilities [resp. the knowledge] I acquired in the learning process have [resp. has] changed me as a person”. The correlation between the answers⁴ is $r=.70^{***}$. This shows that from the perspective of the person as a learner, the interrelation between knowledge and ability is regarded quite high and underpins the hypothesis that the differentiation of the both according to theories of competence development is a rather analytical approach. Particularly, this result may be taken as a hint that the perspective on the person can be regarded as an *integrating* factor as it does not deny a general discrimination between knowledge and ability but this difference does not show dramatically once we look at the person as a learner.

The perspective on the person is also important for the next result: The hypothesis was that motivation to learn is strongly depending on the learner’s interest at the subject. While the data does not allow to find out about the influence one factor has on the other, we still may calculate the correlation of both. It is $r=.73^{***}$, so at least there is a close relationship between interest and motivation. If we suppose that this is a *causal* relationship at all, than there is every indication that a learner’s motivation is strongly dependent from the person’s interest in the matter.

The third hypothesis situated the personal perspective in a broader context as it addresses the degree to which learning has been done voluntarily. The expectation was that the relationship between the learning outcome and the degree of voluntariness is weak and even the relationship between voluntariness and motivation should not be strong. The former expectation has proven correct: there is no significant correlation between the items “I voluntarily dealt with the learning issue” and “At present it is quite useful for me to have gone through the learning process”. However, the correlation between the former item and the question of motivation (“Back than I was considerably motivated for the learning process”) is rather high ($r=.44^{***}$). Accordingly, voluntariness is correlated to interest ($r=.48^{***}$) – thus voluntariness keeps being a factor to focus on.

The next hypothesis broadens the context of the person again, seeing it as embedded in a social context, which we regarded as part of the life world. Therefore the expectation was that learning is not only influenced by others as partners or teachers, but also by others as just doing the same thing. Three items were used to analyse that. The following table shows the mean values of each of those items.

Item	Mean value ⁵
“Others were important as teachers”	1.5
“Others were important as partners in learning”	2.5
“Others were important because they (independently) learned the same”	2.7

Table 1: The importance of others for the learning process⁶

While it is obvious that teachers generally can claim the most importance in the learning processes documented, the data also shows that others are not only important as learning partners, but also when they are just around, dealing with the same matter. So the person encounters him- or herself as part of a group of people aiming (independently) at the same target.

3. The survey was done in German. See Pätzold 2011 for an English translation of the full questionnaire.

4. The significance for correlation analysis and comparison of mean values is denoted the following way: *** means $p<.01$, ** means $p<.05$, * means $p<.1$.

5. For this and the other items scale ranged from 1 (“agree fully”) to 5 (“disagree fully”).

6. The difference between the first mean value and the others is highly significant ($p<.01$), the others are still significant on a 10% level.

The next hypothesis leads back to the person as a learner, particularly to the role of the lived body in learning. It states that the body will be regarded as important not only when the learning task itself is obviously related to bodily action, but also in other cases. To get a clear picture on that, I built two subgroups. One (“body”) consisted of those participants who explicitly referred their answers to a body related learning task (“lacing shoes”, “riding bicycle”, “swimming” or another kind of sports, n=118). The other (“mind”) is put together from those respondents who report on a learning issue which is strongly related to cognitive activity (“fractional arithmetic”, “logical thinking” and “systems theory/constructivism”, n=28). Table 2 shows the mean values of both groups, the difference and the significance.

Item	Mean value (Body)	Mean value (Mind)	Difference
The body was important because the learning issue was something bodily.	1.13	4.61	3.48***
The body was important because the learning situation raised bodily demands.	1.21	4.32	3.11***
For the learning process there where bodily preconditions.	1.58	3.89	2.31***
It had influenced that I changed bodily during the learning process.	2.55	3.86	1.31***
There where bodily peculiarities (e.g. diseases), which influenced the learning process.	3.38	3.11	-0.27 (n.s.)

Table 2: Importance of the body in learning

Expectedly, the differences are strong when the items simultaneously address the learning process and conditions of the learning matter. However, the difference is decreasing and there is a considerable amount of participants who behold bodily aspects as important even within the “mind”-group. Particularly it attracts attention that there is no significant difference between both groups when the item asks for bodily peculiarities. An analysis of the annotations to the question reveals that in this case diseases are the predominant factor in the “mind”-group while those of the “body”-group primarily mention injuries. Yet, both groups mention a variety of other bodily influences and sometimes also relate to a didactical exploitation of the body⁷.

The following hypotheses are based on assumed general differences between the Waldorf-Steiner group and the other participants. The first of them addresses arts. The assumption was that the former group will put significantly more emphasis on esthetical aspects of the learning process. Actually this is only partly true. The comparison of the mean values to the item “At least some of the learning media (books, board drawings) have been designed formidable” showed no significant difference, neither did the responses to the item “In dealing with the learning issue I acted in an esthetical way (drawing of pictures, moving, etc.)”. However, there was a significant difference between the groups concerning the question if learning the issue enabled the participants to do something *different* in an esthetical way“ (the mean difference is .5**, for the Waldorf-Steiner group the mean value is 2.7) and an even stronger one for the item “The learning issue itself had a certain esthetical quality (beautiful, ugly,...)” (difference: .6***, mean value of the Waldorf-Steiner group: 2.2).

The next hypothesis concerns the idea of holistic education, assuming that the Waldorf-Steiner group will put more emphasis on bodily and emotional aspects of learning in general. Again, the method to find out about that is the comparison of mean values. The following table shows the results.

Item	Waldorf-Steiner group	Others	Difference
The body was important because the learning issue was something bodily.	1.88	2.25	.37 (n.s.)
The body was important because the learning situation raised bodily demands.	1.84	2.53	.69***
The learning process affected me emotionally.	1.72	2.60	.88***

Table 3: Body and emotions in Waldorf-Steiner/others-comparison

7. Actually only one participant explicitly related to bodily activity during learning a cognitive subject, which resembles to Waldorf-Steiner education. He or she reports that “the body was used to verify an algorithm [within a course in computer sciences]: we had to change tyres on the court according to the algorithms we had written” (case #197). He or she does not belong to the Waldorf-Steiner group, though.

The latter two items show that there is a significant difference in which the Waldorf-Steiner group seems to value the importance of the body and emotions higher than the others. To find no significant difference with respect to the learning issue in fact supports this assumption because thus it is not probable that the difference of the second item is a side effect of a difference in the selection of the learning matter.⁸

A last hypothesis for the comparison deals with the relationship between knowledge and ability. It has already been shown that the person as a learner tends to integrate those two aspects and furthermore, the strong correlation between both groups is independent of the belonging to the Waldorf-Steiner group or the others. In line with the expectations, the Waldorf-Steiner group values knowledge and abilities higher with respect to personal development than the reference group:

Item	Waldorf-Steiner group	Others	Difference
The abilities I acquired in the learning process have changed me as a person	1.94	2.55	.61***
The knowledge I acquired in the learning process has changed me as a person	2.56	3.05	.49**

Table 4: Abilities, knowledge and personal development

Discussion

With respect to the reported results, it seems safe to say that a quantitative analysis on basis of a questionnaire is appropriate to address at least certain issues of a concept of learning as a change of the person in the life world. Questions stemming from such a concept can be illuminated by the empirical findings. However, there are open questions and some shortcomings in this approach. In some cases it is quite difficult to assign certain results to particular reasons. For example, speaking of the body may bring up quite different concepts on the participants' side. While most of them probably rather relate the term to the feeling body, its limbs etc., it is positively not wrong to regard the brain as part of the body, too – which may lead to considerably different answers. Yet, the data at hand, including the answers to open questions, support the assumption that the vast majority of the group applied a conventional understanding of the body.

A further point of discussion is the selection of the participants. Due to practical reasons the questionnaire has usually been distributed and filled in at the beginning of courses in educational sciences. While it has been made safe that the actual issue of the questionnaire has not been discussed in advance to doing the survey, it still has to be considered that the participants were all aiming at an educational profession. Therefore the generalisability of the results may be restricted. However, this probably would rather apply to the absolute mean values (as it did in the Waldorf-/non-Waldorf comparison) than in more general estimations of learning processes.

The distribution to the two groups of Waldorf-Steiner affiliated participants and others may be more of a problem, as the according criterion admittedly is rather weak. Though the results generally are in line with the expectations it would be desirable to have a more concrete account of the actual experience each of the respondents has with particular educational approaches (e.g. if and for how long they may have attended a Waldorf-Steiner school, a Montessori school or other institutions with a descent educational program). Eventually this may lead to a clearer picture of the different approaches towards learning, the participants report. In this context it would further be desirable to know more about the institutional as well as educational context in which the reported learning process actually has taken place.

A further (and quite ambitious) desideratum would be to overcome the restriction to *reported* learning processes. The study sheds light on the individual's perception of their learning with respect to particular learning processes but it systematically shades learning which is not intentional or even not accessible by episodic memory.⁹ Furthermore it has to be taken into account that some of the reported episodes have taken place long ago so there may be certain mistakes in the retrospective evaluation.

8. The above mentioned groups "body" and "mind" also have a roughly similar percentage of Waldorf-Steiner participants and others.

9. It is an interesting side effect that the study showed that many people seem to remember quite precisely, when and how they learned lacing shoes. Other matters, like fractional arithmetic, are related to certain time frames at school. However, it would be interesting also to investigate processes like learning to recognise a formerly unknown person or to develop advanced scientific or crafts-related concepts. However, it seems that for this type of research, approaches like Piaget's "methode clinique" (cf. Vonèche, 2007) are still to be regarded as state of the art.

Despite those restrictions, the study has shown that learning, delineated by aspects of a self-observed learning process, carries particular characteristics in line with the theoretical framework of the change of the person in the life-world. Some of those characteristics are:

- Knowledge and ability, though being distinguishable from an analytical point of view, tend to be integrated in the person as a learner.
- Motivation seems to be to a great extent dependent on interest; i.e. if one wants to foster motivation of learner or a learning group one of the most promising ways would be to link to the learner's interest (instead of e.g. trying to render the matter “more entertaining”).
- Others are important for learning processes not only when they occur as partners or teachers but also when they are just dealing with the same issue. Therefore it should be possible to perceive others in their effort.
- While being predominantly important with respect to the learning matter, there also is a general importance of the body in learning processes. Particularly this should be borne in mind when advising learners. Bodily peculiarities are a quite normal occurrence in learning processes which should be considered generally.
- While arts play an important role in Waldorf-Steiner education, it seems that they do not strongly influence the learner's concept of learning. The aesthetic dimension is not at the centre of their reports on learning processes.
- The holistic approach of Waldorf-Steiner education is supported by the data in that Waldorf-Steiner affiliated learners tend to regard learning processes generally as more closely related to their personal development.

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