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Small Steps Towards a Culture of Deliberative Learning: Media Supported Pyramid Discussions

Christiane Schmidt

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Abstract: The basic idea of deliberative didactic is to improve decision competency in discussion and research. Based on the philosophy of deliberation (known from the program of the journal *Deliberation-Knowledge-Ethics*) well-considered alternative positions and their comprehensible representation are seen as essential for well-founded decisions. The following article refers to the didactical approach developed by Bettina Blanck. The article focuses on a specific deliberation method: the pyramid discussion. In these discussions, deliberations, valuations and solutions are developed by the team members and represented as the steps of a pyramid. Experiences in using media supported pyramid discussions in university seminars are described and considered as small steps towards the deliberative managing of knowledge diversity in virtual teams.

Introduction

At first glance, the didactic approach of deliberative learning and current approaches of microlearning – especially those emphasizing prepared microcontent with push character for media supported learning in short time – seem to be based on incommensurable ideas. In both contexts – deliberative learning and microlearning – information overload is considered to be an important pedagogical challenge at present, but contrasting strategies are offered. Microlearning focuses on the handling of small units in learning processes. In a broader sense, microlearning is defined as learning with microcontent, which is characterized by small units of content and short learning times. A variety of new microlearning approaches and the integration of microlearning in various didactic concepts has been developed in recent years – mainly in the context of e-learning and knowledge management (cf. Mosel, Hug & Gstrein in prep.; Wikipedia, 2006; for details see also the contributions in this book). In view of information overload, some of these approaches recommend knowledge fragmentation and aim at small learning steps and short effort with prepared microcontent. “Unlike ‘traditional’ elearning approaches, microlearning often tends towards push technology through push media, which reduces the cognitive load on the learners” (Wikipedia, 2006). Deliberative learning focuses on knowledge diversity and reflexive learning. The basic idea of deliberative didactic is to improve decision competency in discussion and research. With respect to information overload, the deliberative approach recommends knowledge justification by considering and representing alternative positions. Deliberative learning tends to be time-consuming and labourintensive. From a sceptic’s point of view, the differences may be briefly characterized as lean-learning against long-winded learning.

Looking more closely and open-mindedly on microlearning and deliberative learning, we also find some points of con-

tact. In this article, an attempt is made to describe the basic idea of deliberative didactic, to give an example of a deliberation method and to discuss its connection with basic ideas of microlearning. As will be seen, achieving decision competency starts with small steps of deliberation. The presented method, the “deliberation oriented pyramid discussion,” is reflected as a special type of micro-collaboration. The given example of pyramid discussions in two collaborating university seminars describes first experiences with deliberations in virtual teams. A comprehensible representation of the deliberation process in pyramid discussions – of traditional as well as of virtual teams – supports the students in finding and building knowledge structures. In the described teams, digital media supported the collaborative structuring of knowledge. The given example therefore touches upon pyramid discussions as a specific view of a virtual knowledge space. Finally, differences to microlearning – especially to prepared micro content with push character – are discussed and open questions are pointed out.

The Deliberative Didactic Approach

The deliberative approach has been developed in the research group “culture of deliberation” at the University of Paderborn. The group started in the middle 1980s discussing deliberation as a requirement of knowledge justification with respect to the responsibility of scientific research. The group members Frank Benseler, Bettina Blanck, Rainer Greshoff and Werner Loh made the upcoming philosophy of deliberation to the conceptual fundament of a scientific discussion journal. This journal, first named *Ethik und Sozialwissenschaften* and later changed into *Erwägung – Wissen – Ethik (EWE) Deliberation – Knowledge – Ethics*, has been published since 1990. In the 90s an interdisciplinary circle started discussing and refining the deliberation approach (cf. Benseler, Blanck, Greshoff & Loh, 1994; for the program

of the journal, see EWE 13, 2002, p. 174). First deliberation seminars have been designed and explored.

The deliberative didactic approach is based on the main ideas about a culture of deliberation. It is seen as important:

- to distinguish between solution oriented and deliberation-oriented handling of alternative positions.
- to consider alternative positions not only in the context of discovery, but also in the context of justification.
- to be conscious about the connection between solution and deliberation: the deliberated alternatives help to qualify the justification of a founded (tentative) solution.
- to document and preserve the deliberated alternatives which allows for examining the state of deliberation and supports a (self-) critical view on solutions.
- to reflect the limits of deliberating.

The aim of deliberative didactic is to improve decision competency in discussion and research. Based on the philosophy of deliberation (in the sense of the program of the aforementioned journal), well-considered alternative positions and their comprehensible representation are seen as essential for wellfounded decisions. Bettina Blanck, who developed the didactic concept, defines a decision as a combination of deliberation and valuation: the deliberation of one or more possibilities and the positive or negative valuation of the deliberated possibilities (cf. Blanck, 2002, p. 236). Decisions aim at solutions. Blanck points out that it is not possible to gain all solutions by decisions. Decisions are only one way to get solutions. For instance, traditions or routines may determine a solution. Solutions may also be determined by preceding personal decisions or preceding decisions of others (cf. Blanck, 2002, p. 237). Decision competency, therefore, is not only a competence to handle deliberations and valuations but also a competence to reflect the feasibility of deciding. A decision may also be the decision not to decide. Decision competency includes, furthermore, the ability to reflect the adequacy of previous decisions.

To provide a culture of deliberation in university seminars cannot be done simply by adding controversial scientific positions to the topic of a traditional seminar. The ways of handling alternative positions have to be reflected. Methods supporting the students' getting used to a deliberation oriented handling of alternatives are necessary. On the level of deliberation, it is essential to make use of knowledge diversity, to open a range of alternatives, to be creative, to share knowledge, to develop one's own positions, to debate the positions of others, and to accept corrections. On the level of deliberation, there are no false or forbidden positions, nobody is to blame for his/her contributions. An essential element is to develop scientific curiosity (cf. Blanck, 2004, p.5).

In deliberation seminars, therefore, methods like brainstorming, gathering examples and writing diaries of research are used. Moreover, special deliberation methods have been explicated and explored, for instance, forms of written discussion, like the position-commentary-response method and the deliberation oriented pyramid discussion (cf. Blanck, 2005).

Let us now look more closely at the latter.

Deliberation Oriented Pyramid Discussions

Pyramid discussions are designed to support the finding, explication, structuring and representation of a variety of alternatives. Deliberation oriented pyramid discussions are mostly written discussions in teams. The produced texts are represented in the form of a pyramid. An important aim of this form of representation is to make it easier to handle knowledge diversity and explore differences and similarities of positions (cf. Blanck, 2005, p. 546). A good size for such a team is eight members. In principle, the pyramid discussion is a special type of debating and arguing: each student of the team of eight members reflects and describes his/her personal ideas, interpretation or expertise to a given problem, or question, or text, or other starting material, so that there are eight positions on level one. In a form of micro-collaboration, the members of four subteams (with two members each) – by discussing their level one positions – find four more-or-less new positions on level two. These new positions can be repetitions, transformations or deliberative integrations of the original positions. Now each of these subteams builds together with another subteam a new subteam (two subteams with four members each) – and by deliberating their level two positions – find two more-or-less new positions on level three. Next, all the eight members of the team work together, deliberating their level three positions until they find the one position on level four. Each collaboration step ends by writing down not only the developed position, but also the remaining points of disagreement.

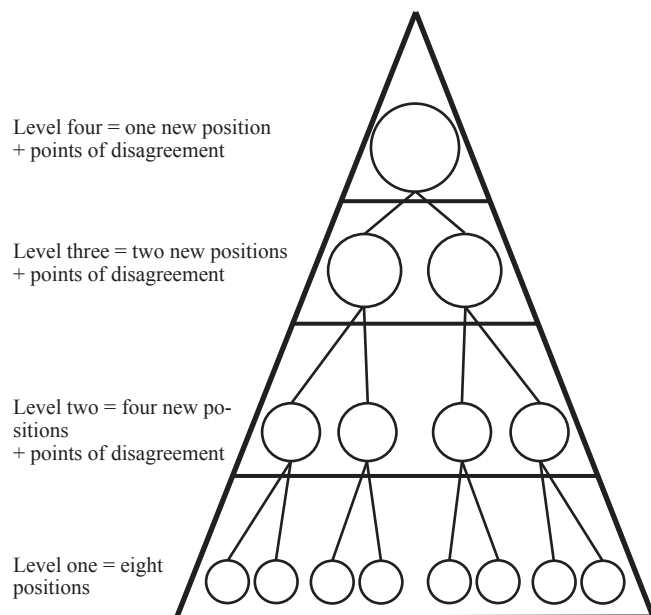


Figure 1. Pyramid discussion (Blanck, 2005, p. 546)

There may be more or less than eight students in a pyramid team. If there were, for example, nine students, they would have to build one subteam of three and three subteams of two students on the second pyramid step. If there were less than eight, the pyramid would have only three steps.

For a well-done deliberation, it is important that the partici-

pants of the pyramid discussion neither only try to maintain their own position, nor only try to enforce the team to agree on one unified position. They, rather, should explore as thoroughly as possible the differences of diverse positions. In the view of the deliberation philosophy, not to achieve a joint position is also seen as a good result of a pyramid discussion: to adhere to different positions may be appropriate, if there are, for instance, not enough arguments in favor of one position (cf. Blanck, 2002; Blanck & Schmidt, 2005).

Pyramid Discussions in the Virtual Knowledge Space ^{open}sTeam

Writing positions and arguments imply the production of a big number of documents. Therefore, one reason to look for possibilities of media supported pyramid discussions was to get the documentation clearly structured. Other requirements for media support were to enable

- the availability of the documents
- a simple handling of all contributions
- personal areas and shared group areas
- possibilities to comment or annotate the documents of others
- links between the documents
- a comprehensible representation of the history of the discussion.

In several research projects of Reinhard Keil-Slawik and his team at the University of Paderborn, these requirements of pyramid discussions and other deliberation methods have been explored in connection with the development of collaborative virtual knowledge spaces. In interdisciplinary discussions and projects, the ideas of deliberative didactic have been connected with ideas of cooperative knowledge organization:

“Our research in Paderborn focuses on finding new and innovative methods for the collaborative structuring of knowledge (...). For a number of years now the open source platform ^{open}sTeam has been used for the technical implementation of our concepts (...). The key conceptual element of our work is the virtual knowledge space. It brings together and focuses a variety of digital services. People (users/learners) meet in virtual knowledge spaces, structure knowledge collaboratively and use different digital means of communication (...). The various media involved are stored in the knowledge space and mapped via a specific view of the space.” (Hampel & Heckmann, 2005, pp. 1942-3; cf. Hampel, Keil-Slawik & Selke, 2005).

In a pilot project, pyramid discussions were developed as such a specific view of the virtual knowledge space ^{open}sTeam. The technical realization was developed by Patricia Heckmann, the didactic approach by Bettina Blanck who tried out the method together with Christiane Schmidt in two collaborating university seminars (Heckmann, 2004, Blanck & Schmidt, 2005). The pyramid discussions in these seminars are described in the next section. Then connections and differences between pyramid discussions and microlearning will be discussed.

Media Supported Pyramid Discussions in Two Collaborating University Seminars

The now considered example of pyramid discussions took place in 2004 at two German universities: Paderborn and Hildesheim. The involved seminars differed in topic and timetable. The topic of the seminar in Paderborn – managed by Bettina Blanck and addressed to advanced students – was “How to handle diversity at school.” The seminar in Hildesheim – managed by Christiane Schmidt and addressed to beginners – was an introduction to scientific work for students in educational science. These seminars cooperated only during certain weeks, as can be seen in Figure 2.

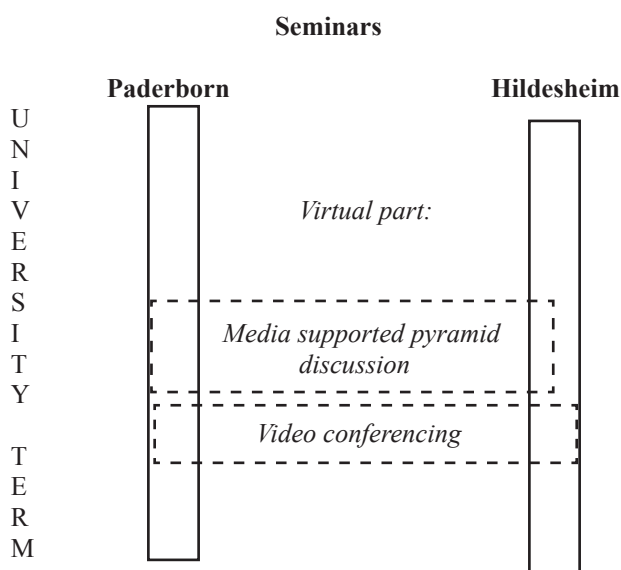


Figure 2. Partly collaborating seminars

In a shared group area of the virtual knowledge space ^{open}sTeam, the students worked on two pyramid discussions. The students in Paderborn deliberated, in their pyramid, the question “What is a well-done diversity reflecting teaching?” (Was ist ein guter heterogenitätsbewusster Unterricht?). The students in Hildesheim chose one of several given proposals of statements as a starting point of their pyramid discussion. The statement they picked out was “Teachers who attempt to have all children learn the same things will only support ‘low performers’ and neglect the ‘high performers.’ (Lehrerinnen und Lehrer, die sich bemühen, dass alle Kinder das Gleiche lernen, fördern nur die ‘Schwachen’ und vernachlässigen es, auch ‘starke’ SchülerInnen zu fördern). Each local pyramid team had eight members. In Hildesheim, thirty students took part in the seminar. They could choose between conventional working groups – preparing and presenting papers – and media supported pyramid discussions. Most of them chose the first option. In the shared area of ^{open}sTeam, the students could store their positions and discuss and develop them collaboratively in asynchronous, as well as in synchronous, communication. Reaching the third step, the students in Hildesheim referred to literature to justify their arguments (according to the regulations of seminar examination).

To encourage the communication between the teams of the two collaborating seminars, each student had to write a com-

ment to one of the level-one-positions of the pyramid of the other team and to trace and comment on the history of this position. So it was possible for the students to accompany a member of the other team from step one to step four by writing comments. The collaboration of the teams was intensified and reflected by videoconferencing between both seminars (cf. Blanck & Schmidt, 2005).

Let's now have a look at the following summary of a selected aspect of the deliberations of the pyramid discussion in Hildesheim. The selected aspect "support of 'low performers' by special courses" is mentioned in several step one positions and is partly picked up in step two and three. There are also some comments from the other team on this aspect. It is not the central aspect of the deliberation, but explicitly mentioned and easy to trace. Therefore, it is selected here to illustrate a small section of the deliberation process.

On the first step of the pyramid, we find different opinions about the support of "low performers" by special additional courses. Arguments for special courses, for instance, are the advantages of working in small groups and the advantages of individualized learning time. Personal experiences of the students regarding how their teachers tried to manage diversity in the classroom are partly reported to support and partly mentioned to contest the idea of special groups. An argument against special courses on this pyramid step is that heterogeneity in the classroom may encourage the pupils to learn from each other.

On the second step, most of the students reflected the differences and similarities between their positions and tried to construct together a new "mixed" position. For instance, one subgroup with different opinions about special courses for "low performers" discussed that ideally there shouldn't be special courses, but that in present praxis such courses are still necessary. The members of one of the subteams on level two – they were good friends – did not touch upon the differences between their positions. They mainly adapted one of both positions, screening off the contrary points.

In the third step, the four students of one of the subteams picked up the aspect of special courses for "low performers." They pointed out the importance of giving all pupils equal access to education. They voted for individualized support and discussed special courses as a possibility to realise this support. The idea of different learning areas, in which the pupils could help each other, was discussed and valued as a better realisation of individualized support.

The students in Paderborn wrote several comments to the first-and second-steppositions of the students in Hildesheim. One of those comments – referring to the aspect of the special courses – may now continue our example. One of the students in Hildesheim had written that – in her opinion – the best way to support "low performers" would be to offer special courses in addition to regular courses. The commentator did not agree. She thought this separation would lead to an exceptional position of the supported children. She also rejected the separation for the "high performers." If "low performers" and "high performers" were supported in the

classroom the children would learn that diversity is normal and that "low performers" are not stupid and "high performers" are not better than the others.

Pyramid Discussions and Microlearning

In a broader sense, the steps of a deliberation oriented pyramid discussion may be interpreted as micro-steps of deliberation and of collaborative knowledge structuring.

Each student was involved in writing from the very beginning – working alone on step one of the pyramid, answering to the question (Pyramid of Paderborn) or taking position to the statement (Pyramid of Hildesheim). Problems like uncertainty in how to start the discussion or difficulties because of unequal participation in the beginning of the discussions – well known in discussions of virtual teams – did not occur. To write down one's own position was the presupposition for the following teamwork. Our impression was that the stepwise enlargement of the collaborating subteams supported the development of the deliberation process. Every student could be sure about the inclusion of his/her more-or-less small contribution. The first steps in this stepwise enlargement of the collaboration may be seen as micro-collaboration, which supports in small steps the development of the team (see for the term "microcollaboration" Neuhold & Lindner, 2006, p. 21).

The documentation of the contributions, in the shape of a pyramid, supported the structuring of positions in the teams. The shared group area of the virtual knowledge space *open-sTeam* facilitated the structured documentation of the deliberation process of the positions. These small steps of deliberation are one way to inspire the students to find and build knowledge structures and to handle knowledge diversity in teams. Here we may find some points of contact of deliberative learning with the background of microlearning, where the microlearning discourse refers to "the process of medialization, mediation, transformation and order of knowledge" (Hug, 2006, p. 2).

The comments on the positions of the other team in our example may be interpreted as very first steps to learn how to handle knowledge diversity in virtual teams. ICT (Information and Communication Technologies) – supported virtual teams have become an important form of co-operation in education and at work. Like a traditional team, a virtual team is a group of people, built to realize a task. While the members of a traditional team use to meet at the same place, communicating mostly face to face, the members of a virtual team are at different places, often even in different countries, communicating mainly via media, partly synchronously, partly asynchronously (Hauenschild, Schmidt & Wagner, 2005, p. 14; Schmidt, 2005). The building of partnerships with members at two different campus universities in two collaborating seminars may be seen as a pre-exercise to such virtual teamwork.

To comment critically on a statement of another student in writing is no simple task. To handle different positions/opin-

ions in team discussions and especially to handle criticism – to criticize others, as well as to be criticised – is a special challenge of handling knowledge diversity and social relations in teams. In our example, each student had to comment and trace a position of another student. In the beginning, there were several misunderstandings of the younger students in Hildesheim when getting comments from the advanced students in Paderborn. The first commentary, written by a student in Paderborn, was long and detailed. The commented-upon subteam in Hildesheim was shocked about the length and felt attacked. This commentary extended the uneasiness of the beginners in Hildesheim about writing comments on the texts of the advanced students in Paderborn. To learn to value criticism and to learn to handle it in a deliberative way is part of a long process of changing the discussion culture in university and society. The initiation of a new way of handling criticism in a deliberation oriented pyramid discussion has to go along with reflections on the experiences made learning by doing. Pyramid teams that are not experienced in deliberative discussions need external support for these reflections.

If members of a virtual team communicate mainly asynchronously and in writing, problems of handling criticism may be augmented. Based on our observations of the commentary-partnerships, we suspected that the reflection of these problems needs synchronous communication. In the seminar, the problems of the virtual partners to handle criticism came up for discussion and could be reflected during the synchronous communication in the videoconference.

Small steps in media supported micro-collaboration in the deliberative didactic approach are embedded in reflexive learning and knowledge structuring. As the problems of handling criticism show, to improve decision competency in discussion and research cannot be learned micro-step by micro-step. There are roundabout ways, leaps and bounds, feedback looping, deepening thoughts and changing processes over time. The small steps in a deliberation-oriented pyramid are not knowledge nuggets to be collected by the students. They have to write and justify their own positions. Dimensions of microlearning like “relatively short effort,” “rather simple issues,” “narrow topics,” and “micro content with push character” (Hug, 2006, p.9; cf. also EAMIL, 2006), like, for example, language training on a screen saver (cf. Hug, 2005, p.7) are in sharp contrast to these dimensions of deliberative learning.

Up to this point, we have been looking at microlearning elements of deliberation oriented pyramid discussions. To look at microlearning from a deliberative perspective raises many open questions beyond the scope of this article. Some of these questions are: Do different allied learning topics and different types of knowledge resolve the contrasts between microlearning and deliberative learning? What about elements of deliberative learning like reflection, feedback, and criticism in microlearning contexts? Microlearning is derived from microteaching, which is mainly characterized by feedback of peers to experienced interaction (cf. Hug, 2006, p. 8; see for the tradition of microteaching, for example, Fricke & Thiele, 1982). Is micro content with push character – offered

for learning by short effort – compatible to ideas of reflexive learning by doing and collaborative knowledge structuring?

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