The “befter method”

from the perspective of (intercultural) learning research

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Aim of the befter method

The befter method (“before and after the experience”) was developed as a learning method for collaborative learning in international online cooperation projects. Using this method, learners should be brought to “deeper learning” through “self-made experiences”, in which they activate existing knowledge structures and link them with new knowledge. In addition, learners should gain more self-confidence through this method as well as develop their social and media skills.

Procedure of the befter method

The “befter method” follows 7 steps, which are also called “lighthouses” and are intended to provide orientation in these projects. They are divided into the phases before the actual learning experience, the learning experience itself and the processing phase after the learning experience.

Before the experience

1st **Vision and Imagination:** Here the learners independently produce ideas for sustainability projects that they would like to work on and present them on the project online platform.

2 **Festival of ideas and team building:** In this phase, the learners study the project ideas, exchange ideas, give each other feedback and decide on which topic they would like to form a project team. They do this via video conferences or in the classroom, for example.

The experience

3. **experience on site:** In this step, the focus is on actual direct experience. This means, for example, that the learners visit companies, conduct experiments to answer their project questions, organize interviews with experts for their questions and record their results in a suitable form and with different media (video, audio, transcripts, etc.). From this experience phase, they in turn generate new questions in order to delve deeper and deeper into the subject matter.

After the experience

4. **shape and create:** in this phase, the learners view and edit the results they collected in the previous step so that they can later be presented to others on the project website.

5 **Reflection:** In this phase, the learners examine their own findings with regard to the project question and the extent to which certain hypotheses have been confirmed in reality or not. They reflect on their personal development and the development of the team during the implementation of the project.

6 **Publishing:** In this step, the learners publish their results on the project website and thus ensure the dissemination and sustainability of their project activities.

7. **Promotion and getting feedback:** In the last step, the learners are motivated to discuss their results with others and to be able to perceive and categorize their own results in a larger context from the feedback of others.

A suitable learning concept in pedagogical contexts must always answer the question of the transfer of acquired knowledge into reality beyond the classroom. All too often we come across the phenomenon of "inert knowledge", i.e. learners acquire knowledge that they can reproduce in tests but fail to apply it when it becomes relevant in reality.

The most convincing explanation for this phenomenon is provided by the theories of "situated learning" and subject-centered learning. Although these concepts are based on very different approaches, they have a common epistemological foundation. They are based on the following basic assumptions:

Learning is subject-centered: Learning cannot be imposed from the outside, by a teacher or a learning environment, however creatively designed. Learners always need a subjectively perceived "good reason" to embark on a learning process and take on the effort of learning (Holzkamp 1993). If learners see no relevance for themselves in a task against the background of their life interests and their own biographical situation, then they will perhaps work on the task, but only make enough effort to avoid possible negative consequences, such as receiving a bad grade or negative criticism from the teacher. Holzkamp speaks here of a so-called "defensive learning motivation", which does not lead to sustainability of the learning process and makes a transfer of knowledge to new questions unlikely. If, on the other hand, learners see the project task as an issue that is relevant to them personally and they actively "make it their own", then a more "expansive learning motivation" can be expected. Learners will then make an effort to immerse themselves ever more deeply in a subject, which makes it more likely that the knowledge acquired will be more sustainable and transferable.

Learning is situated: If knowledge cannot be separated from the situation in which it is acquired, then it is crucial for the transfer of knowledge that knowledge is not imparted "in the abstract", but always in its context of application. For example, a lecture on the SDGs can certainly be very instructive, but can still lead to inert knowledge if it is not clear to learners how sustainability goals are shaped by which actions in a specific application context. The flexibility of knowledge and thus its probability of transfer depends to a large extent on how knowledge is contextualized in different situations. In these different application contexts, similarities and differences can then be identified and principles can be found that link these contexts, so-called meta-contextualizations (Kammhuber 2017).

Learning is a social, multi-perspective process: learning does not take place in isolation, but learners are social beings, i.e. they compare their ideas with those of other people or their products, e.g. with teachers, peers or teaching materials, and in this way construct a specific view of a learning object. The more consciously this process of reflection is carried out, the richer the perspective on knowledge and thus the more complex and differentiated the perception of reality becomes. This subsequently facilitates the transfer of knowledge.

Learning as an identity-forming process: Learning is more than the acquisition of factual knowledge. Through learning, learners gradually become members of a community of experts in which specific values, norms and rules apply, with the help of which a certain self-image is gradually formed and contributes to identity development (Lave & Wenger 1991). In an apprenticeship, for example, bakers or florists not only learn their trade, but also develop an identity as a baker or florist and a sense of professional pride.

Central didactic design guidelines for learning environments can then be derived from these basic principles (Bransford, Brown & Cocking, 1999):

- **Authenticity and relevance** of the learning environment/materials, i.e. the learning context should be based in reality or reflect its complexity and offer a “good reason” from the learner's subjective perspective to engage in a learning process.
- **Multiple contexts**, i.e. as many different application contexts as possible should be workable in the learning situation so that learners can meta-contextualize their knowledge;
- **Multiple perspectives**, i.e. by including different perspectives, e.g. from different disciplines or interest groups, the complexity of the perception of the problem situation can be expanded and made more flexible;
- **Discursive learning culture**, i.e. the communicative exchange of multiple perspectives should be facilitated through cooperative forms of learning and argumentation (Stengel, 2008);
- **Teachers as “excellent learners”,** i.e. teachers in these learning environments are not the “know-it-all” who have a definitive answer to all questions but are rather “learning experts” who show learners how they look at problems and questions and what actions they derive from them. In other words, they show how they move in a complex context and search for solutions.

How transfer-effective is the "befter method"?

If we now analyse the "befter method" according to the criteria of a subject-centred and situated learning environment, we can see that the "befter method" fulfils the criteria of a transfer-effective and motivating learning environment very well:

Befter steps	Design criteria of subject, centered situated learning
Vision & Imagination	Through the independent development of project ideas, learning becomes subject-centered, i.e. the learners work on THEIR questions, which leads to an expansive motivation to learn. .
Festival of Ideas & Teambuilding	The social aspect of learning is already visible here, with which questions are clarified through exchange and change of perspective, but also “expert” communities are established.
Experience on site	This is where learners gain authentic and relevant experience relating to their problem. They experience the issue in a real, complex context and develop context-related, situated knowledge about their problem.
Shape & Create	By capturing their experiences using different methods and techniques, learners make these experiences accessible for reflection, which is crucial for the development of flexible, transfer-oriented knowledge.
Reflection	By reflecting on their experiences together as a team, learners learn to adopt multiple perspectives and to meta-contextualize the knowledge applied in different situations.
Publishing	By publishing, learners prepare their findings for the public. Here, too, they enter into a communicative exchange and must include the perspectives of the audience in the presentation of their results. This promotes a further deepening of the learners' knowledge and also increases their motivation, as they see that their project work is relevant for the public. .
Promotion & Feedback	In this final step, multi-perspectivity is once again applied. Feedback in social exchange with people from outside the team broadens the perspective on their own research question once again. Learners learn to critically evaluate their project results and derive a lasting, sustainable learning process.

Possible obstacles to learning effectiveness

The learning environments along the befter method offer a lot of learning potential, but also present some challenges that can impair learning success. The most important challenges are described below and tips are given on how to successfully overcome them.

Lost in context

Learning research on situated learning environments has shown that novices in a learning field without a basic knowledge structure can quickly become overwhelmed by the complexity of a question. They then need a lot of time to build up the necessary knowledge in the field to solve the problem. This can then lead to difficulties with learning motivation and frustration. This can be counteracted if the learners acquire structured background knowledge during and after the selection of their topics before they enter the “experience on site”. This can be done either by the teacher or through teaching materials.

Dominance and conformity in groups

Team dynamics have a strong impact on the learning motivation and learning success of individual team members. For example, opinionated team members and conformity processes in the team can influence shy or less self-confident team members in such a way that they no longer dare to express their perspectives or questions and are therefore no longer able to make the project questions their own. Their motivation to learn will then be primarily defensive and the team will fall short of its potential. Here it is important to sensitize the teams to these problems and to provide them with methods for shaping teamwork in such a way that the project goal is achieved but all team members can develop equally in the process.

Intercultural teams

If the teams are made up of learners with different cultural socializations, the team can be enriched by highly interesting new perspectives, but the problems known from intercultural team research can also arise. For example, different communication and conflict styles, differences in project management and team cooperation can lead to misunderstandings and conflicts that prevent the team's learning potential from being fully exploited. This can be exacerbated by different levels of proficiency in the common foreign language, resulting in problems of dominance and subordination with subsequent conflicts. This can be countered with intercultural preparation and coaching for the teams.

Frustration due to lack of demand

Learners develop a high level of motivation to show the results of their teamwork (publishing & promotion). If there is a lack of demand from the external audience, frustration can quickly arise, and learners begin to ask themselves why they have gone to all this effort. In this respect, it is important that this step does not just end

with an upload to the website but includes an event and an invitation to interested external parties to whom the content is then presented.

Conclusion

The befter method can be seen as a successful didactic implementation of the principles of subject-centered and situated learning and offers the opportunity to build up flexible, transferable knowledge in a motivating learning environment, as long as the potential learning obstacles are recognized at an early stage and appropriate measures are developed to overcome them. Learners develop a wide range of skills, such as communication, team, conflict and decision-making skills, the ability to change perspectives, intercultural skills, sustainable thinking and action, interdisciplinary thinking and action, language skills, project management skills, learning skills, self-competence and much more. In this respect, the befter method is a good way to promote so-called “future skills” in young people (OECD 2019).

References:

Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How People Learn: Brain, Mind, Experience, and School.* National Academy Press.

Holzkamp, K (1995). *Lernen. Subjektwissenschaftliche Grundlegung*. Campus

Kammhuber, S. (2000). *Interkulturelles Lernen und Lehren*. Springer.

Kammhuber, S. (2017). Globalisierung-Kulturelle Vielfalt-Interkulturelles Lernen. In D. Frey und H.W. Bierhoff (Hrsg.). *Kommunikation, Interaktion und Soziale Gruppenprozesse*. *Enzyklopädie der Psychologie. Sozialpsychologie, Band 3*, S. 407-440. Hogrefe.

Lave, Jean, and Etienne Wenger. 1991. *Situated Learning: Legitimate Peripheral Participation.* Cambridge: Cambridge University Press.

OECD (2019). *Skills for 2030*. https://www.oecd.org/content/dam/oecd/en/about/projects/edu/education-2040/concept-notes/Skills_for_2030_concept_note.pdf

Stengel, V. (2008). *Interkulturelles Lernen mit kooperativen Methoden*. Peter Lang.