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Articles

New Study: with participation to more learner-centredness

New Study: Mit Partizipation zu mehr studierendenzentrierter Lehre

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Abstract

Current teaching approaches do not always seem to provide an adequate response to the challenges of the future, assuring that students acquire the necessary skills and mindset capable of adapting to emerging challenges. In the era of New Study, we need a shift from traditional teaching to a more learner-centred pedagogy. One important aspect of this is to actively engage students in the (re)design of the learning environment, giving them the freedom and responsibility to decide and contribute to the development, exploration, or evaluation of the learning process. New Study needs participation – an educator-student partnership as a collaborative and mutual process where all participants are given the equal chance to partake in shaping the learning environment. This article analyses the first exploration phase of the research project KoLLI, which analyses the role of participation in higher education and aims to develop a generic and flexible framework to enable participation at the course level.

Keywords: student participation at the micro-level; learner centred pedagogy.

Zusammenfassung

Derzeitige Lehrkonzepte scheinen nicht immer eine angemessene Antwort auf die Herausforderungen der Zukunft zu geben und zu gewährleisten, dass die Studierenden die notwendigen Fähigkeiten und eine Denkweise erwerben, die es ihnen ermöglicht, sich an neue Herausforderungen anzupassen. Im Zeitalter von New Study brauchen wir eine Abkehr vom Frontalunterricht hin zu einer stärker auf die Lernenden ausgerichteten Didaktik. Ein wichtiger Aspekt dabei ist, die Studierenden aktiv in die (Neu-)Gestaltung des Lernumfelds einzubeziehen und ihnen die Freiheit und Verantwortung zu geben, diese zu entwickeln und mitzugestalten. New Study braucht Partizipation - eine Partnerschaft zwischen Lehrenden und Lernenden, bei dem alle Beteiligten die gleiche Chance haben, die Lernumgebung zu gestalten. In diesem Artikel stellen wir die erste Explorationsphase des Forschungsprojekts KoLLI vor, das die Rolle der Partizipation in der Hochschulbildung analysiert und darauf abzielt, ein allgemeines und flexibles Rahmenwerk zu entwickeln, das Partizipation auf der Kursebene ermöglicht.

Schlüsselwörter: Studentenbeteiligung auf der Mikroebene; lernendenzentrierte Didaktik.

1. Introduction

Due to the ongoing digitalization, a rapid changing of the job market and changing learning behaviours, higher education requires an adjustment of pedagogical approaches to offer sustainable as well as competency-based learning. In which matter universities change, depends on the question: How higher education will transform itself as a reaction of a transformation of its surroundings? One approach could be the shift from traditional teaching to a more learner-centred pedagogy to shape future employees that are equipped with Future Skills. But it is not only about Future Skills but also about shaping a mindset that is able to analyse and critically reflect situations as well as adjust to changing environments and arising challenges.

Current models of higher education do not always seem to provide an adequate response to the challenges of the future, like climate change, social inequality and digital transformation (Ehlers, 2024). The Organization for Economic Co-operation and Development (OECD) suggests to improve *skills for a resilient green and digital transition* like information-processing, socio-emotional, metacognitive skills as well as communication skills for challenging economic problems of the future (OECD, 2023).

New Study utilising principals of New Work focuses on the learner's needs, fostering meaning-making, a sense of social belonging, and responsibility. This approach enhances motivation and the realization of potential (Giese & Suhr, 2024). Therefore, we need a teaching practice that priories the development of skills and competencies, rather than simply transferring knowledge to students (OECD, 2023). Some authors see a shift from teaching to learning (Dewey, 1997; Freire, 2000; Piaget, 1954) or a constructivist turn (Bruner, 1960; Papert, 1980). They all have the idea in common that education needs to be more learner centred. We see participation in teaching and learning as one possible approach to develop more learner centredness lectures. Because learner centredness emphasizes that learning is an active process for which learners are responsible themselves, while educators act as facilitators (Ahn & Class, 2016; Lea et al., 2003; Weimer, 2002). This promotes mutual respect and interdependence in the teaching-learning process (Attard et al., 2010; Lea et al., 2003) and needs methods for learning and teaching, and also study related processes, that support partnerships and participation between educators and learners (Bovill et al., 2011; Brooman et al., 2015; Martens et al., 2019).

In most lectures, interdependency between educators and learners is more a community of destiny, where everybody has fixed roles: Educators teach, students learn. In traditional lectures, educators are active while students usually stay passive – listening to and observing the teaching – with educators asking questions from time-to-time to check whether the students are following (Weimer, 2002). This learning setting, however, does not secure that graduates actually acquire the taught skills. For this, educators should foster student engagement and practice learner-centred pedagogy, instead. Wong & Lien (2022) showed that student engagement is crucial for success in higher education by awakening a more serious interest for learning that results in getting active in the learning process and shaping a commitment for learning. Moreover, student engagement is not only about consulting students (like asking them to evaluate lectures), it's about exploration how students can become participants in the design of teaching (Bovill et al., 2011).

Following on from the previous sentence, we are going to discuss participation in higher education, how it may increase student engagement and allow for learner-centred education. We will further introduce our on-going research project KoLLI (Cooperative Teaching-Learning Innovation) and present first results about a framework for facilitating participation and collaboration between educators and learners in lectures to adjust the teaching-

learning environment. Based on first evaluation results we discuss how participation might be successfully anchored in the process of teaching and learning in higher education on the micro-level (participation in lectures instead of co-creating e. g. curricula).

2. Participation in the Design of Teaching

Learning environments refer to the broader context of education, focusing on the dynamic interactions between learners, educators, content, and tools within a given timeframe. Unlike isolated learning episodes or purely physical and technological settings, this concept emphasizes how pedagogical approaches, activities, and assessments evolve and influence one another over time (OECD, 2023). Therefore, a learning environment is made up of people, technologies, processes and physical resources (Nuninger & Châtelet, 2020). It can be supported by technologies like learning management systems, learning record systems, learning tools and administrational support but often educators shape this environment and learners use it.

In such learning environments participation is an act of sharing or partaking. Partaking of something is possible in various ways between two points – external determination and self-organization – and depends on the individual background as well as on cultural behaviour of the involved people. In general, participation refers to the involvement and engagement of e. g. members of an organization in achieving its objectives.

Participation is an important aspect of New Work, i. e. the question of how the world of work is changing (Hofmann et al., 2019). In our project, we investigate how participation can be created at the micro-level of higher education supporting the shift from traditional teaching to New Study – specifically during lectures. This creates opportunities to actively practise participation and to develop participation skills that include a willingness to partake, which can also be useful in other social and professional contexts and positively influence many Future Skills. Ehlers and Eigbrecht (2024) give some practical recommendations as overarching principles for promoting Future Skills in higher education on the micro-level. In the context of our project, they promote, among other things, learner-centredness and participatory approaches to teaching and assessment.

The concept of *student participation* encompasses various interpretations, ranging from increasing access to higher education to involving students as active collaborators in shaping their own learning experiences (Healey et al., 2014). In this article we focus on direct participation, in which students are directly involved in shaping the learning environment, i.e., without an institutionalized body representing their interests (European Students' Union, 2016). Bovill and Bulley (2011) name this "active student participation" to refer to participation that influences the students' own learning process.

Rusticus et al. (2023) identified aspects for a positive learning experience. They promote a learning environment with high levels of engagement and motivation, a supportive emotional atmosphere, peer support, strong staff-student relationships, meaningful experiences and small class sizes. In this study, students also highlighted aspects that could diminish the quality of the learning environment, such as challenges regarding group work, maintaining a work-life balance, or a lack of community.

There is a wide range of ways in which students can get involved in a learning environment. We found different models (Arnstein, 1969; Mayrberger, 2019; Bovill, 2017) to systematize participation. They all have the differentiation in level of involvement in common.

Arnstein (1969) published *A ladder of Citizen Participation* that strongly influenced the discussion about public participation in various fields like politics or social science. The simplification represents in eight rungs the varying degrees of power distribution between citizens and decision-makers.

Mayrberger (2019) introduces participatory media pedagogy for higher education. Participation is the foundation for her constructivist media pedagogy, which is based on relationships in the learning and teaching process. She defined four types of participation using nine levels of involvement. Additionally, she introduced a *participation space*, which is determined by the extent to which educators, and learners tend to act in symmetrical or asymmetrical relationships and interactions – in other words, how they deal with the power and roles granted to them (Mayrberger, 2019). Bremner, Sakata, and Cameron (2022) defined a lower number but similar levels in their study about Learner-Centred Pedagogy.

Bovill (2017) defines the *Students as Partners* approach as a practical application of participatory teaching. She developed a participation matrix to identify the roles of students and educators in participatory educational building designs (Bovill, 2017). The highest form of participation seems to be co-creation; it does not only enable greater involvement of students and teaching staff, but also promotes metacognitive engagement with learning processes and course contents. These participation approaches contribute to the development of key competencies, increase the employability of students and strengthen institutional commitment for a shift to learner-centredness. Also in her conclusion, she argues that overcoming implementation challenges is possible through transparency, targeted communication and institutional support. Particular emphasis is placed on the need for a cultural change that establishes co-creation as an integral part of teaching-learning processes. This requires patience and a step-by-step implementation, starting with smaller projects up to integration at institutional level. The article concludes with the insight that co-creation not only challenges traditional role models in higher education, but also opens up new opportunities to shape education as a collaborative and inclusive endeavour.

Since students vary in their willingness to participate which is also influenced by their competencies, the conditions of participation and the readiness for changing the role of involvement, this approach shows the importance for different forms of participation as well as the need to define how many students should be part in each form. This also connects to Mayrberger's participation space, which can offer individual aspects for any student.

In conclusion, for the role of participation in the era of New Study to foster learner-centredness, we see participation ranging from consulting to partnership (Bovill, 2017) or from consultation to self-determination (Mayrberger, 2019). We focus on a form of participation, which is characterized by collaboration, such as partnership in the model of Bovill (2017) and shared decision making (Type III - IV) in Mayrberger (2019).

In KoLLI we aim for an educator-student partnership as a collaborative and mutual process where all participants are given the chance to contribute equally – though not necessarily in identical ways – to the development, decision-making, execution, exploration, or evaluation of the learning process and environment (Cook-Sather, Bovill, & Felten, 2014). We will not focus on interactions utilizing common learning activities such as asking questions in lectures or group work with fixed specifications. The project is open for lecturers from any university and degree programs.

3 Research methodology

Many educators struggle with the question how to teach in such a way that learners profit the most, expand and train necessary skills as well as successfully graduate (Bigge & Shermis, 2004). One method to achieve this might be the opening of the learning environment for collaboration on teaching-learning-innovations (short LLIs for the German word *Lehr-Lern-Innovation*). Such LLIs will at the same time open a way to move towards learner-centredness step-by-step.

We define LLIs as deliberate improvements to a course, aimed at enhancing the learning environment. They often begin with the educator's vision and generally emphasize incremental, iterative improvements over sweeping changes, recognizing that most courses evolve naturally through iterative cycles. To this end the KoLLI project aims to develop a framework how educators and students may collaborate to (re)design the learning environment within lectures and implement such LLIs, enabling educators to prepare moments of participation, to structure and evaluate the (co-)created LLIs.

The KoLLI project is driven by the Design Based Research (DBR, Philippakos, 2021) methodology framework as described by Reinmann (2024) defining five dimensions and the importance of their interrelations.

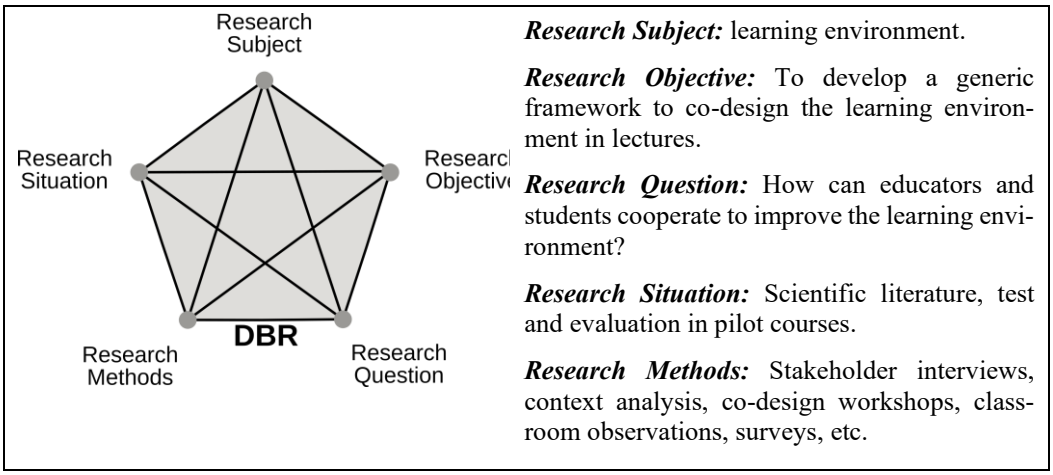

Figure 1. DBR methodology in KoLLI (based on Reinmann, 2024, p. 91).

Our *research subject* is the learning environment in higher education and how it can be influenced by student participation on the micro-level.

Our main *research objective* is to develop a flexible, generic educational framework on the micro-level across various disciplines enabling educators and students to co-design the learning environment within lectures including an implementation package:

- *KoLLI Toolkit*: Low-threshold guidelines and checklists on how to find and create suitable participatory elements, lists of methods, digital tools and reading materials to support educators seeking to incorporate participatory elements in their lectures. The material will be published on a website;
- *Outreach Resources*: General promotional materials (print, video) and training materials for educators and institutions on how to implement the KoLLI approach, e. g. workshop materials, slides and counselling guidelines for educational support units;

- *Example Innovations*: Course-specific LLIs as by-products of the testing phase.

We seek to offer an accessible framework that appeals to a broad audience, emphasizing the utility of even small-scale enhancements. Because the underlying hypotheses assert that student participation in this regard enhances the overall quality of teaching and learning, but needs careful consideration to be successful. See the next two chapters for how these hypotheses formed during the exploratory first project iteration:

- Participation requires increased effort by educators and learners but the benefits outweigh the effort;
- Participation on collaborative teaching-learning-innovations can significantly improve the learning environment as well as experience for students and teachers alike. But students might experience it negatively, if not done right, due to increased workload, lack of understanding etc.;
- Thus, educators recognize and remove possible obstacles in order to create positive conditions for the success of participative moments. If these moments are effective, student engagement will be fostered;
- In principle, any type of course is suitable for student participation. However, the relevant application boundaries still need to be identified and are likely to depend on local circumstances.

The research objective leads to the following *research question*: How can educators and students successfully and effectively cooperate on the micro- level to improve the learning environment of an ongoing course?

The *research situation* is partly determined by the scientific literature on participation in chapter two and the pilot courses in which KoLLI is tested and evaluated. We cooperate with educators across different degrees, courses, semesters and universities to define, test, and refine the framework. For this the project plan encompasses three iterations with a mixture of *research methods*: literature reviews, stakeholder interviews, context analysis, co-design workshops, classroom observations, pre- and post-surveys, educator interviews and more.

In line with the Research Through Design (RTD, Figure 2) we identify three fields of action for conducting our research, which extend the six DBR steps in Easterday et al. (2014). We will conduct three project iterations following this process:

1. *Design / Conception*: Developing ideas regarding an assumed "possible reality", e. g. assuming that participation positively influences teaching and learning. (Idea vs. focus, understand, define and conceive);
2. *Implementation and evaluation:* Empirical investigation of the "actual reality" using various pilots in which the KoLLI framework is tested and evaluated. (Hypothesis vs. build and test);
3. *Model building:* Concretisation and documentation of the model including its underlying theories, principles, patterns and findings. (Model - no equivalent).

In January 2025, the project completed the first iteration (Figure 2), yielding foundational insights into the needs of educators and students. Simultaneously, the KoLLI framework is under active development, integrating feedback from the preliminary testing phase to enhance its utility and adaptability.

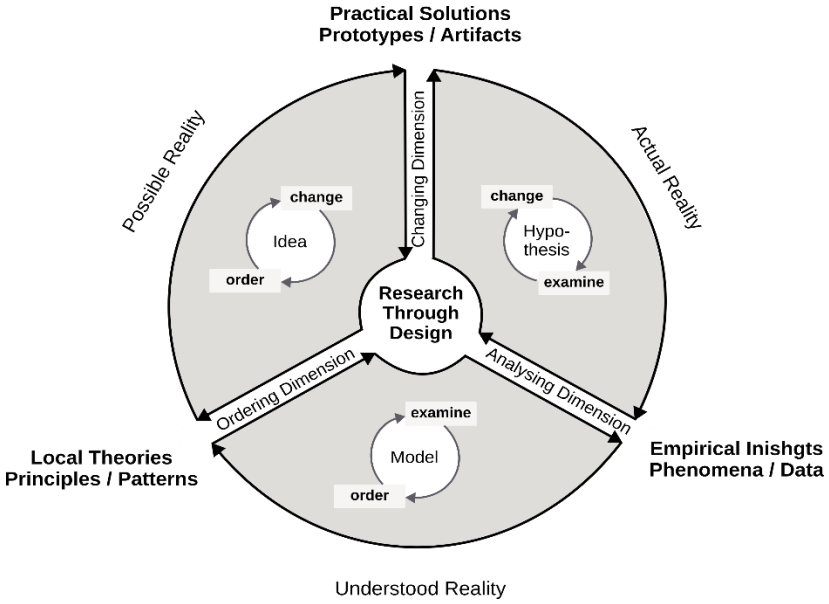

Figure 2. RTD applied in each KoLLI project iteration (adjusted from Reinmann et al., 2024, p. 36ff).

4. First Project Iteration

In the following chapters the results of the first iteration from September 2024 to January 2025 are presented and the associated experiences and findings are described. This was done in the following courses:

- 2x Programming I, 1st Semester, BA in Business Information Systems, Cooperate State University Baden-Württemberg Karlsruhe – 29 students and 31 students (LLI: creating a guide to teach first-year students the reflected use of AI when learning programming and building a list of useful learning materials);
- 1x Illustration and Presentation Techniques (Business English), 1st Semester, BA in Business Information Systems, Cooperate State University Baden-Württemberg Karlsruhe – 18 students (LLI: Explaining different presentation techniques choosing various media formats, e. g. video or podcast);
- 1x Web Programming, 3rd Semester, BA in Business Information Systems, Cooperate State University Baden-Württemberg Karlsruhe – 26 students (LLI: based on the experience from project-based learning, students conceived and built prototypes for the further development of an educational game platform, giving them free choice of learning targets and learning paths);
- 1x Career Orientation Consulting, all semesters BA/MA in economics, University of Education Karlsruhe – 20 students (LLI: a guide that defines criteria for effective reflection).

For the evaluation we use a mixed methods approach. All courses were accompanied by continuous feedback by the educators as well as peer feedback, discussions, and Q&A sessions. Three of the courses were held by members of the project team. In all courses, the project team explained the context of the research project to students and conducted the

student surveys. The evaluated participatory moments offered students possibilities to co-design their assessment (reflection guide), to increase support and awareness of their own learning process (how to start learning programming – which tools and materials can be useful), to reflect their current learnings in intermediate discussions with educators and peers (web programming, presentation and communication skills) and create artefacts for future student generations (all courses).

Each course was evaluated with three standardized student surveys:

- Pre-Survey: n=124;
- Mid-Survey: n=110;
- Post-Survey: n=96.

The surveys were conducted during the lectures using Social Science Survey (Leiner, 2024). The surveys contained open and closed questions, whereby the pre- and post-surveys consist of largely identical questions to ensure comparability of the results (Creswell & Creswell, 2018). The questions fall in the categories "Course Content", "Participation", "Student Engagement" and "Learning Effectiveness".

The mid-survey was reduced in scope and only contained four question each in the categories "Clarity and Overload" and "Satisfaction". Open questions in all surveys focussed on prior knowledge, support needs and general comments. All other questions were Likert-questions with a four-point scale, forcing students to decide between dislike and like.

In addition to the student surveys, a reflective discussion with the educators in the form of guided interviews is ongoing. The aim is to identify the conditions for success and to retrospectively discuss the potential and challenges of the participation formats as well as to evaluate the utilization of the framework. This evaluation process is established in educational research as a proven approach for supplementing quantitative data. The interviews will be analysed according to grounded theory (Glaser & Strauss, 2017).

5. Findings and Implications

This chapter summarises initial findings. All findings are interrelated and interlinked and underline the importance of our adaptive, DBR-oriented and dialogical research design.

5.1. Cultural change in educator-students relationship

The shift from teaching to learning and its focus on competences is accompanied by a great change in the mindset of educators and students. This proved to be true when we noticed an inherent reluctance of some educators to actively involve students in the design and implementation of the teaching and learning process, which seemed to be partly due to a fear of overburdening students and thereby jeopardising the group's learning progress. But also, the fear of losing control over the learning outcomes in case the students misunderstood the course concept. In order to investigate this issue more systematically, we plan to conduct in-depth interviews with lecturers.

On the other hand, students appreciated the participatory offer but especially first-year students showed a clear scepticism towards their own involvement in questions of teaching and learning. The statistical data suggest that they perceived participation as an additional burden rather than an integral part of the learning experience, failing to see the benefits for themselves and the usefulness of a LLI improving the learning environment. Some

preferred a greater focus on exam preparation, instead. We suspect that these students—mostly coming from school—have not experienced this level of participation before and so may not be used to this level of responsibility and self-determination in education.

Accordingly, the study habits assessed show a low level of self-directed and regular preparation and follow-up of lectures. This may suggest that adapting to the demands of higher education is still a major challenge for first-year students, as they rated the interest in participatory moments significantly lower than students in higher semesters. This raises the question of the extent to which the transition from guided school education to self-organised learning needs to be actively supported.

Based on the feedback from first-year students, we assume that it is more difficult for students and lecturers to successfully implement participatory moments in basic knowledge courses. This aspect needs to be further investigated.

As a result, in the next iteration, we need a broader spread of semesters to explore these findings, and in particular to focus on how to overcome the mental reservations to foster an open attitude to participation. An important aspect will be the systematic investigation of educators' motives for integrating participation moments into their courses and expectations by students. A better understanding of these motives as well as of the barriers could help to increase the willingness to adapt participation. This should include an analysis of what factors influence the decision to promote participation, what goals are pursued and to what extent institutional, pedagogical or personal beliefs play a role.

5.2. Participation as part of the course design

Since the KoLLI research team attended some of the lectures to introduce the research project and general idea of participation as well as to conduct the surveys, this might have amplified that many students, and possibly lecturers, experienced participation as an additional task instead of an integral part of the course design. Communication and implementation must therefore be adapted in such a way that lecturers are supported and mentored more closely, but the research team remains invisible to the students. Educators should have the confidence to place participation much more at the centre of their course design.

Furthermore, we need to differentiate our idea of participation on the micro-level more clearly from related concepts such as learning activation, or participation in curriculum development considering that due to time constraints, curricular and competence requirements, participatory approaches in courses are more challenging than corresponding approaches at the meso and macro levels of universities. Similarly, we should consider in how far a strong culture of participation at the meso and macro levels of a university is necessary to support the promotion of participation at the micro-level.

5.3. Challenges Thinking, Training and Time

The findings of the first iteration also show that the conditions for success and challenges for participation are key project concerns, which also supports the findings of Bovill et al. (2015). They examined the challenges and potential of collaboration between university students and teaching staff for the co-creation of teaching-learning processes. In particular, three key challenges are addressed: Resistance to co-creation, institutional structures and norms, and ensuring inclusivity.

We therefore extend our hypotheses, so that in the next project iterations, possible challenges will be systematically identified according to the Four T's model (Bergmann &

Sams, 2015):

- *Thinking*: Inappropriate attitudes or lack of motivation;
- *Training*: Lack of or insufficient skills and experience;
- *Time:* Lack of time;
- *Technology*: Lack of or insufficient technical infrastructure.

In the first iteration, training and thinking proved to be the most important areas of deficit (both lecturers and students lacked sufficient knowledge about the possibilities and methods of successful participation). Lecturers were generally willing to offer participatory moments, but students – especially in the first semester – need a lot of information and motivation, thus KoLLI needs to support lecturers to better fulfil their role as creators of participatory moments through increased and targeted guidance and training. A toolbox will enable them to learn the skills needed to design and co-create LLIs.

The time bottleneck plays a particular role in our special context of participation in lectures, since the time spent on participatory moments competes with time available for teaching and learning activities which is often quite limited. Therefore, the main challenge will remain finding efficient solutions for participation spaces. We need to clearly define recognisable benefits and realistic expectations as key success factors that can be evaluated. However, it is likely to be relatively difficult to attribute recognisable follow-up effects to the participation measures implemented.

In contrast, the technology factor plays a less important role, as participation is first and foremost a question of attitude and methodological knowledge. However, KoLLI will investigate which methods of participation can be effectively supported by technologies.

5.4. Participation by Design

It proved to be essential ensuring that the benefits of participation are evident to all stakeholders. For each pilot course, it is crucial to more stringently identify in advance which teaching or learning challenges can be addressed through participation and how existing teaching can be improved. The pilot courses in the second iteration should be designed to be more explicitly utility- and party-oriented, focusing on both students and instructors.

For the second iteration we discuss the idea of *Participation by Design*. The idea is still under development, but might be defined as: a method through which the KoLLI team collaborates with lecturers to jointly design a participatory teaching-learning environment. This entails designing the systematic integration of participatory moments in the course design: defining subjects of participation, selecting methods, and determining the timing for participation. This design phase might be supported by the *D-Design Thinking* method (Daniel & Tuchscherer, 2024), which provides a collection of methods tailored for the target-oriented design of cooperative teaching development projects.

To systematically screen and evaluate suitable subjects for participation (e.g., learning objectives or assessment criteria) we try to develop a multidimensional participation model. It provides a detailed course-level structure that can be directly applied by lecturers. Similar to a morphological matrix, it serves as a decision-making tool, documenting the following interrelated decisions that educators make when designing participatory moments:

1. Lifecycle of the Learning Environment: This dimension considers the maturity of the learning environment at the time of participation, ranging from idea generation and early planning stages to well-established implementations;

2. Subject of Participation: Defines the areas where students are given room for input and decision-making, such as learning objectives, pedagogical concepts, organizational frameworks, teaching materials, or assessment tasks;
3. Timing of Participation: Considers when participatory moments should occur, such as at the beginning of the semester or a specific lesson unit;
4. Duration of Participation: Reflects the time and effort allocated to participatory activities within the course;
5. Degree of Participation: References the possible participation-level;
6. Role of Educators: Examines the educator's role in facilitating participation, which can range from knowledge delivery and mentoring to project leadership or co-creation of materials;
7. Role of Students Relative to Educators: Examines how students collaborate with educators, from giving feedback to co-leading projects or conducting independent research and implementation;
8. Role of Students Relative to Peers: Explores how students support and interact with one another, for example, through group work, peer reviews, or collaborative projects;
9. Preferred Format of Engagement: Identifies the physical or virtual learning spaces for interaction, from traditional classrooms and specialized workspaces to online or hybrid environments;
10. Incentive Systems and Motivational Measures: Focuses on designing meaningful participatory moments and motivating students, from soft factors like recognition to hard factors like directly influencing course assessments;
11. Quality Assurance Measures: Includes methods to ensure the effectiveness and credibility of participatory activities, such as feedback sessions, peer reviews, or plenary discussions.

This is the first version derived from the interpretation of our literature review and the findings of the first iteration. Applying this model when utilizing *Participation by Design*, the lecturers shall be able to find their participatory moments.

6. Conclusion

Participation, like teaching and learning in general, is a mutual activity requiring the consent and involvement of both educators and students. It demands willingness, commitment, and effort from all parties involved. As outlined above there is a wide range of possible definitions what participation could mean for students and educators as well as which role students and educators play in moments of participation to adjust the learning environment.

However, unlike traditional knowledge-based learning, participation at the micro-level – where students are granted the freedom and responsibility to actively and continuously (re)design the learning environment – requires a higher degree of collaboration, adaptability, and shared ownership. Participation involves more than just working on tasks with options. While students may already experience participation in the sense of consulting or involvement by selecting projects or forms of work, KoLLI aims for a deeper level of engagement where students actively shape key elements of teaching and learning, such as refining learning objectives, determining forms of examination, selecting teaching methods and developing learning materials.

The teaching-learning innovations (LLIs) don't need to be complex or major upheavals. Participation can be dynamic within the current teaching concept as it can be part of the wider course design process, as demonstrated in some courses during the first iteration of the project. KoLLI aims to develop a generic framework suitable for a wide range of contexts, emphasising the importance of iterative small improvements over major disruptions utilizing participation considering students' needs.

However, our initial exploratory iteration has revealed significant challenges that need to be addressed as well as might be limited to the study program we started with (e. g. small group sizes or a so-called instructor effect since most lecturers are part of the project team). One major obstacle is the lack of a clear definition of participation, and the varying levels of understanding and motivation among students and educators. Another one is the identification of assumed barriers and success factors that need to be considered in order to promote a more open attitude and to reduce the inherent reluctance and to reach collaboration between educators and students or ideally partnership. Addressing these issues in the next two project iterations will be essential for enhancing the framework's effectiveness and scalability.

Despite these challenges, we remain convinced that student participation in the era of New Study will have a significant positive impact on the development of Future Skills. By empowering students to influence their learning environment, we cultivate a mindset capable of analysing and critically reflecting on situations and adapting to changing environments and emerging challenges. The participatory approach encourages critical thinking, enhances problem-solving skills and promotes a sense of ownership and responsibility among students. These attributes are crucial for navigating the complexities of the modern world and preparing for future uncertainties. Ultimately, this will create environments that not only support academic achievement, but also equip students with the necessary skills to thrive in an ever-changing landscape.

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