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## **Towards design-based learning at HAMK**

### **DESIGN-BASED EDUCATION (DBE)**

Let's develop new concrete solutions together!

HAMK utilises working life-oriented co-creation learning, or DBE.

Design-based education is co-creation learning. Concrete solutions to genuine challenges in working life and our society are developed together in a user-oriented manner. In this way, mutually beneficial cooperation with working life can be achieved already during studies. Challenge-based processes offer an inspiring learning environment in their authenticity.

The process based on design thinking creates genuine useful solutions. Solutions can be new services, operating models, products or new ways of working. Multidisciplinary teams provide a sufficiently challenging learning experience and produce more creative and advanced solutions with more diverse expertise. DBE's goal is to develop future-proof innovation skills and advanced working life skills.

#### **DBE - Design-based education**

DBE stands for *design-based education*. The aim of design-based education is to develop students' multidisciplinary research, development and innovation competence, metacognitive and social skills, and to provide them with the skills to act as proactive experts in the constantly changing working life. DBE also develops the expertise and development skills of teachers and representatives of working life and increases the social and societal value of education.

The DBE pedagogy under co-development at HAMK is based on a socio-constructivist concept of learning, in which the student's role is seen to change from a learner of knowledge to a cooperative processor of information and a producer of new knowledge. In this context, information also refers to concrete solutions.

HAMK's DBE activities and pedagogy are developed based on design thinking: experimenting together and finding out best practices.

As a rule, it provides students with general (generic) expert skills for future working life, which complement the goals of HAMK's strategy and education-specific learning outcomes. The development of generic skills continues throughout studies and careers in accordance with the idea of continuous learning. Therefore, the development of competence is cumulative, and the implementation methods can be scaled as the studies progress. So you

don't have to learn everything at once, and not all implementation methods need to be the same.

DBE activities require both students, teachers and organisations to be prepared for innovative and sustainable development in multidisciplinary cooperation with working life. DBE activities emphasise student agency and communal team learning, which is built so that everyone can develop as a person, learner, teacher and expert.

### **HAMK's DBE dimensions are developed together**

DBE can be seen through its dimensions as a whole. Figure 1 shows HAMK's current thinking on DBE activities from the perspective of students, teachers and organisations. DBE is characterised by eight key dimensions: 1) Design thinking 2) Authentic challenges and working life orientation, 3) Sustainable development and responsibility, 4) Learning by development and teamwork, 5) Student agency, 6) Well-being skills, 7) Multidisciplinary and multidisciplinary cooperation, 8) Research-based, innovation competence and innovation.



Figure 1. DBE is illustrated by eight key dimensions at HAMK.

### **1) Design thinking**

Design thinking is both a way of thinking and a tool that makes it possible to iteratively build (repeating and testing phases and returning to previous stages until the desired result is achieved) user-oriented solutions to complex and wicked (difficult to solve) challenges and real problems arising from working life.

*Student:* In your studies, you apply human-centred and user-oriented methods to develop new, authentic and concrete solutions. You will also practice the ability to tolerate uncertainty and approach wicked problems with an open mind.

*Teacher:* You support students in defining a problem worth solving, user research, brainstorming, concrete experiments, i.e. prototyping and user testing. You guide students to build desirable, sustainable, economical and feasible solutions from the user's perspective.

*Organization:* Create opportunities for students to iteratively develop human-centric and user-centric solutions by creating space in curriculum design and module implementations for implementations where students can reach the end users and/or customers of the solution.

### **2) Authentic challenges and working life orientation**

Authentic learning offers students the opportunity to solve open tasks and problems arising from real-life connections. Open challenges enable creative and innovative solutions, thus developing students' collaborative creativity skills. Companies, the public sector and the third sector are strong partners in the design and implementation of the modules.

*Student:* You will study working life-oriented, topical and real (authentic) challenges and learning assignments with experts. You develop collaborative creativity and problem-solving skills.

*Teacher:* You support and guide students' growth and work-based learning with authentic challenges. Close cooperation with working life maintains and increases your own competence.

*Organisation:* The success of the DBE model is supported by sufficient contacts between teachers and the world of work. The organisation supports teachers' opportunities to engage with the activities of the World's Best partner network and alumni network.

### **3) Sustainability and responsibility**

When developing new solutions, the responsibility of operations and the sustainability of the concrete outputs to be developed must be taken into account. It is appropriate to examine the sustainability of solutions from a diverse perspective of ecological, social, economic and cultural sustainability. Responsibility for one's own and the team's learning and actions is emphasised in co-creation.

*Student:* You are able to develop solutions to working life-oriented challenges together with others in accordance with the principles of sustainable development. You are familiar with the UN's Sustainable Development Goals and Agenda for Action (Agenda 2030) and are able to make decisions that promote the achievement of these goals. You act responsibly, taking care of your own and your team's learning and activities.

*Teacher:* You promote responsible behaviour among students. You are familiar with the UN Sustainable Development Goals and Action Plan and are able to apply them in formulating authentic challenges and in guiding and facilitating student projects. You guide students' work towards achieving the UN Sustainable Development Goals. You will provide tools to support responsible learning and operation of the team.

*Organization:* The sustainability skills of students and teachers play a key role in making the world the best in the world. The organisation builds HAMK100 training and coaching to complement teachers' competence in sustainable development. Sustainable development goals must be taken into account in teaching planning all the way to the course level, and progress in this work is monitored annually.

### **Developmental learning and teamwork**

Development work is carried out on a joint learning journey in teams. Team building skills become an important prerequisite for success in development work. It is important to learn how to create a collaborative negotiation culture and be able to help your team achieve the best results and a positive teamwork experience.

*Student:* You are able to work constructively and responsibly in multidisciplinary and multicultural teams, building team spirit. You will develop the skills of listening present, perceiving the needs of others, learning and emotions, and clearly expressing them clearly in teamwork with other students. You learn to use development methods and tools.

*Teacher:* You are able to apply and guide the use of different methods, such as project work, problem-solving projects, group work and discussion-based learning.

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*Organization:* Ensures teachers are not left alone. Both the planning and implementation of teaching should be done as teamwork, where each teacher has the opportunity to influence the development of teaching. The organisation encourages cross-border cooperation between training and units and the breaking down of silos, and creates structures to support this.

#### **4) Student agency**

The student is a proactive participant in cooperation. Proactivity involves the need to anticipate, manage and, move things forward and get things done. Student agency describes the reciprocal relationship between the student and the learning environment, and it plays an important role both in collaborative and meaningful learning and in building new solutions.

*Student:* You are an active participant in your own studies. The learning environment supports and creates opportunities for active influence and participation and supports confidence in oneself as a learner.

*Teacher:* You support student agency by providing constructive, forward-looking feedback, flexibility in teaching, supporting opportunities for choice and influence, encouraging and enabling students' central peer support and interaction.

*Organization:* Create support mechanisms and practices to support and coach students who are facing challenges with their own agency.

#### **5) Well-being skills**

We value expertise and take care of the well-being of our higher education community. Together, we are building a healthy higher education community where everyone can develop as a person, learner, teacher and expert. Well-being skills are things we can all learn to recognize and learn.

*Student:* During your studies, you will receive tools and guidance for well-being skills, such as stress management, time management, interaction skills, self-reflection, and self-leadership. You will also learn to promote the collective well-being of your own team.

*Teacher:* In building a healthy learning environment, activities that promote the safety and health of learning and operating environments are essential. You support community spirit and well-being and are able to support students' individual strengths, self-efficacy and lifelong learning skills. In cooperation, ethical aspects, such as respect for differences and fairness, must be taken into account.

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*Organisation:* Recognises the prerequisites for a healthy higher education community and contributes to the well-being of teachers and thus students. To support the development of well-being skills, the organisation strongly develops tutoring activities and organises various projects and experiments to improve the well-being of teachers and students.

## **6) Multidisciplinarity and multidisciplinary cooperation**

Multidisciplinary cooperation brings together different fields of study (e.g. different fields of education, professional groups, students, customers and partners) and crosses their borders. New solutions can emerge at the boundaries of fields and heterogeneous teams are more creative.

*Student:* As your studies progress, you will also study and work in cooperation with students and experts other than your own field of study, learning from each other. As a team member, you bring the expertise of your own field to multiprofessional cooperation to solve challenges arising from working life.

*Teacher:* You enable the realisation of multidisciplinary, taking into account the student's stage of studies, and you work in cooperation with teachers and researchers from other fields, learning from each other.

*Organisation:* Supports solutions to increase multidisciplinary, e.g. for cross-campus and cross-unit learning events. Existing events will be utilised and opportunities will be created for students to get to know and participate in learning situations organised on other campuses.

## **7) Research-based, innovation competence and innovation**

Research-based, innovation competence and regenerative (transformative) refer to the fact that working and learning with problem-solving and projects is both research-based and new knowledge, creating useful, concrete and usable solutions and renewing working life.

*Student:* During your studies, you will participate in research, development and innovation projects and get to apply different research and development methods.

*Teacher:* You facilitate, coach and support students in learning critical thinking, creating new knowledge and problem-solving methods. You develop your teaching material and teaching methods on a research-based basis, and your teaching is based on pedagogical research and the research-based approach of your own teaching.

*Organisation:* Enables student- and working life-oriented research, development and innovation project activities and its structures, facilities and curricula. Innovation competence refers to the knowledge, skills, attitudes and personal qualities needed for the

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co-creation of new, concrete and usable solutions. Transformative learning refers to learning that changes and renews familiar thought and action patterns, requiring critical reflection, experientiality, creativity, collaboration and learning in communities.