



The Medienfaktor has started to develop digital professionalization programs in cooperation with teaching students. Published at <https://medienfaktor.education/allgemein/professionalisierungsprogramme/>

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1. What is the idea behind an innovation lab?

John Dewey's democratic criticism of Walter Lippmann's book 'Public Opinion' at the beginning of the 20th century was essentially about democracy being shaped by all social actors and not by self-proclaimed elites, expert cultures (today, we would include filter bubbles on the net) or so-called 'think tanks'. According to the democratic argument, the rationality of discourse is measured by the inclusion of the perspectives of all. Sustainable solutions can only be developed through fair competition between the arguments and the diversity of ideas. The innovation laboratories of MindLab in Denmark and the Public Service Division (PSD) Innovation Lab in Singapore inspired the Medienfaktor to follow Dewey's footsteps by pursuing a democratic grassroots approach.

The arguments for the democratic development of public services are obvious. A 'top-down' design easily overlooks the needs and peculiarities of all those social groups for which services are to be offered. Even well-organized surveys always imply the perspective of the respondents methodologically and have only a limited validity due to their random temporal and procedural limitation (social actors are interviewed and questioned about new socio-political options, but are not actively participating in their development). Good and sustainable social design, since it depends on feedback loops, is inevitably based on the principle of co-development.

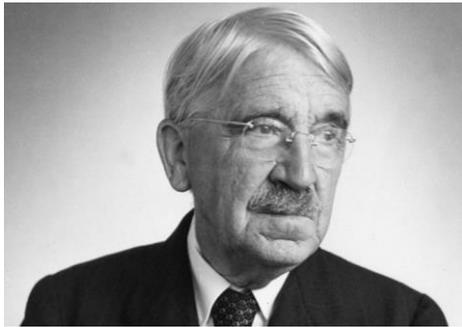


Photo: Educational reformer John Dewey (1859 -1952)

Social Change Management: Collaborative development with all stakeholders

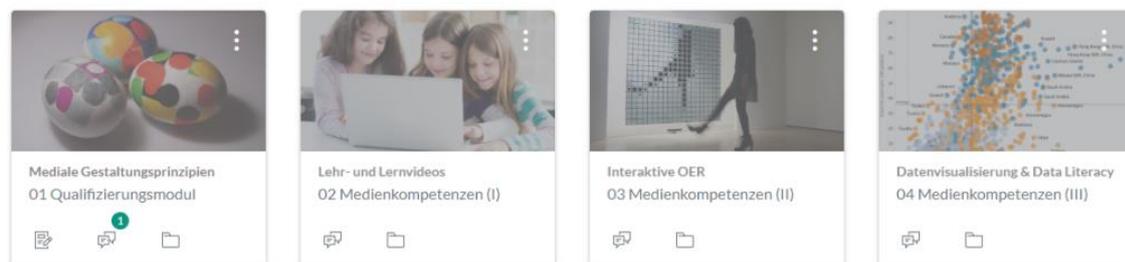
In a nutshell, the procedure of an Innovation Lab can be described as follows: Design processes become qualitatively informative once target groups can experience new guidelines and services within a prototyped 'sandbox environment' first on a smaller scale before an official implementation is decided. In our case, we gain insights into the effectiveness and quality of professionalization programs through feedback from students *in situ*, ideally during the entire cooperative design process (Hence our slogan 'Let's co-create digital education!').

Since we operate within an international educational environment where the digital professionalization of teachers very generally poses a global challenge, we have decided to invite leading international partners as external consultants. We will report more on our internationalisation initiative in the coming months.

Social participation in developing projects

The second argument for a grassroots approach is ownership. Only when actors become 'stakeholders', active participants, do they become interested and motivated in new possibilities for shaping their future. Formal participation without active participation or a decision-making mandate has a demotivating effect and pushes actors into a passive role. Motivation arises as soon as actors realize that their participation also has practical consequences in their real lives. An indifferent attitude changes the moment personal autonomy, competencies and social relationships of target groups turn into debated factors within public service design. Building on the key ideas of collaborative development and social participation, the design approach of the Medienfaktor is based on the empathic and understanding-oriented connection of the perspectives of all actors. We are weaving together diverse perspectives and relationships.

Dashboard



Screenshot: The Dashboard in CANVAS LMS for the development of first prototypes

2. The form of digital professionalization:

First insights and ideas from discussions with students

In the introductory discussions on the curriculum development of the professionalization program, our two student expert groups consisted of Antje Leib, Dr Roberta Nicosia, Nicolai Geiser, Alex Raupach and Paula Wegerich. The expert groups independently derived at the conclusion that the structure described below seems best suited for a digital professionalization course for teaching students at the BA level:

2.1 The qualification module: Equal starting conditions for all

The digital training programme should start with a short and intensive qualification module, which will enable all participants to identify the individual baseline of their digital competences and to develop equal prior knowledge and basic skills as a common and fair starting point. In this qualification module there won't be grades, only a 'qualified' or 'not qualified'.

Some keyword ideas regarding content: Introduction to the digital learning platform and Blended Learning practices, provision of a common glossary (common terms to describe key phenomena in digital education), basic computer and software skills, troubleshooting skills, basic design skills (visual competence), knowledge of the pedagogical, social and cognitive functioning of digital media, and basic study skills (such as the use of online libraries and citation software). Exercises should be practice-oriented and include critical reflection.

The playful introduction to the software and visual communication is carried out, among other things, via the digital image editing program Affinity Photo. The program Camtasia is used for creating learning videos and the software package Da Vinci Resolve for professional productions in deep learning mode. In order to avoid long-term financial commitments and to establish access to a larger variety of qualified providers, the Medienfaktor opted for license-free software.



Screenshots: The professionalization programs use licence-free software, such as Da Vinci Resolve, Camtasia and Affinity

2.2 Free choice of professionalization programs

After completing the introductory qualification programme, students are free to choose between three modules. These are as follows:

- Video and audio production
- Interactive open educational resources (OER), as well as
- Data competence and data visualization

These three areas represent related and typical areas of technical expertise. Since the central goal of the professionalization program is the strategic use of digital media, such an approach seems to be appropriate. Freedom of choice means that as soon as a sufficiently large range of professionalization modules is available, students can focus on developing personalized competence profiles.

2.3 Adaptive learning paths (personalised learning)

There was a consensus among all student experts that the modules should be suitable for students with different levels of competence and background, whether they are newcomers, beginners or 'integrators' (according to the differentiation in the EU framework 'Digital literacy of educators'/ DigCompEdu). All students have the right to enter the elective modules with the same level of prior knowledge. In order to respond to students with different levels of achievement, professionalisation should take place within the framework of adaptive learning paths.



The learning paths take into account individual differences in the interests, learning styles, time management habits and support needs of students.

Photo: *The Medienfaktor Team during CANVAS LMS Training*

2.4 Authenticity of learning

The use of digital media should be based on authentic cases from everyday school life, which could, for example, be presented in vignettes or other forms of case studies. The learning mode should provide feedback loops for students to inform them of their progress in digital literacy. This includes using innovative learning analytics while integrating online and face-to-face learning communities. In order to ensure authentic learning, external partners such as schools or the successful 'chalk dust' initiative of the University of Oldenburg need to be involved.

2.5 Personal responsibility for learning

High on the wishlist is an appreciative, learner-centred and team-based learning environment that encourages students to take personal responsibility for their learning.

2.6 Internal quality protocols and service-oriented modus operandi

The programme should be supported by internal quality protocols. It is crucial for the success of the modules that the programs are perceived as a high-quality and well-designed public service.

2.7 Digital tokens, badges, certificates and digital passports

Instead of the usual university credit points (KPs), certificates, badges and digital tokens can likewise offer incentives, with the option to accumulate credits in exchange for services, such as free software start-up kits for highly motivated students. A digital passport could be issued to students who have successfully advised actual school projects beyond the professionalisation programmes. In addition to the formal ECTS points (KPs), an informal educational currency is introduced, which represents an important component of the Medienfaktor learning-ecosystem.

The system of 'digital tokens' and 'badges' has not only proven itself at numerous leading universities (University of California, Toronto, Berkeley, Harvard, MIT, University of Munich, University of Potsdam) but is now also being [integrated into blockchain technologies](#).

2.8 Deep learning options

The modules should offer so-called Deep Learning modules, which are optional and can be completed after completion of the regular modules. Deep Learning modules train students on a professional level and prepare them for digital leadership. This means that they can not only produce OER at a professional level but are capable of motivating and training their peers.

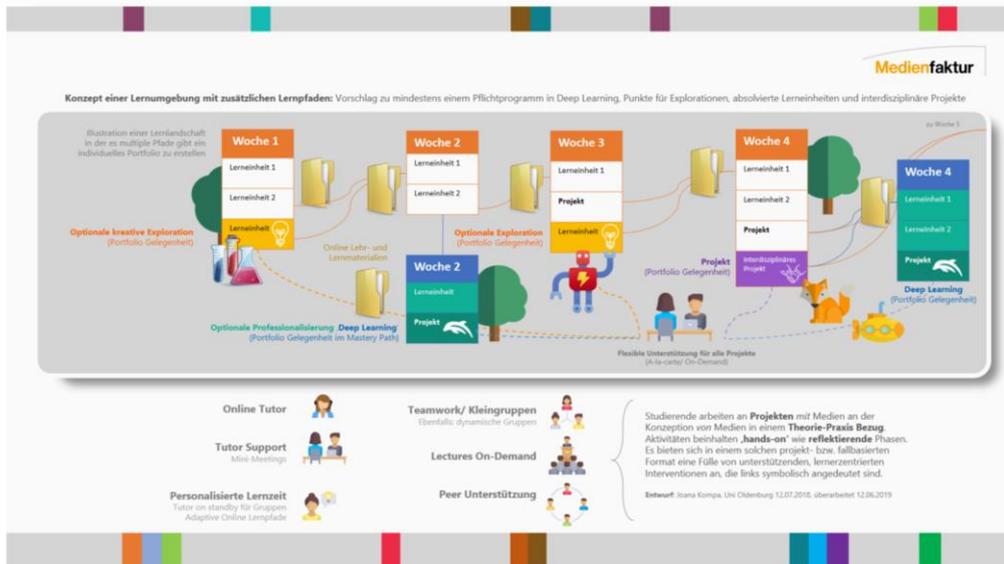


Illustration: Early sketch of a 'learning landscape' (2018) by the author. Similar to a highly complex VR (Virtual Reality) space, learners can explore and develop their interests and competencies autonomously. In the tradition of constructivist pedagogy, learning is understood as the creative handling of simulated present and future problems and challenges. Above (grey) the learning paths, below the support options for learning processes.

Next steps until October 2019

Once basic content, teaching methods, support systems and schedules are defined, prototypes are created in the CANVAS Learning Management System (LMS). The prototypes for the qualification module and the video module are set out to be completed by winter semester 2019/20.

Credits

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