



The Potential of *LMS-Course-Templates* to foster Informed Acceptance of Digitization in Higher Education

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Abstract

Background: The Corona-Crisis enforced the implementation of digital teaching- and learning-formats (dTLF) in education. In order to support the academic staff effectively, a digital “Toolbox” [1] including step-by-step manuals was created. Functional a Moodle course [2], the “Toolbox” included an innovative element: the LMS-Course-Template. This template can be downloaded, modified and used as basis for a professional online teaching- and learning-course. In regard to the “Learning Design Research” it classifies as a “generic design” [3]. The reaction of the academic staff following the online publication of the “Toolbox” – including the LMS-Course-Template – was encouraging, as many colleagues had used templates in preparing presentations, but never in the context of a learning-management-system (LMS) like Moodle. Since then the improvement of the LMS-Course-Template became a main task.

Template-Elements: Today the template consists of the following main elements: (1) user friendly design, (2) pre-structured timeline, (3) recommendations for stand-alone-tools and tool-formations that are suitable for teaching and learning online and (4) several “frame elements”. The latter are: a.) rules how to communicate correctly online, b.) suggestions how to increase learning motivation and c.) methods for improving self-organisation. In addition, different colours indicate the modification: Black is the default colour, supplement-explanations/step-by-step manuals are green, red serves as place holder of own course material and yellow mentions relevant scientific studies.

Conclusion: Drawing the analogy to the major use of templates in creating presentations, the LMS-Course-Template and its potential for fostering informed acceptance of digitization is underestimated. In the OER Movement [4] generic templates are almost irrelevant. The “sense of achievement”, that the use of templates triggers, is likely to increase motivation and interest in dTLFs. The template fulfils its role as a “door opener” and increases the understanding of the functionality of the LMS, its tools and possibilities. The faculty has the possibility to achieve LMS-competence, curiosity in progress and informed acceptance of digitization.

Keywords: Template, Informed Acceptance, Digital Competence, Learning-Design-Research, Generic Design, Learning-Management-System

1. Background

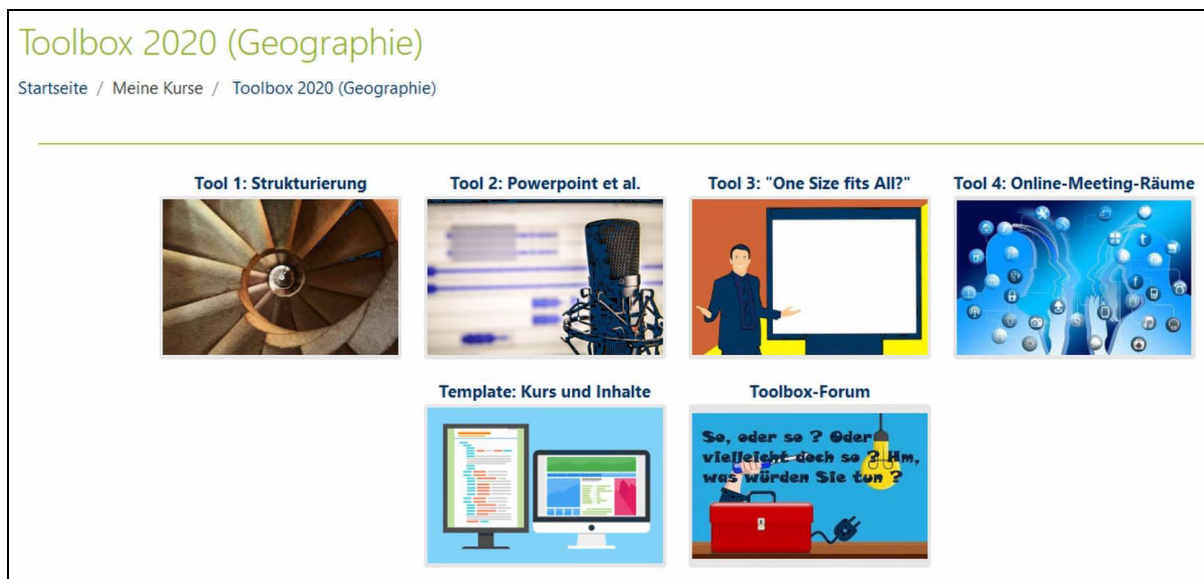
Rational and sustainable digitization is a main task for the future in all fields of life. In consequence our society, economy, production of goods, environment and education will change. New questions rise and sound answers have to be found. Several institutions act proactive and try to be part of the change instead of just being observers. In regard to this development, the *Institute of Geography* at the *Ruhr-University Bochum* founded in the year 2019 a new team under the title: “Digitization in Education”. Each of the three team members is holding a degree in geography with different fields of specialization: from human and physical geography over didactics to geoinformation. This was the starting point of speeding up the debate about digitization, gaining knowledge in the field and promoting certain well-chosen digital teaching- and learning-formats at the *Institute of Geography*. Implementation was accompanied by debates among colleagues and therefore the strategy was to implement flagship projects that will act as best-practice examples. This situation changed completely in March this year. The Corona-Crisis enforced the implementation of digital teaching- and learning-formats in education from one day to the other. As courses with physical presence were not allowed anymore, almost all analog teaching was transformed to digital formats in less than three weeks. One of the main challenges was to enable the faculty to manage this transformation as smooth and professional as possible.

2. “Toolbox” and LMS-Course-Template

In order to support the faculty at the *Institute of Geography* effectively, a digital “Toolbox” [1] including step-by-step manuals was created by our team. Functional a Moodle course [2], the “Toolbox” includes the four main chapters “Structuring”, “Powerpoint et al.”, “One size fits all?” and “Online-



Meeting-Rooms". In addition, there is a Forum for discussion and exchange of ideas, and the innovative element "Template". The latter is titled in the "Toolbox" as "Template: Kurs und Inhalte". Graphic 1 gives an overview of the digital "Toolbox" and its content.



Graphic 1: Overview of the digital "Toolbox" created in order to support the faculty in the transformation of analog teaching content to digital teaching formats. The LMS-Course-Template is part of the "Toolbox" (title: "Template: Kurs und Inhalte").

The LMS-Course-Template can be downloaded as a .mbz file, modified and used as basis for a professional online teaching- and learning-course. The .mbz file is a backup file created in Moodle, which can be used by course-creators to restore an existing course or – in our case – to duplicate a created course structure (including frame elements), as a so-called template. For this procedure it is not necessary to have administrator-rights, the assigned role as course-creator or teacher is sufficient. In regard to the "Learning Design Research" this kind of template classifies as a "generic design", that means, the structure (including frame elements) is provided in form of a template, not the learning content itself. The learning content will be placed into the template by the correspondent lecturer. Therefore, a "template could be used for multiple topics within a single discipline, or ideally across multiple disciplines" [3].

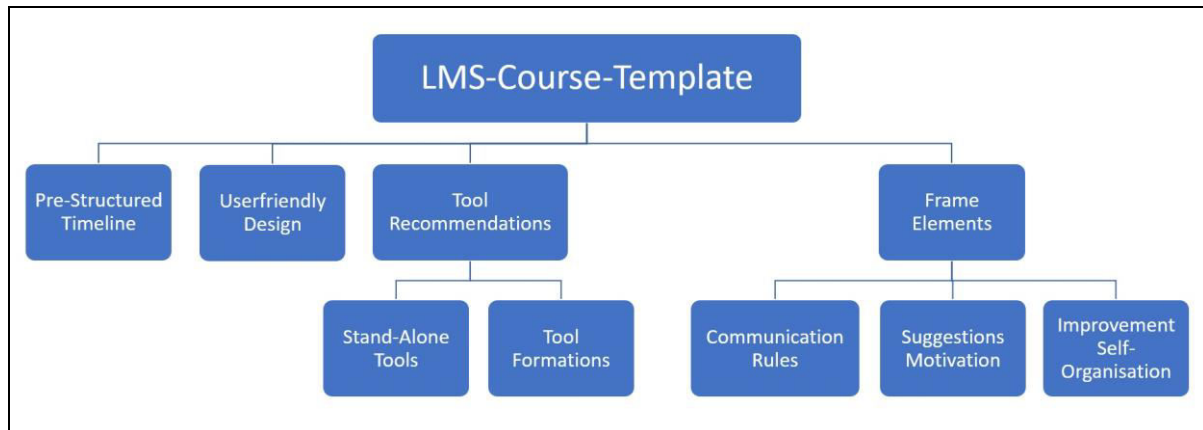
The reaction of the academic staff following the online publication of the "Toolbox" – including the LMS-Course-Template – was encouraging, as many colleagues had used templates in preparing presentations, but never in the context of a learning-management-system (LMS) like Moodle.

Since then the improvement of the LMS-Course-Template became a main task. Considering the experience and research results of DALZIEL & DALZIEL (2012), we tried to reduce the risk of "information overload" and to fulfil the "preference for brief advice followed by a rapid move to "hands-on" exploration of the templates, rather than detailed "up-front" pedagogical advice." [3]

3. Template Elements

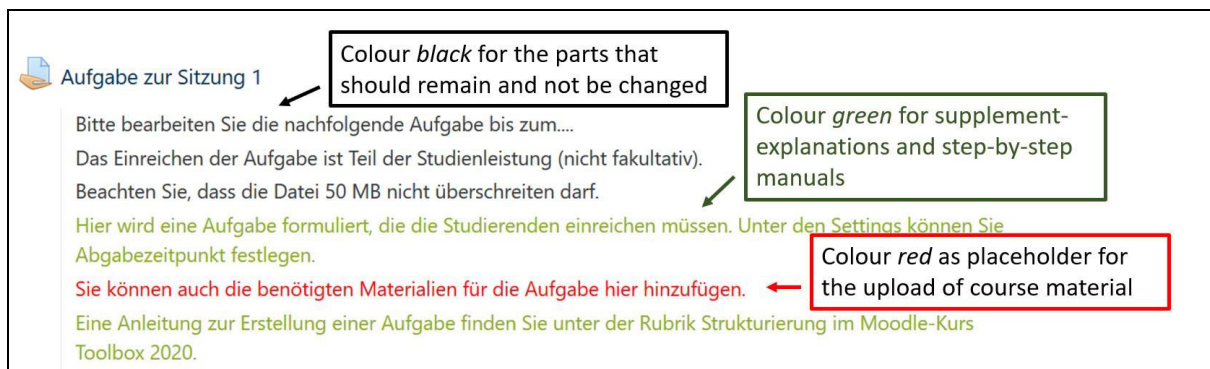
Today the template consists of the following main elements: (1) user friendly design, (2) pre-structured timeline, (3) recommendations for stand-alone-tools and tool-formations that are suitable for teaching and learning online and (4) several "frame elements".

The frame elements are: a.) rules how to communicate correctly online (so-called Netiquette), b.) suggestions how to increase learning motivation and c.) methods for improving self-organisation. Graphic 2 shows all elements of the LMS-Course-Template.



Graphic 2: Elements of the LMS-Course-Template

In addition, different colours indicate the possibilities of modification: *Black* is the default colour in Moodle. Text that should remain and not be changed is written in *black*. Supplement-explanations and step-by-step manuals are *green*, *red* serves as placeholder for the upload of own course material and *yellow* mentions relevant scientific studies related to the topic of didactics in higher education. Graphic 3 gives an example of the use of different colours in the template with the aim to facilitate orientation and usage of the template.



Aufgabe zur Sitzung 1

Bitte bearbeiten Sie die nachfolgende Aufgabe bis zum...
Das Einreichen der Aufgabe ist Teil der Studienleistung (nicht fakultativ).
Beachten Sie, dass die Datei 50 MB nicht überschreiten darf.

Hier wird eine Aufgabe formuliert, die die Studierenden einreichen müssen. Unter den Settings können Sie Abgabezeitpunkt festlegen.

Sie können auch die benötigten Materialien für die Aufgabe hier hinzufügen.

Eine Anleitung zur Erstellung einer Aufgabe finden Sie unter der Rubrik Strukturierung im Moodle-Kurs Toolbox 2020.

Annotations:

- Colour *black* for the parts that should remain and not be changed (points to the task title and instructions).
- Colour *green* for supplement-explanations and step-by-step manuals (points to the explanatory text).
- Colour *red* as placeholder for the upload of course material (points to the red text).

Graphic 3: Usage of Colours in the template with the aim to facilitate orientation.

The template is still in progress and it is our plan for the future to implement more helpful ideas and structures.

4. Positive Side-Effects and Challenges using LMS-Course-Templates

The main reasons for using a template are in general saving time and being guided through a digital creation process without having a deep understanding of the basic application or program. But there are some "side-effects" that attracted our attention. As this paper is experience-based the following observations are a starting point of an inductive approach, which might be followed in future by deductive research. At this moment we point out that the usage of a template that has a high usability and a similarity to already well-known templates in the field of creating presentations, can trigger a "sense of achievement" during the creation process. This is likely to increase motivation and interest in digital teaching- and learning-formats. Also DALZIEL & DALZIEL (2012) are pointing out the effect of inspiration that the ideas shown in a template can have on the course-creators [3]. Therefore our hypothesis is: templates – offered during the creation process of a digital learning- and teaching-course – are (1) increasing the understanding of the functionality of the learning-management-system, (2) mitigating negative preconceptions about digital education and (3) enabling an informed acceptance of digitization in higher education.

The term "informed acceptance" is used in analogy to the term "informed consent" in the health and medical sector. Informed acceptance indicates the shift from personal preconceptions and resistance to change to a well-informed, outcome-oriented and solution seeking perspective. It has to be



discussed if the terms “informed tolerance” or “informed progress” might be more appropriate than “informed acceptance”. At this stage of reflection we decided to use the term “informed acceptance”.

Another challenge will be the way, how a template is introduced to the faculty. Research showed that “the way ... templates were presented had a significant impact on the willingness of educators to explore them further”. Often, templates were only used for collecting ideas to enrich their own teaching, but the real purpose and potential of a template was left behind [3]. We are looking forward to the semester evaluation that will take place in July 2020 to gain more insights of the potential of the LMS-Course-Templates developed at the *Institute of Geography*.

Our goal is not the complete digitization of education in the sense of “what is technically feasible”. Foremost the digital transformation in education is in our opinion a process, driven by scientific knowledge, professional experience and rational arguments. The use of templates can help to build a bridge especially to the fraction of faculty that are general opponents to digitization in higher education. And it can support lecturers and teachers that are interested in the use of digital teaching- and learning-formats, but lack of knowledge and support stops them from implementation.

5. Conclusion

Drawing the analogy to the major use of templates in creating presentations, the LMS-Course-Template and its potential for fostering informed acceptance of digitization is underestimated. In the OER Movement [4] generic templates are almost irrelevant. From our experiences we draw the conclusion that the “sense of achievement”, that the use of templates triggers, is likely to increase motivation and interest in dTLFs. The template fulfils its role as a “door opener” and increases the understanding of the functionality of the LMS, its tools and possibilities. The faculty has the possibility to achieve LMS-competence, curiosity in progress and informed acceptance of digitization.

References

- [1] Link to the website for the Toolbox: <https://moodle.ruhr-uni-bochum.de/m/enrol/index.php?id=23352> (last access May 15th 2020)
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- [4] Link to the website of Unesco: <https://en.unesco.org/themes/building-knowledge-societies/oer> (last access May 15th 2020)