

Fostering cooperation between lecturers and TLC staff to improve digital teaching. Experiences with a pool of discipline-specific experts

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Abstract

The necessity of discipline-specific teaching method skills of lecturers is exacerbated by a partly insufficient cooperation between lecturers and media-didactic staff in Teaching and Learning Centers (TLC). This paper aims to illustrate how this lack of cooperation between lecturers and media-didactic experts can be solved by a team of discipline-specific experts skilled in media-didactic methods. Due to their knowledge of the discipline-specific communication cultures these discipline-specific experts build a “bridge” in cooperation between lecturers and media-didactic experts as well as technical staff. Experiences gathered with the TLC of the University of Applied Sciences Fulda show that the discipline-specific experts support lecturers by fostering particularly informal cooperation between them and media-didactic experts or technical staff. Therefore, the pool of discipline-specific experts is a new and innovative way to support lecturers in acquiring discipline-specific digital teaching skills, fostering discourse on teaching practices and further developing digital teaching.

Keywords: *Cooperation; digital teaching; discourse on teaching; digital skills.*

1. We Need a Closer Cooperation Between Lecturers and Staff of TLCs!

During the COVID-19 pandemic, most university lecturers all over the world had to move abruptly towards “online education”. The rapid start of such digital education brought not only challenges for lecturers, students and staff of Teaching and Learning Centers (TLCs), it also fostered digitalization in teaching and learning. Lecturers had to perform in online classrooms by applying digital skills. Students had to adapt to digital, often unfamiliar learning spaces and necessarily acquired new learning skills. Universities were forced to advance their infrastructures and organization (Perez-Sanagustin et al., 2022). Particularly TLCs had to develop support in online teaching methods for digital spaces.

Since March 2020, a transformation towards the digitization of the university system has started, and the question of the sustainability of these changes has emerged. In this context, staff of TLCs play a key role as they enable lecturers and students to adapt to continuous changes in education by explaining digital tools and teaching skills to them. Within this process, e-learning and media-didactic experts are particularly important as they can support lecturers in developing courses, in trying out teaching methods or technologies (Karcher & Nunn, 2021). In short: TLCs support lecturers in acquiring digital teaching skills.

Despite the urgent support needed in the past two years of the COVID-19 pandemic, still too many lecturers do not see the necessity of cooperating with the TLCs staff or consider the central services to be too little related to the teaching methods in their discipline. Even lecturers who have been eager to acquire digital teaching skills are becoming less interested in furthering their digital teaching in cooperation with media-didactic experts at TLCs. This raises the question as to how to foster and/or maintain cooperation between lecturers and media-didactic experts in TLCs for a sustainable development of teaching skills.

Cooperation is essential for the following illustrations. In essence cooperation (lat. co together, opera tasks, work) between humans is the purposeful interaction of two or more persons, groups or systems with a common interest. It is an intentional and planned way of working together and by processes of mutual agreement on specific goals. It can be both formal, in the case of existing structures or obligations, and informal, when there are no rules in place (Pastoors & Ebert 2019). In terms of the “homo heterogeneous”, cooperation is particularly understood here as a pursuing of longterm goals and acting sustainably (Rogall & 2015). In line with Kubrick (2001), it is seen as an unfolding process of interaction which can be better understood by interrelating the four perspectives “subject- or task-related”, “social”, “organizing” and “communicative”. These perspectives illuminate the dynamics of shared practices evolving into a shared collective culture with formal and informal communication and collaboration.

This paper argues that a cooperation between lecturers, media-didactic and technical staff in TLCs may be fostered by implementing a team of discipline-specific experts who know the

department culture and discourse on teaching in their discipline. This sort of cooperation will be illustrated by insights into the project *Developing Online Formats Together - Innovative and Sustainable* (GO-IN), University of Applied Sciences Fulda (HFD), which aims to foster such a cooperation by a pool of discipline-specific experts. First, there will be an illustration of the necessity of enhanced cooperation between the TLC and the departments. (2) This is followed by an overview of GO-IN (3). In a next step, examples of support by discipline-specific experts are provided (4), the *informal group discussions* (4.1.) and the *adaptation of teaching material* (4.2). Finally, the experiences are discussed (5).

2. The Necessity of Enhanced Cooperation between the TLC *Dienstleistungen Lehre und Studium* and the Departments at the University of Applied Sciences Fulda

At the University of Applied Sciences Fulda (HFD), there are currently around 730 employees and 9,700 students with diverse educational backgrounds, personal and professional biographies. The HFD unites a variety of disciplines and has eight departments with their own cultures of communication: Applied Computer Science (AI), Electrical Engineering and Information Technology (ET), Food Technology (LT), Oecotrophology (OE), Health Science (GW), Social and Cultural Sciences (SK), Social Work Science (PG), Business Science (W). Students and lecturers are supported by the media-didactic experts in the TLC of the HFD, the *Dienstleistungen Lehre und Studium* (DLS). This variety of disciplines and diversity of students is a strength of the HFD, but it entails challenges. These challenges in digital teaching were addressed by DLS. Since 2005, lecturers have been supported in media-didactic teaching and technical support by a central e-learning service and a cooperation project of many universities ("Digitally Supported Teaching and Learning - digLL").

Despite HFD's support services, teaching during the COVID-19 pandemic has brought inconsistent development in digital teaching with regard to methods, tools and didactics across the departments. The strengths and weaknesses of the HFD in digital teaching were identified in the evaluation of the online semester 2020/21 (Kraft, Merkator & Pohl, 2021). The evaluation included students (N=1.834) and lecturers (N=288). Data collection was conducted via questionnaire survey and analysis by means of descriptive statistics. The results revealed that there was good technical support, but partly problems in choosing appropriate didactic methods among lecturers due to the overload of options. Therefore, the identified key challenge was to address discipline-specific support and foster cooperation and discourse about digital teaching methods between lecturers and DLS staff. The lack of formal as well as informal cooperation between TLCs and departments in order to foster teaching is not a new challenge. At the HFD, improving digital teaching through cooperation is the focus of the GO-IN project, which is described in the following chapter.

3. The Project GO-IN and the Concept of the Pool of Discipline-specific experts

GO-IN is a project across disciplines; it is centrally managed by the Vice President for Teaching and Learning and coordinated in DLS. It has the goal to identify existing digital teaching practices which were developed during the COVID-19 pandemic. Lecturers are particularly supported in adapting the digital teaching concepts identified and apply them in a more developed way in their own teaching. The project has five pillars. First, a pool of discipline-specific experts, with one expert from each discipline. Second, a professorial advisory council, including one professor from each department. Third, discourse space(s), which are spaces for discussions about digital teaching. Fourth, development of teaching and learning labs and fifth, producing teaching, learning and assessment materials. The “heart” of the GO-IN-project is the pool of experts skilled in digital teaching methods and tools who have a background in a certain discipline. The so called discipline-specific experts of this pool foster particularly informal cooperation between lecturers and media-didactic experts or DLS staff by building a “bridge” of communication. Once established, informal cooperations sometimes transform into formal cooperation structures (see Figure 1).

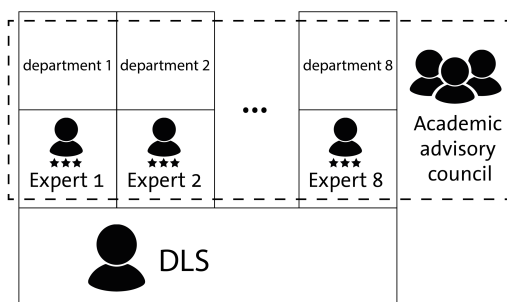


Figure 1. Supported by the academic advisory council, eight discipline-specific experts build a bridge in cooperation between the departments and DLS staff. Figure from: Christian Stickel (2023).

They support lecturers in developing a teaching concept, adapting certain teaching practices or choosing an appropriate teaching tool. They are supported by media-didactic experts and other technical staff in DLS as well as a professor from their discipline, who is a member of the advisory council of the department, which forms the second pillar. The third pillar is the discourse space(s) where the discipline-specific experts initiate communication about digital teaching and learning by identifying discipline-specific needs in digital teaching methods. They foster discourse about teaching and learning built on their knowledge about which methods are preferred in the different disciplines. Furthermore, they bring together lecturers within and across departments who are interested in the same teaching method(s) or digital tool(s). With regard to the fourth pillar, development of teaching and learning labs, this supports the departments in bringing together lecturers with the suitable person in DLS who can support them in the design and application of innovative, digital-driven labs and the

related teaching methods in these new labs. They also establish cooperation between DLS and the lecturers in regard to technical support for teaching settings. As part of the fifth pillar, the discipline-specific experts support lecturers in producing teaching, learning and assessment material by developing and creating these materials with media producers in DLS.

4. Discipline-Specific Experts at Work: Two Examples

Based on the GO-IN project outline and the role of discipline-specific experts within the project, the following examples illustrate informal (and formal) cooperation in practice. The first example, the *informal group discussions*, addresses the question of how informal cooperation with lecturers enhances a discourse about challenges in digital teaching and enables tailor-made solutions. The second example, the *adaptation of teaching material*, addresses how discipline-specific experts foster the adaptation of digital learning material within and across departments by informal cooperation activities.

4.1. Informal Group Discussions

At the beginning of GO-IN, *informal group discussions* facilitated contacting lecturers and establishing easy-going and non-obligatory regular meetings, the discourse spaces. The *informal group discussions* enable the identification of good ongoing digital teaching practices and prevailing challenges at the HFD. In five departments (AI, GW, LT, Oe, SK), the discipline-specific experts fostered contact with nearly all lecturers in different ways, depending on communication structure and culture in a department. In the departments AI, LT, SK contact was established by the discipline-specific experts. In the department GW, the discipline-specific expert began to participate in an existing formal discourse space. In the department Oe, the best way to invite lecturers seemed to be an invitation by the member of the advisory council. Despite the different ways of contacting lecturers for *informal group discussions*, this led to two key developments: Firstly, they revealed good digital teaching practices as well as challenges and, secondly, they initiated and established regular discourse about teaching and learning between lecturers, discipline-specific experts and the DLS staff. These discourse spaces are diverse and aligned to the communication culture in the discipline and department.

In the department AI, the discourse space *eLA (eLearning & Lehre-Austausch)* was implemented. There is an open discussion between professors and all other lecturers about teaching digitization as well as applying digital methods and tools. The discipline-specific expert coordinates and moderates the discourse space. Due to their sound knowledge in teaching, they are able to pick up teaching examples that may be relevant for many lecturers, applying KI in teaching.

The department GW already had the formal discourse space *AG Qualität der Lehre* for discussion of teaching. Professors and lecturers participate here, treating varying topics related to teaching and contributed to by participants. The discipline-specific expert gains insight into good and challenging teaching examples and identifies particularly sustainable structures of a discussion format which might not have been known before outside the department.

Even though there is no specific title for discourse spaces in the department LT, the exchange about teaching is conducted regularly in two kinds of discourse spaces, one for professors and one for all other lecturers. Both discourse spaces are initiated by the discipline-specific expert. At the beginning of some meetings, the discipline-specific expert, accompanied by a lecturer, provides example(s) of a good digital teaching pattern (According to Kohls (2009) patterns are schemes that document proven solutions in an easily accessible, practical form.). This input is followed by discussions on the topic presented. The discipline-specific experts deliver information and foster the discussion as they transmit their knowledge on teaching methods in the communication culture of the department.

The department Oe also has no title for its discourse space, although such a space is initiated regularly by the discipline-specific expert for interested lecturers. The participants are professors and lecturers alike. The discipline-specific expert always presents patterns first in a moodle course before an open exchange about the information presented starts. The discourse is moderated by the discipline-specific expert. Hence, the discussions rely on their knowledge about the teaching practice in the discipline.

Derived partly from the experience gained in the other departments and partly from extensive *informal group discussion*, the department SK has just started to implement a discourse space. Initiated by the discipline-specific expert, professors and all other lecturers will participate in this discourse space together. This discourse space was already implemented once by the department Oe and following meetings for discussions are planned. At this first meeting, the discipline-specific expert presented a pattern which was discussed afterwards.

4.2. Adaptation of Teaching Material.

The *adaptation of teaching material* became particularly feasible after a well established informal and partly developed formal cooperation between lecturers and discipline-specific experts (as well as DLS staff), which started to consolidate. The central goal of developing digital teaching material is to provide templates which can be slightly modified and easily applied by lecturers of all departments. Several templates for teaching, learning and exams have already been developed in cooperation with lecturers, discipline-specific experts and media producers.

A favourite template among lecturers is the digital learning template *escape game*. It was developed to foster digitally assisted in-depth learning in class – virtual and in presence. The idea for a learning unit with an *escape game* was proposed by a professor in the department of LT. She herself did not have the time to compile such a template and was not sufficiently skilled in media production. She asked the discipline-specific expert for assistance and the latter in turn contacted one of the media producers in DLS. During the development of the *escape game* by the media producers, the discipline-specific expert regularly presented the evolving versions to the professor in order to tune them to the professor's needs. Together they designed two *escape games*. In a meeting of the pool of discipline-specific experts, the participants discussed how *escape games* may be adapted for other courses. The solution was to design an *escape game* template. Accordingly, the discipline-specific expert, the media producer and five student assistants developed a template.

After the *escape game* template had been tested in a teaching course, the professor, supported by the discipline-specific expert, shared her experiences with other professors in the LT department. In particular, they presented it in the discourse space for professors described above. The template was further presented in discourse spaces of four other departments (Oe, AI, GW, SK). There, the discipline-specific expert from these respective departments explained and presented the template, which led to new cooperations between lecturers and media-producers. In the department Oe, the template has already been adapted to other in-depth learning units in class. It has already been integrated into the course's teaching concept. In AI the implementation has started. The other two departments have declared a high interest in using the *escape game* template.

5. Reflections on Experiences with the Pool of Discipline-Specific Experts

The development of digital teaching and learning in the last two years was shaped by necessities during the COVID-19 pandemic. Due to the support in digital teaching, the role of TLCs changed and gained greater influence. TLC staff, whether media-didactic experts or technical staff such as media producers, were particularly requested for solutions to technical challenges, less for digital teaching methods and the development of digital teaching skills. In this regard there is often still a lack of cooperation between lecturers looking for discipline-specific teaching methods and media-didactic experts.

As the “heart” of the the GO-IN project of the HFD, the pool of discipline-specific experts fosters digital teaching and learning by enhancing the cooperation between the departments and the DLS media-didactic experts, media producers or other technical staff. The discipline-specific experts particularly initiate informal cooperations which sometimes segued into formal cooperation structures. The experiences revealed that such a pool of discipline-specific experts can build a ‘bridge’ between DLS staff by bringing in the knowledge about

the practiced communication culture of a department and the understanding of the relevant teaching and learning methods in a specific discipline. However, the experiences in both examples also demonstrate that formal cooperation by professorial support is highly significant.

In a nutshell, the discipline-specific experts are aligned to the communication culture in the department and as a pool of experts, they are therefore able to foster the cooperation between lecturers of all departments and the DLS staff. Such an increase in personnel of the mid-level staff of a university in discipline-specific consulting may therefore lead to sustainable discourse and improvement in digital teaching and learning.

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