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2020 Annual Report of the Center for Teacher Education and Educational Research (ZLSB)



#### **Publishing Details**

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#### Dear Readers,



15 years after founding the ZLSB, we closed it for the first time for face-to-face interactions on Friday, 20 March 2020, at 5:20 p.m. The moment the key turned in the office door and the view of the parking lot and Zellescher Weg, both deserted, remain unforgotten. Lockdown: Of the ZLSB, of TUD, of the whole country. The first wave of the Corona pandemic had the Federal Republic of Germany and the world firmly in its grip.

After the weekend, we reopened - digitally and keeping our distance - for all "customers" and employees at 8:00 a.m. on Monday, 23 March 2020. With a fortnight's period of preparation and participation in TUD's crisis management team on teaching, the remote mode from home could begin. During the first week of working from home, there was a lot to clarify and to try out. Computers had to be set up, cameras positioned and microphones aligned in order to get used to the new daily routine of digital conferences in virtual rooms. That we were not the only ones having to adjust to a new daily routine was demonstrated by an e-mail from one of our partners that reached us from the U.S. on the second day of lockdown. With American pragmatism, it said:

"We all are aware that we now live in a new, challenging yet workable, reality. Thus, everybody keeps their spirits up and try to be as optimistic as possible. Send my warm regards to our colleagues at TU-Dresden. Please, stay safe and positive, and take a good care of yourself and your family."

We always kept the spirit of this mail in mind during the course of 2020. Everyone did their part, taking care of their individual assignments. We talked to ministries and state authorities about postponing exams and yet still making them possible. At the university, internships had to be readjusted, exams adapted to digital teaching, and suggestions made for the crisis management team on teaching. A wide variety of ZLSB projects needed to be converted from classroom events to digital formats, without significant loss of quality. The ZLSB digital team also provided support for teaching, for all those involved in teacher training.

The first absence from the ZLSB lasted for 81 days. In mid-June, we were able to continue again face to face, "at a distance" and wearing masks. Of course, offices were only half occupied and working from other locations remained a regular feature. We all breathed a little "air of home" in our building with students and colleagues, until the second lockdown from 14 December 2020. Between June and December, we reaped the harvest of the first half year of Corona, so to speak. For example, at the start of the semester for students in teacher training degree programs in October, we were able to roll out everything that had to be planned digitally, and even hold - without hitches the first online conferences in November, both nationally and internationally.



And lo and behold: It worked. The almost 40 pages of the ZLSB 2020 annual report provide lively testimony to the regional, national and international capacity for development in the year of Corona. Five years ago, when we celebrated a decade of the ZLSB in a face-to face event, there were only eight pages. By now, so much is happening every day in the most varied of sub-sectors that from 2021, we will be publishing a bimonthly newsletter. In 2020, we already had to basically adapt the homepage every week. We would also like to refer you to the homepage for up-to-date information on matters concerning teacher education at the TUD. You can now also find podcasts and films on the homepage. All in keeping with the motto that in German spells our name: "Zusammen" (Together), "Lehren und Forschen" (Teaching and Research), "Studieren und Internationalisieren" (Studying and Internationalizing), "Beraten und Beteiligen" (Advising and Participating): ZLSB.

Prof. Axel Gehrmann Managing Director of the ZLSB

# **Report from the Head Office**

#### In times of lockdown from March 2020

With a great deal of improvisation and dedication, but also with the help of excellent IT support, all ZLSB employees were able to continue working from various locations from the beginning of the first lockdown in mid-March 2020. Even though the pandemic brought with it massive restrictions, ways were quickly found to maintain the ability to work. To this end, we established seven teams at the ZLSB. Today, they continue to support us in communicating with our areas of work.

After 81 days, at the end of the first lockdown in mid-June, not everyone returned to normal operations. To keep contacts reduced, many colleagues continued to work on a mobile basis. In this way, a new normality was established. This happened knowing that some new colleagues have unfortunately not yet been able to meet the "old" ones.



Empty corridors in Seminar Building II (Photo: ZLSB)

The same is true for our new first semester students, who we were able to welcome (virtually) in October, as well as for many interns, who were only allowed limited access to the schools. The state examinations were also affected by the pandemic, but students were able to sit them under certain conditions.

#### Internationalization of teacher education

After the successful conclusion of the IMPRESS kick-off meeting in December 2019, we started the new year full of the inspiration and ideas that our international colleagues had given us. Through return visits, field trips and a broad exchange of students and academics, we intended to further expand and deepen our international collaborations. For the first time, we would even have been in a position to promote mobility more broadly and to provide targeted contacts in the



*Virtual international conference on lateral entry (Photo: Neumärker)* 

newly established IMPRESS network, thanks to the DAAD "Lehramt.International" program. Preparations were in full swing until - like so many things they were thwarted by the pandemic. With great commitment, our colleagues developed "kerosene-free" forms of collaboration.

Virtual get-together conferences helped us to stay in touch with our international colleagues. This meant that, despite the limitations, we managed to jointly organize an international conference on lateral entry, a scientific lecture series on the subject of "Educational Systems in (Trans)Formation -Facing the global challenges" and an international continuing education event for teachers.

#### **Overlap-free teaching**

Parallel to the revision of the degree programs in the course of an amendment of the "Lehramtspüfungsordnung I" (Teaching Degree Examination Regulations I), TUD began to integrate the teacher training degree programs into its quality management. The introduction of a time-slot model, which is being worked on intensively, is intended to bring about further improvements with regard to studiability. After extensive preparatory work in TUD-Sylber, the process for establishing a timeslot model began with discussions with University's Executive Board, the Schools and Faculties. The introduction of the subject of Biology is also being prepared.

#### Successful implementation of acquired research and development projects

The TUD-Sylber family grew in 2020. From spring onwards, complementing TUD-Sylber, our colleagues have been focusing on specific problems for teachers at vocational schools. In cooperation with Leipzig University, the PraxisdigitaliS project pursues digitalization in teacher education. Both



the Coordination Office for digitalization in TUD-Sylber and digitalization at the ZLSB are gaining in importance. From 2021, the working group will be expanded to include "Schullogin" and the Saxon Education Server. The annual TUD-Sylber conference on "Heterogeneity and Inclusion" was held virtually this year,. Thanks to further special funding and in cooperation with the working group inclusion, it was also possible to advance the conception and equipping of the Teaching-Learning Room "Inclusion".

#### Board of Directors, Academic Advisory Council and Board of Trustees

Apart from dealing with the current situation, the Board of Directors focused on personnel development, the processes of degree program development, the in-depth exchange with the heads of the working groups, and the transfer of project results into the broad field of teacher education. The Academic Advisory Council also dealt with the design of the new degree programs, the issues regarding teaching and examinations in the current Corona situation, and the future safeguarding of teaching after the expiry of the education package at the end of 2020. .

Headed by Prof. Bayrhuber, the Board of Trustees took stock of the current status at its meeting on 13 November. The members were impressed by the positive development of the center. This was made possible not least by further acquisition of extensive third-party funding, and supported the setting of priorities in the areas of digitalization, international networking and overlap-free studying. Prof. Falk Radisch (University of Rostock) and Ms. Katrin Noack (SMWK, State Ministry for Higher Education, Research and the Arts) were newly appointed as members. We would like to cordially thank Prof. Heidemarie Kemnitz (TU Braunschweig) and Mr. Norbert Busch-Fahrenkrug (SMWK, State Ministry for Higher Education, Research and the Arts) for their commitment and support. [Neumärker]



# **Academic Affairs Office for Teacher Training**



#### **Development of student numbers**

In 2020, TU Dresden enrolled students in four teacher training degree programs leading to a state examination. These include degree programs for teaching at primary schools, secondary schools, grammar schools "Gymnasien" and vocational schools.

With the enrollment for winter semester 2020/2021, the total number of students in the teacher training degree programs increased to 3,961, of which 943 students were enrolled in the first semester. Overall, with 12.25%, the students in teacher training degree programs make up the largest first-semester group at the entire TU Dresden. Looking at all semesters together, they represent 12.6% of students university-wide and thus the second largest cohort of all students.



*Students in their first semester of teacher training degree programs in winter semester 2020/21 (as of 01.12.20)* 

In terms of the distribution of first-semester students, the degree program teacher training at "Gymnasien" (grammar schools) accounts for the largest share, with 429 first-semester students (45.5%). The other three teacher training degree programs are level with approximately the same percentage each (PS: 17.7%, Second.: 20.3%, VS: 16.5 %) [Sichler]

#### Amending the degree programs

From 2019, on the recommendation of the State Commission for Teacher Training, all teacher training locations were requested by the Saxon State Ministry of Education and Culture (SMK) to revise their respective study documents in line with the coming new "Lehramtspüfungsordnung I" (Teaching Degree Examination Regulations I, LAPO I). For this purpose, the SMK conveyed framework conditions to the Saxon universities. TUD then formed groups of experts.

In accordance with the new guidelines, course content in the field of inclusion in the education sciences and content regarding civic and media education is to be included in the form of separate modules in the additional areas of study. In anticipation of the new LAPO I, the subjects and subject areas have begun to revise their study regulations. Likewise, the modules in education sciences are being adapted in order to, among other things, embed the topic of inclusion more firmly in the course content. This affects 77 study and examination regulations in the four degree programs, containing over 1,000 modules. In addition to the necessary changes, the degree programs are also being optimized in order to further improve studiability and dovetailing of the partial degree programs. This includes standardized module sizes and predominantly one-semester modules, which are also intended to make it easier for students to interrupt their studies to incorporate a stay abroad.

With the start of the new degree programs anticipated for winter semester 2023/24, the plan is to go live with the teacher training degree programs in the TUD's SLM system "CampusNet". [Höhne]



Lecture of the Academic Affairs Office for Teacher Training at Uni Live in the AUDIMAX (Photo: Schubert)

#### Recruitment of new students and support for students in teacher training degree programs during their studies – before the pandemic

The aim of the Academic Affairs Office for Teacher Training is to provide intensive support for prospective students and students in teacher training degree programs. The pandemic has presented us with several challenges in the most varied aspects of organization, of advising and supporting students in their daily lives, and of planning and holding information events.

On 12 January 2020, the Academic Affairs Office for Teacher Training was still able to welcome numerous visitors to Uni Live. The lecture in the AU-DIMAX, the largest lecture hall of TU Dresden, also attracted hundreds of guests. At the Career Start Fair, staff were involved intensively during a total of three days at the SMK's very well-frequented booth for the recruitment of teachers in Saxony.

The State Office for Schooling and Education, in cooperation with the Academic Affairs Office, held two more information sessions regarding the First State Examination and the "Vorbereitungsdienst" (Preparatory service) in Saxony as face-to-face events on 15 and 23 January 2020.

During the time that followed, face-to-face events with these large numbers of participants were no longer possible. Various virtual formats had to be found in order to maintain the numerous information and support services, and to be able to offer them digitally. [Schubert]



Information booths at Uni Live (Photo: Queitsch)

# New paths for student communication – digital momentum through Corona

For several months now, live chats with students, podcasts, and information events in the form of video conferences have been among the tools for student communication of the Academic Affairs Office for Teacher Training.

In order to provide close supervision for students and prospective students even under the conditions of the COVID-19 pandemic, additional unconventional communication channels had to be found quickly from spring 2020 onwards. Therefore, in addition to the established telephone consultation hours and the e-mail ticket system, new digital paths were taken to provide students with information and counseling services.

A completely digital semester is particularly difficult for new students, who can neither get to know their lecturers and fellow students in person, nor physically explore the university campus. In order to give first-semester students a good introduction to studying, the ZLSB placed particular emphasis on virtual services regarding the start of studies.



The freshers' opening, which usually fills the largest lecture hall at TU Dresden with nearly 1,000 students, took place digitally. First-semester students were welcomed to TU Dresden by speeches on video. Further videos, podcasts and presentations with soundtracks provided students with the most important information on how to organize their studies during the first semester. In the initial weeks of the semester, students also received assistance with compiling their timetables from digital orientation tutorials. A virtual tour of the campus and of the Academic Affairs Office for Teacher Training allowed students to get to know important places and contact persons of the teacher training degree program at TU Dresden, at least in a digital manner.

The usual information events for prospective students (e.g. Uni Live university Information Day) and for advanced students (e.g. information events on international mobility and the first state examination) are also regularly held in digital form. In addition, there are further services such as the online consultation hours for students regarding questions of digital teaching. These are services of the Coordination Office "Digitalization".

The new information and advisory formats are actively used and gratefully received by the students. They contribute to the feeling that teacher training students at TU Dresden have of being well informed and advised, despite the almost complete absence of face-to-face events. Even though the staff of the Academic Affairs Office for Teacher Training miss the personal contact with students, some of the digital formats will permanently enrich the repertoire of student communication, even after the pandemic. [Hähniche, Sichler, Thielemann]



Record of student telephone inquiries at the Front Desk (time span from 1 October 2020 to 31 December 2020)

# Consequences of the pandemic for work at the Front Desk in the Academic Affairs Office

The Front Desk in the Academic Affairs Office of Teacher Training was already set up back in 2016, and, since the end of 2019, has become a central port of call for all prospective students and students of teacher training degree programs. Students can usually be offered quick and straightforward help during an initial personal consultation. This comprises general information, providing students with information materials, and handing out and receiving forms. The Front Desk also acts as a central intermediary for the Back Office (Examination Office, Study Counseling, Internship Coordination and Counseling for Supplementary Studies), as well as for other university bodies (Central Student Information and Counseling Service, Academic Advisory Service of the Faculties and Departments, International Office, Matriculation Office, etc.).

From March 2020, due to the special circumstances of the pandemic, the Front Desk also had to work from home in order to maintain communication with the students and the staff of the Academic Affairs Office. In this way, it was still possible to provide information and forward inquiries and contacts, mainly via telephone and the ticket system, and even while operating under restrictions. From the beginning of the winter semester in October until the end of December, more than 1,800 inquiries were handled by telephone, and 749 queries were resolved directly by service staff.

The Academic Affairs Office has been using a ticket system to respond to written inquiries since 2019. Anyone with a query can contact the staff of the different areas via a uniform mail form - the "form mailer" - on the website of the ZLSB. Students log in with their ZIH login, which keeps the correspondence safe in terms of data security and also makes it easier for the staff in the Academic Affairs Office to answer the inquiries. Students' information linked to the matriculation number is automatically stored by the IDM system of TUD and is available to staff. Basic information about the degree program and the combination of subjects does not have to be filled in by the students themselves, but is still visible to the staff in the Academic Affairs Office.

Prospective students without ZIH login also have the option of contacting the Academic Affairs Office in writing. The reason for the inquiry can be selected from a drop-down menu, so that the correct contact person is already selected in the background. Last year, the Academic Affairs Office received over 13,000 such tickets, which were answered by staff. [Sichler, Thielemann]





# MTC – TUD\_MTC Making Teachers Confident

As for everyone else, 2020 also panned out differently than expected for MTC. The tutorials and workshops scheduled could not take place face to face due to the pandemic. A new plan was needed to continue to support students in this extraordinary situation during the start phase and the further course of their studies. Telephone and video consultation hours were set up in the summer semester, and the interdisciplinary tutorials were digitized in order to give first-semester students a successful start to their studies.



Via BigBlueButton tutorials, students were able to learn more about the topics of academic work, exam preparation and career aspirations. Digital services regarding starting a degree course and compiling a timetable were supplemented by "orientation tutorials" in the form of guided campus tours for small groups. The focus was not only on introducing the campus and important central facilities by the tutors, but also on social and professional integration of the first-semester students. More than 500 teacher training students, divided into 50 tutor-led groups, took advantage of this offer. In addition, students were able to have their completed timetable checked.

The Summer School 2020 took place as a hybrid mix of digital services and face-to-face workshops

on soft skills, digitalization and school, and internationalization. Formats for exchanging practical experiences were also on offer. The digital services regarding online teaching, the use of digital media in the classroom, and the creation of teaching and learning videos were particularly popular.

At the same time, we started a new medium, the podcasts. Short episodes provide information on various topics and are intended to give prospective and current students and also employees of TU Dresden insights into projects, plans, and the tasks of the various in-house areas. So far, seven podcasts have been produced. These include interviews on the Study Counseling Service, Internship Coordination, as well as on digital media in schools. Further episodes are being planned.

New collaborations also emerged in 2020: For the first time, two digital workshops on conflict, time and stress management were held for participants in the lateral entry program.

The TUD\_MTC (Making Teachers Confident) project will be funded by the Higher Education Pact until 30 November 2021. [Schanze]

Contact: Anja Schanze



Episode 7: IMPRESS - Bringing the World to Dresden Episode 6: Digital Media in Schools - PraxisdigitaliS Episode 5: Teaching-Learning Room "Inclusion" Episode 4: Internship Coordination Episode 3: Additional Areas of Study Episode 2: Study Counseling Service at the ZLSB Episode 1: Front Desk of the Academic Affairs Office



Further informationen: https://tu-dresden.de/zlsb/ publikationen/podcasts

### Avoidance of overlap in teacher training degree programs

For the past four semesters, the Academic Affairs Office for Teacher Training has been using an examination plan to document and coordinate examination data from the Departments. This has by now become an integral part of its work. The plan is the memory of examination management and also helps to identify, resolve and avoid overlaps. The detailed analysis and evaluation of the data obtained each semester also serves to continuously optimize the examination plan itself.

In 2020, the procurement of the examination data led to significantly more communication with the Departments than in previous years. In this respect, Corona can be seen as an opportunity that was definitely exploited. During the course of the year, the examination management of the Academic Affairs Office for Teacher Training was increasingly perceived as a player that was already involved in the planning of possible examination dates. This is an important milestone for the future avoidance of overlaps and a move towards increased transparency within the examination process, which has had positive effects reaching as far as the coordination of the degree programs. Changes in examination modalities resulted in changes in the curricula of several vocational subject areas. It was possible to filter these quickly with the help of the examination plan and to compile them into a clear overview. An additional benefit from March 2020 onwards has been employing the examination plan to collect and evaluate relevant data, for instance the alternative examination achievements and credits available to examiners by virtue of the decision of

the Senate.

The goal of working on and with the examination plan continues to be the identification of specific examination dates. In this context, a significant increase in the quantity and quality of data was achieved in 2020. For example, the focus lies increasingly on identifying regular occurrences in the range of examinations on offer. The next step is to establish a certain degree of predictability in the range of examinations on offer, so that the focus can then shift to coordinating them without overlaps.

Efforts to introduce the time-slot model - already begun last year - and making it better known as an instrument for overlap-free course planning were intensified and rapidly advanced throughout the university in 2020. The concept of the time slot-model was presented to all Faculties involved in the teacher training degree programs and to the Senate Committee "Teaching". In this way, it was possible to involve many actors of the university in the development process. This will increase the chances of broad acceptance during piloting and implementation.

On 14 January 2020, the presentation of the time slot-model took place in the Faculty of Linguistics, Literature and Cultural Studies. On 23 January 2020, a discussion with the University Executive Board on how to proceed further followed. On 12 February 2020, the concept was presented to the colleagues of the School of Science, and on 23 March 2020, to the Faculty of Arts, Humanities

#### Anmeldezeiträume Bildungswissenschaften

Anmeldezeitraum 1 im **WiSe 2020/21** = 01.11.2020 - 28.11.2020 Anmeldezeitraum 2 im **WiSe 2020/21** = 07.01.2021 - 23.01.2021 Stand: 16.11.2020

Bitte beachten Sie: Zeit und Ort der Prüfungsleistung erfahren Sie bei Ihren Prüferinnen und Prüfern. Modulnamen mit Kennzeichnung WiSe 2020/21 markieren (Vor-)Prüfungsleistungen für Studierende mit Immatrikulation ab WiSe 2020/21. Den konkreten Anmeldzeitraum der mit "1 + 2" ausgewiesenen Prüfungsleistungen entnehmen Sie bitte HIS.

Modulname	Stg.	Modulnummer	Prüfungsleistung	PL-Nummer	Zeitraum
Orientierungswissen	GS	EW-SEGS-BW-1	Portfolio (unbenotet)	1110	1
Erziehungswissenschaft					
Orientierungswissen	GS	EW-SEGS-BW-1	Reflexion	1103	1
Erziehungswissenschaft (WiSe					
2020/21)					
Orientierungswissen	GS	EW-SEGS-BW-1	Referat	1130	1
Erziehungswissenschaft	os	EW-SEMS-BW-1			
	GY	EW-SEGY-BW 1			
Orientierungswissen	GS	EW-SEGS-BW-1	Beleg	1120	1
Erziehungswissenschaft					

Sample excerpt from the examination plan for the education sciences in winter semester 2020/21: Listed are the allocation of examination achievements and credits in the modules to the two periods of application



Schematic representation of examination planning during the course of the academic year

and Social Science. Important questions from the School were answered.

Finally, on 10 June 2020, the time-slot model was presented to all members of the Study Commissions "Teacher Training", including the student representatives from the Faculty Students' Councils. During the subsequent discussion, there was positive feedback for the project. The first half of the year was concluded by a discussion with the Faculty of Computer Science.

Since a large number of teacher training subjects are taught at the School of Humanities and Social Sciences (German abbreviation: GSW) at TU Dresden, implementing the avoidance of overlap in the teacher training subjects would also have a positive effect on the scientific combination degree programs in terms of planning teaching and examinations without overlaps. In the GSW School Committee, there was a unanimous vote (16:0:0) in favor of significantly pursuing the work on the time-slot model and finally, to set it in motion via the committee route at TU Dresden.

The time slots that were introduced in the education sciences in winter semester 2019/20 have become further established and are attracting more and more attention in the individual Faculties. At the start of studies, there was no feedback regarding overlaps between the major compulsory courses in the education sciences and the specialist sciences. In an initiation process for introducing the avoidance of overlap throughout the university, first discussions were held on 19 February 2020 with the Unit "Processes and Organizational Management". Here, key data for a university-wide project paper were defined. The submission of the documents for the planned action coincided with the time when the University Executive Board was changed in August 2020. It was therefore necessary to present the project to the new extended University Executive Board of TU Dresden at the beginning of its new term of office on 27 August 2020. The University Executive Board showed positive interest and will continue to support the project.

In order to successfully implement the project within the university context, the support of the University's Executive Board is required. On 2 December 2020, the project was included in the agenda of the Senate Committee "Teaching" and discussed. A positive recommendation for decision at the next meeting was made. The aim is to start with the pilot project "Overlap-free studying for teacher training subjects" after the decision has been reached by the Senate. [Hähniche, Vogel, Sichler]

https://tu-dresden.de/zlsb/lehramtsstudium/studienbuero-lehramt

Contact persons: Juliane Sichler, Christine Hähniche

# **Research and Development**

## Study on teacher training students at TU Dresden



#### Survey of first-semester students

At the beginning of each winter semester, the ZLSB surveys first-semester teacher training students on their motives for choosing their course of study, their application behavior, educational biography, and geographical origin. The now published report for the previous winter semester 2018/19 shows: The vast majority of students have their sights set firmly on their goal of becoming teachers and have pedagogical motivations for their choice of a teacher training degree program. This "intrinsic" motivation has a positive influence on success in studying and development of competencies. The teacher training degree program as a stopgap solution, on the other hand, is rarely in evidence. Therefore, findings that up to a third of teacher training degree students do not have the firm career aspiration of becoming teachers from the outset cannot be confirmed for TU Dresden.

#### Strong local roots

In addition, those surveyed reveal very strong local roots: More than three quarters of teacher training degree students at TU Dresden come from the Dresden area and the eastern districts of Saxony, and intend to stay in Saxony after completing their studies. Students from rural areas can also often imagine working in the region later on. If the potential of regional identity or rootedness can be fully exploited, it would be a valuable contribution to meeting the demand for teachers in Saxony as a whole, especially in rural areas. Students from other German states, on the other hand, often favor a return to their region of origin, although only one in five completely rule out staying in Saxony. In this way, along with the secondcareer qualification of teachers (lateral entry), TU Dresden plays its part in remedying the teacher shortage at saxon schools in the medium term. [Schmechtig]

The brochure containing all results is available at: https://tu-dresden.de/zlsb/publikationen



Geographical origins of the students

# Survey of teaching staff in Saxony: A high level of openmindedness vis-à-vis digital school education

Teachers in Saxony are facing up to the challenges posed by the trend toward digitalization of schools and teaching. This is demonstrated by a representative survey of teachers at Saxon primary schools, secondary schools and grammar schools, the results of which have now been published by the ZLSB.

# Teaching media competence is the task of schools

Teachers largely agree that it is the task of schools to teach children and adolescents media competencies. The majority of those surveyed also agree that digital media should become a natural part of learning. Only primary school teachers are somewhat more skeptical in this regard. However, not all teachers believe that the use of digital media will lead to greater learning success for pupils. Only half of those surveyed are unreservedly of this opinion.

Although teaching staff of all ages are open to an increasing digitalization of schools and education, the survey reveals generational differences. On average, younger respondents are more optimistic regarding the added didactic value of digital applications in the classroom. Older respondents, for all their open-mindedness regarding digital media in principle, more often admit to having difficulties themselves in dealing with technical innovations. However, this does not lead to older teachers refusing to use digital tools in their lessons. On the contrary: The older generation is characterized by an exceptionally high level of willingness to undergo further training.

#### High expectations on future teachers

Active teachers expect future teaching staff to have strong digital competencies. "Meeting this expectation is also the task of teacher training at TU Dresden," emphasizes Prof. Lars Bernard, Chief Officer Digitalization and Information on the University Executive Board of TU Dresden. This is underscored, among other things, by the establishment of the Coordination Office "digitalization in Teacher Education" at the Center for Teacher Education.

Regarding the survey of teaching staff in Saxony: In May and June 2019, 2,300 randomly selected teachers at publicly-run primary, secondary and grammar schools in Saxony were invited to participate in a written postal survey conducted by the ZLSB. 830 teachers participated in the survey. This corresponds to a participation rate of 37 percent. [Schmechtig]

The brochure containing all results is available at: https://tu-dresden.de/zlsb/publikationen

Contact: Nelly Schmechtig



Data in percent for response categories 6 and 7 "I agree (fully)".

# TUD-SYLBER: Synergetic teacher education within a framework of excellence

The TUD-Sylber project aims to strengthen "synergetic teacher education", in which the various players within and outside TU Dresden act in a joined-up and coordinated manner. This project is part of the "Qualitätsoffensive Lehrerbildung", a joint initiative of the Federal Government and the Länder which aims to improve the quality of teacher training. The program is funded by the Federal Ministry of Education and Research.

#### The challenge of the pandemic

This requires an intensive exchange and personal encounters. That is why the pandemic-related restrictions also represent a considerable challenge for the project work of TUD-Sylber. Many stakeholders in universities, schools and training institutions are at full stretch just maintaining their basic functions in teaching and lessons, so that capacities for additional initiatives and collaborations are sometimes very limited.

#### Providing digital teaching materials

Nevertheless, in 2020 again, the eight sub-projects – involving all types of disciplines and schools – made important strides towards achieving the project goals. These include the establishment of collaborations with schools in rural areas through internships and courses as well as the production of digital teaching programs and materials. The TUD-Sylber conference, which has brought together actors involved in teacher training from all over Saxony every autumn since 2016, was held online for the first time in 2020.

#### Support, networking and teaching services

The institutions created at ZLSB as part of TUD-Sylber have maintained their support, networking and teaching services without interruption, even during phases of emergency operation and working from home. These include the Graduate Forum Teacher Education for the support of empirical researchers in education sciences and didactics as well as the Liaison Office Teacher Education aimed at strengthening cooperation between TUD and non-university educational actors in rural areas. The services provided by the Coordination Office "Digitalization in Teacher Education" were in particularly high demand due to the sudden increase in the relevance of digital teaching and learning formats in 2020. [Puderbach]

#### Further information:

https://tu-dresden.de/zlsb/forschung-und-projek-te/tud-sylber

#### Contact: Rolf Puderbach



Participation of TU Dresden in the Quality Offensive in Teacher Training: TUD-Sylber + TUD-Sylber-BBS + PraxisdigitaliS

# TUD-Sylber-BBS: Further development of teacher education at vocational schools

In spring 2020, the successful ongoing project "TUD-Sylber<sup>2</sup>" was supplemented by the research project "TUD-Sylber-BBS: Synergetic Teacher Education for Teaching at vocational schools", which is specifically geared towards teacher education at vocational schools. Until the end of 2023, TU Dresden will receive more than two million euros in funding from the German Federal and State Governments to increase the quality of the degree program and the number of students.

#### Quality and structural development

Overall, the degree program is intended to become more practice-oriented. Both the importance of the various contents of the program for future professional activity and the relationship of the individual elements to each other will be more clearly emphasized. In addition to quality and structural development, the question of the support students need to successfully complete their degree program will also be addressed.

#### Transfer into teacher training

Solutions successfully developed during the course of TUD-Sylber-BBS will later be integrated into teacher training at TU Dresden and made available to other universities. The structures and approaches for cooperation within the university and also for cross-phase cooperation in teacher training, which were already developed in the projects TUD-Sylber and TUD-Sylber2, are intended to be used and supplemented during the new project.

#### Six subprojects

Apart from project coordination, TUD-Sylber-BBS is divided into six subprojects: Two of these are dedicated to recruiting students, particularly for teacher training degree programs in commercial and technical subjects, and to developing a concept for a dual program for students who are simultaneously employed as school assistants in vocational school centers. The other four are concerned with various aspects of quality and structural development, e.g. stronger cooperation between didactics, sciences and educational science. Jointly, arrangements are to be found for a closer connection between subject-specific scientific content and the future work as teachers. In addition, the intention is for students to develop more of an insight into the professional reality of their future trainees.

#### Participants in the project

The TUD-Sylber-BBS project represents one of 13 projects nationwide that focus on "Teacher Training for vocational schools". The Faculty of Education, the Faculty of Business and Economics and the Center for Teacher Education and Educational Research (ZLSB) are involved in the TUD-Sylber-BBS project. [Sachse]

German Federal and State Governments' Program "Quality Offensive in Teacher Education": www.qualitaetsoffensive-lehrerbildung.de

Further information https://tu-dresden.de/zlsb/ forschung-und-projekte/tud-sylber-bbs



#### Contact: Prof. Dr. Manuela Niethammer



# PraxisdigitaliS: Shaping digital practice in Saxony

As part of the "Qualitätsoffensive Lehrerbildung", the project "Praxis digital gestalten in Sachsen (PraxisdigitaliS)" (Shaping digital practice in Saxony) pursues digitalization in teacher training. The overarching goal of the project is to embed digitalization in teacher training at Saxon universities. In association with Leipzig University, competenceoriented standards of digitalization are being developed, tested and established in teacher training programs.

#### Digitalization of teacher training

PraxisdigitaliS makes it possible to design a concept for digitizing teacher training and to work with all locations on the development and sustainable implementation of teaching-learning scenarios for the training of digitalization-related competencies in Saxony. Computer skills are being tested in the "Teaching Lab" at the Didactics of Computer Science (German abbreviation: DDI). Its development is part of the project.

#### Close links to TUD-Sylber

At TU Dresden, PraxisdigitaliS complements the efforts already being made in the TUD-Sylber project to improve digitalization-related competencies among teachers and university lecturers. In doing so, the project expands the work of the Coordination Office "Digitalization" at ZLSB, which is available to all teacher training students at TU in the shape of its free counseling services.

#### Constitutive meeting of the advisory board

The project's Scientific Advisory Board came together for its inaugural meeting on 29 September 2020. The members understand their positions as those of "critical friends". The advisory board comments on interim results, developments of the project and their quality. Furthermore, recommendations for action are made regarding selected topics and current developments.

#### Digital media in school

An initial project result is the module "Digital Media in School". Its aim is to provide teacher training students and lateral entrants with a practical understanding of the competencies that will be required in their future profession and how these can be communicated to pupils. Teacher training students at TU Dresden have the opportunity to attend this module as part of their additional areas of study. [Brückner]

Further information: https://tu-dresden.de/zlsb/ forschung-und-projekte/praxisdigitalis

#### Contact: Rolf Puderbach

# "Heterogeneity and inclusion in teacher training"– The fifth TUD-SYLBER Conference

On 14 September 2020, TUD's annual conference on teacher training in Saxony took place digitally for the first time. Representatives from universities, training centers and schools addressed the question of how future teaching staff can best be prepared for dealing with a heterogeneous body of pupils.

# Equal participation in lessons and school life despite individual needs

Schools and teachers are increasingly faced with the challenge of enabling pupils with different individual needs to participate equally in lessons and school life. Preparing future teaching staff to design learning processes with diverse learning groups is a central task of teacher training. This does not only concern pupils with physical disabilities or special needs. Rather, the diversity of learning groups arises along numerous dimensions of heterogeneity, such as age, language, gender, sexual identity, and social and ethnic origin. The exchange and linking up of teachers and researchers, who in many locations in Saxony are dedicated to dealing with heterogeneity in schools, were the focus of the 5th TUD-Sylber Conference "Heterogeneity and inclusion in teacher training". More than 100 participants took part.

Dealing with heterogeneity, as became clear in numerous contributions, is a task for teaching staff, who are supposed to design lessons in such a way that pupils with the most diverse learning requirements and needs are supported in the best possible way. Dealing with diversity is also a learning goal: Pupils should learn at school how to deal with the diversity of their peers and how to live and learn together without discrimination.

The program took into account the breadth and diversity of the conference topic. In eleven parallel

workshops and a digital exchange forum with twelve short contributions, discussions were held on inclusive teaching models, subject-oriented diagnostics and differentiation of learning goals, as well as on anti-racist, transcultural and sex education. Despite the large variety of perspectives, at the end of the five-hour conference there was agreement that dealing with heterogeneity, inclusion and sensitivity towards diversity are crosssectional issues in teacher training. These must have their undisputed place in both teacher training and in the "Vorbereitungsdienst" (Teaching traineeship), as well as in the continuing education of teachers. The sensitivity towards diversity among teachers is just as important as the pedagogical tools for dealing with the challenges discussed. The tenor of the conference was that collaborations between the various teacher training institutions possess great potential.

# Attitudes of teaching staff in Saxony regarding joint schooling

However, the findings of a large-scale survey of teaching staff conducted by the ZLSB, which were presented at the conference, also show that Saxon teachers are skeptical about the joint schooling of pupils with and without special educational needs, feel burdened by inclusion, and are in favor of maintaining the existing special needs school structure in Saxony. In this respect, they do not differ significantly from teachers in other federal states. In any case, there is still some convincing to do in terms of training Saxon teachers. [Puderbach]

Further information: https://tu-dresden.de/zlsb/ tud-sylber-konferenz

#### Contact: Rolf Puderbach



# Early-Career Colleges in Dialog – the Network of Early-Career Teacher Education Colleges ("NeLe")



Doctoral students with teacher training degrees face similar challenges across all locations: Research methods are rarely part of academic education and - for the doctorate - have to be acquired later, using personal initiative. Moreover, the hybrid structure of the teacher training programs makes it difficult to find one's place in terms of academic discipline. At the same time, the interdisciplinary nature of research into teacher training brings with it a multi-perspective exchange and thus many opportunities for a comprehensive consideration of the topic of one's own doctoral thesis. These were the opportunities and challenges that the founding of the NeLe network in 2016 was designed to address, through systematic cross-linking of expertise and experiences from newly founded (in the "Quality Offensive in Teacher Training") and existing teacher training support programs for young talent.

# Methodical and content-related promotion of young talent

The founding members of the NeLe network, representatives of the projects of the Quality Offensive in Teacher Training at TU Dresden, University

of Erfurt, Martin Luther University Halle-Wittenberg, Friedrich Schiller University Jena and the University of Potsdam regularly discuss opportunities for methodical and content-related promotion of young talent, and also discuss quality of supervision and "best practice" approaches.

#### Annual Summer School

An annual Summer School for doctoral candidates is organized at one of the project locations. Here, participants benefit from the expertise of experienced scientists of the different universities involved, and can also network and exchange ideas across disciplines. The continuity of the event series makes it possible to follow the development of the respective dissertations and to initiate long-term collaborations among the earlycareer researchers. In 2020, the Summer School is be hosted by the University of Erfurt, and in 2021 it will take place in Dresden.

#### **Cross-university cooperation**

At these network meetings, those responsible for the respective graduate programs have the additional opportunity for individual cross-university collaborations. The future work of the network aims to strengthen ties among doctoral candidates through innovative digital communication formats. [Beier]

Further information: https://tu-dresden.de/zlsb/ die-einrichtung/graduiertenforum

Contact: Dr. Frank Beier

#### Congratulations on successfully completing doctorates in 2020

#### **Peter Arnold**

Digitalisierung und Lehrkräftefortbildung – Gelingensbedingungen und Strukturen von Fortbildungen zum Einsatz digitaler und interaktiver Medien in der Schule (Digitalization and continuing education of teaching staff - Conditions for success and structures of continuing education events on the use of digital and interactive media in schools) (Faculty of Education)

#### Sebastian Schellhammer

Theoretische, skalenübergreifende Untersuchungen von Struktur-Eigenschafts-Beziehungen molekularer Materialien in der Organischen Elektronik (Theoretical, cross-scale evaluations of structure-property relationships of molecular materials in organic electronics) (Faculty of Mechanical Science and Engineering)

# 1<sup>st</sup> Dresden Conference on Lateral Entry and Second Career Teachers (LETE)



From 24 to 26 November 2020, the ZLSB hosted the "1<sup>st</sup> Dresden Conference on Lateral Entry and Second-Career Teachers (LETE)" in a virtual format. More than 120 guests from 16 nations attended during the days of the conference. The idea for the topic emerged from international meetings on "Digitalization and Lateral Entry" at the ZLSB in October 2019 and from the IMPRESS kick-off event on strengthening the internationalization of teacher training at the ZLSB in December 2019. During these events, ZLSB network partners presented regional and national topics of teacher training in the context of lateral



*Virtual workshops at different levels on topics related to the teacher shortage (Photo: Seymer)* 

#### entry.

It was the goal of this year's international conference to examine the teacher shortage and its impact on teacher training, as well as to identify and synchronize research efforts nationally and internationally. The virtual conference opened with welcoming addresses by the Vice-Rector, Prof. Gerald Gerlach, and the Managing Director of the ZLSB, Prof. Axel

#### Gehrmann.

In subsequent keynote presentations, the teacher shortage was once again illustrated from multiple perspectives. For example, Prof. LeTendre of Pennsylvania State University (USA) examined the relationship between teacher shortage and politically determined factors of influence (e.g. salary differentials, different degrees) as well as local factors of influence (e.g. urban-rural divide, schools with a high proportion of children with low social-economic status). Prof. Dr. Falk Radisch (University of Rostock) and Prof. Dr. Axel Gehrmann, focused on alternative paths in teacher education, compared them to undergraduate teacher education and presented similarities, differences and perspectives of the teaching profession.

In poster presentations and workshops, national and international researchers engaged in a stimulating exchange on concepts of teacher education (macro-level), non-traditional pathways into the teaching profession (meso-level), and specific teaching-learning formats (micro-level). Further collaboration in the form of publications, mutual conference participations and joint virtual meetings with our national and international partners will be continued in the coming years. [Germer]

Further information: https://tu-dresden.de/zlsb/ fort-weiterbildung/seiteneinstieg/1st-dresdenconference-on-lateral-entry-and-second-careerteachers

#### Contact persons: Peggy Germer, Thomas



# Teaching

## Second-career teacher program for



For four years now, the scientific qualification of lateral entrants has been an integral part of the work at the ZLSB. In 2020, 153 teachers successfully completed the qualification in Dresden, although the COVID-19 pandemic has also permanently changed the work processes in this area, and organizational restructuring has had to take place. With great effort and the personal commitment of the BQL team, it was possible to safeguard the smooth running of the qualification measures. The development and establishment of digital learning and working environments in particular will shape the next few years and will be an even more important cross-sectional issue in teaching and in the organization of the lateral entry program than before. Scientific education at TUD will thus emerge from the situation caused by COVID-19 even more prepared for the future.

#### **Digitalization successes**

In addition to all the challenges that 2020 posed to qualification, the team was also able to make an impact beyond its own program, in particular by supporting Saxon teachers with the help of the digitalization team "BQL.Digital": It was also possible to reach teachers in regular school positions and qualify them for the challenges of digital teaching.

#### First digitally held international conference

From 24 to 26 November, the "1<sup>st</sup> Dresden Conference on Lateral Entry and Second-Career Teachers", was the first international conference on the topic of "non-traditional paths into the teaching profession" to be held virtually. A total of 120 scientists from 16 countries had intensive discussions on the teacher shortage and potential solution strategies. At the same time, it was possible to further expand and thematically enrich the network with international partners.

# High demands on participants during the pandemic

In the coming year, the main focus will be on conceptual and structural developments in the training and continuing education of teaching staff. Initial considerations regarding the consolidation of individual activities over the coming years will be paramount. To this end, scientific training provides a broad spectrum of experience in the context of second-career services for teaching staff in schools, which will serve as a solid basis for the successful further development of the activities of the program. [Bárány, Hoischen]

#### Contact: Thomas Bárány

## Lateral entrants at work

#### Insights into the workshop week for future primary school teachers on the topic of "Differentiation"

The ZLSB has been running the program for the second-career qualification of teachers at primary and secondary schools since 2017. In this program, future teachers go through various teaching-learning formats as part of their academic training. A particularly practice-oriented option is the "Workshop", which in January 2020 rang in the new year for the prospective primary school teachers in Saxony.

#### Workshops for the subjects German, mathematics and local science education

After a joint kick-off meeting, things got off to a "differentiated" start: In various rooms inside and outside the teaching building of Dresden International University (DIU), a project partner of the ZLSB, interesting daily workshops were held during that week. For the subject of German, there were differentiated topics such as "Fairytales" and "Reading Diary". A materials show as well as random experiments and magic squares for mathematics were also on offer. As part of the local geography/history/biology teaching module, participants had the opportunity to explore the Dresden Transport Museum as an out-of-school place of learning and to explore on site the didactic potential for heterogeneous learning groups.

#### Differentiation and educational equity

In the context of education, the focus was on "external and internal differentiation" and "educational equity". In psychology, the future teachers were able to familiarize themselves with "learning games for learners with difficulties in reading and writing". Each of the 90 participants had the opportunity to explore the topics and materials on offer at their own pace, ask questions, discuss results of the tasks that were set and reflect on the ideas for their own classes. In addition, there were interesting discussions of experts in which the lecturers did not take on the role of teachers but acted as coaches. At the end of the workshop, a World Café took place where results were multiplied and shared at the same time.

#### Open concept

The workshop week can be thought of as an open concept in which lecturers provide impetus, and knowledge is shared and expanded. Therefore, the team of lecturers devised cross-thematic and cross-methodological formats regarding the topic of "Differentiation in the primary sector". The practice-related tasks were an invitation to try these out and recreate them, while taking into account different dimensions of heterogeneity of institutional learning in primary school. Lecturers, in their capacity as advisers, accompanied and reflected the process of learning during the workshop week. The differentiation aspect was deliberately chosen to deepen determiners of the didactics of teaching and learning in heterogeneous groups in a free and constructive atmosphere. The open concept of the workshop week was positively received by the participants. For the following semesters, an additional virtual concept for the workshop week is being planned in order to reach not only teachers of the second-career qualification of teaching staff at primary schools. [Germer]

#### Contact: Peggy Germer



# BQL.Digital – Digital learning and support services for lateral entrants

Since 2018, the ZLSB has been providing a central online service – "BQL.Digital" – for participants in the BQL lateral entry program. It provides information on lateral entry as well as numerous digital learning opportunities for the use of digital media in the classroom. These learning opportunities at BQL.Digital are aimed at lateral entrants, teacher training students and lecturers.

In 2020, more than 400 lateral entrants and more than 50 lecturers were active in the online service BQL.Digital. The OPAL online learning platform was expanded step by step to provide a lot of new blended-learning content for lateral entrants: Various learning modules - including learning videos and knowledge tests - were created that present digital tools and software solutions for use in the classroom (e.g. "Programming with Calliope Mini", "Online quizzes with Kahoot!" and "Online tests for STEM lessons").

Due to the restrictions caused by the COVID-19 pandemic, from summer semester 2020 onwards, the online service BQL.Digital has been expanded to include further comprehensive measures for lateral entrants and lecturers in the program. This was done in order to quickly provide the best possible advice regarding the topics of digital teaching and learning under the given circumstances. Thus, in close cooperation with the Coordination Office "Digitalization in Teacher Education" from TUD-Sylber<sup>2</sup>, a series of support measures such as virtual workshops on online teaching, video tutorials, email support, as well as online consultation hours on digitalization topics for lateral entrants and lecturers were created.

At the beginning of summer semester 2020, the lateral entry team welcomed a new group of lateral entrants for primary schools. Due to the pandemic, this new group had to start the very first semester of their academic qualification purely virtually. However, through virtual welcome seminars, explanatory videos with step-by-step instructions, and with individual support, all new lateral entrants were able to start with their academic education. Furthermore, in the summer and winter semesters of 2020, a weekly "online consultation hour digitalization & teacher education" was offered for lecturers in teacher training, undergraduate teacher training students and lateral entrants. Here, virtual advice on technical and didactic questions regarding topics such as online exams, recordings of lectures and the OPAL



*Online consultation hour for teacher training staff and students (Photo: Oertel)* 

#### learning platform was given.

In 2020, the activities of BQL.Digital were presented to a wider audience and discussed with experts at the "Klausurtagung BQL" (Closed meeting) in Moritzburg, at the conference regarding the "Netzwerk Mathematik/Physik E-Learning (ELMAT)" (Network Mathematics/Physics E-Learning) in Dresden, at the "Third Spaces!? Digitale Lernumgebungen zur Förderung von Theorie-Praxis-Bezügen in der Hochschullehre" (Digital learning environments to promote theory-practice relationships in university teaching) in Jena, and virtually at the 5<sup>th</sup> TUD-Sylber Conference "Heterogeneity and inclusion in teacher training".

Together with the Coordination Office "Digitalization in Teacher Education" at the ZLSB, BQL.Digital has been given the Teaching Award 2020 for its comprehensive package of measures by the Society of Friends and Supporters of TU Dresden. [Oertel]

# Further information on the online service "BQL.Digital": http://tiny.cc/BQLdigital

#### Contact: Dagmar Oertel



Sindy Riebeck, Dagmar Oertel and Fritz Hoffmann being presented with the Teaching Award (Photo: Crispin-Iven Mokry)

# Communicating democratic values - one of the noblest tasks of schools and teacher education



What needs to be done, among other things, to avoid non-action. (© Besand)

The nationwide experts conference on teaching staff education is an annual format that comprehensively highlights central aspects and concerns of teacher education. In February 2020, the twoday event took place in Dresden, with about 230 participants.

#### Cross-sectional task of teacher education

One of the most important cross-sectional tasks in all three phases of teacher training is civic education. This was underlined by Prof. Anja Besand, Chair of Didactics of Civic Education, at the beginning of the conference: "It is one of the noblest tasks of schools to communicate democratic values and to overcome notions of inequality." In her keynote address, she shed light on the question of how good civic education can succeed in a polarized society. Her talk focused on issues such as the development of appropriate strategies for action as well as attitudes in dealing with rightwing extremism, racism, anti-Semitism or conspiracy myths.

# The challenge of hostility towards specific groups

Taking their cue from the keynote address, all participants had the opportunity to compile a collection of challenging situations in case-oriented workshops and to discuss them in detail. The case work clearly showed that agitation against a free and democratic basic order as well as hostility towards specific groups represent central challenges for all actors and participants in teacher training. It also became very clear that these challenging situations are regularly encountered by the participants in seminar rooms, classrooms and staffrooms as well as in school committees designed for participation. The workshops were moderated by the "Haupt- und Fachausbildungsleiter:innen" (Main and specialist training supervisors at Dresden training centers). Here, the participants also discussed implementing the developed strategies in teacher education.

Apart from the manifold workshops and thematic spaces, further highlights of the conference were the lectures of the expert for experiences of racism and discrimination in school contexts, Prof. Karim Fereidooni, Ruhr-University Bochum, and the author of "Zehn Regeln für Demokratie-Retter" (Ten rules for democracy-savers), Mr. Jürgen Wiebicke. The successful conference was the result of a cooperation between the State Office for Schooling and Education (in charge of the cooperation), the Chair of Didactics of Civic Education, and the ZLSB.

# Education in democracy in schools and teacher training

The conference format will celebrate its 20th anniversary in February 2022 in Marburg and will - following on from the event in Dresden - deal with a variety of approaches for successful education in democracy in schools and teacher training. [Weiß]

Further information : https://expertentagung-lehrerbildung-2020.de

Contact: Steven Weiß



Experts Conference 2020 (Photo: ipunct.de)

## We go viral... Action orientation in the digital space?!



In 2020, digital teaching reached a new dimension. Previously common seminar formats had to be completely rethought, and new concepts had to be developed for the digital space. In the process, teaching and learning formats were developed and designed for the digital space in order to enable sustainable and competence-oriented learning. The Corona crisis forced lecturers and students to change suddenly and completely, to leave old paths of teaching and learning and often to explore still unknown routes. This confirmed that digital transformation is in full swing and that the way we obtain our information, communicate and - at the same time - learn has changed rapidly and utterly.

The qualitative aspiration in implementing digital teaching grew steadily. The following question became crucial: How can didactic aspirations for prospective teachers in the digital space be designed in such a way that they are attractive for their own teaching-learning arrangements and appropriate for the professional field? The focus is on action orientation as a didactic paradigm and central educational goal in vocational training, in order to enable competence learning in a holistic way.

# But do action orientation and digitalization go together?

Action orientation enables corresponding knowledge, system-oriented joined-up thinking and action (cf. KMK 2018, p. 1), in order to "solve" complex and characteristic tasks or problems in the classroom and, of course, in everyday professional life. It is important to strive for this aspiration in the university context, too, in order to enable (transfer) learning in the broadest sense for teacher training students. Based on the defining of terms regarding action orientation and competence, the focus is on independent planning, implementation and assessment (cf. KMK 2018, p. 32). Challenges arise when it comes to holistically identifying the (vocational) reality and taking up the actual experiences of learners, and enabling reflective processes of learning (cf. KMK 2018, p. 17).

The strategy paper on education in the digital world (KMK 2016) already pointed out and acknowledged [...] that a "digital revolution" is taking place, which is accompanied by opportunities to promote individual talents and potentials and is also accompanied by challenges, because previously practiced forms of teaching and learning as well as the structure of learning environments need to be reconsidered and redesigned, and the educational goals also need to be critically reviewed and expanded. (cf. KMK 2016)

This was actually revealed in the learning process and in the acquisition of competencies by the students. Essentially, according to Urlen (2018), challenges and thus also opportunities for learning in the digital space were and are evident in the following areas:



Challenges (© Stirner)

- · Communicating and cooperating
- Producing and presenting
- Protecting and acting safely
- Problem solving and acting
- · Analyzing and reflecting (cf. Urlen 2018).

The creation of media-supported learning opportunities focused on didactic aspects in carrying out digital teaching and also in preparing teacher training students. These aspects should be essential for the students work, for example in the practical school studies. Regardless of whether it was possible for lessons to be held in digital or faceto-face form in the context of school internships, the connection between knowledge and action was always a central challenge. Instructional and design strategies were rethought and redefined, appropriate teaching materials were selected or newly produced, criteria for learning success were (re)determined, and the evaluation of learning opportunities was revised (cf. Dengler, Tenberg 2018, p. 33).

As part of the seminar "Handlungsorientierung im sozialpädagogischen Unterricht" (Action Orientation in social education teaching, Chair of Social Education and Didactics of Social Education), students saw potential as well as challenges in the design of teaching and learning arrangements in the digital space, which also reflected their personal life environment at the present time (see images).

The diverse experiences with digital teaching confirmed that it is neither good nor bad, but rather that an essential prerequisite for successful teaching and learning in the digital space is the competence of all users, i.e. teachers and learners.

Opportunities as well as challenges arise from the diverse opportunities of teaching and learning, regardless of whether learning is synchronous, asynchronous or hybrid. Content becomes more freely accessible, can be freely selected, and can often be retrieved flexibly. As a result, content is also adapted to different target groups and opens up the chance to use media in a more self-determined, creative, and communicative manner (cf. Urlen 2018). Smartphones, tablets, video games, etc. can tap into creative potential and stimulate societal reflections as well as connect people with each other. Especially during the pandemic, concepts of communication pedagogy for integration into everyday life proved to be necessary in order to counteract to some extent the tendency of students to become isolated.

It proved challenging to maintain the motivation to learn due to the diverse and new forms of acquiring information (padlets, podcasts, lectures with soundtracks, etc.). Lack of transparency of the seminar format or the complexity of different tools were seen as typical burdens. Sticking to feedback loops in order to enable a certain form of resonance or even learning culture proved to be extremely significant.

The roles of lecturers and learners have been redefined, expanded and in some cases reinvented by digitalization. The missing resonance space and the real encounters have clearly been missing. Nevertheless an exciting path, which certainly still holds many new possibilities, has only just opened up. There is great potential in an even greater autonomy of the learner and an even more self-organized and individualized access to learning. Learning always takes place, whether voluntarily or involuntarily. The question is only: Learning what and what for? [Stirner]

#### Contact: Carolin Stirner



Potentials (© Stirner)

## Inclusion as a priority topic of society

#### The "Teaching-Learning-Space Inclusion" – Living diversity

The ZLSB supports TUD in making inclusion a cross-sectional topic in teacher training. At the end of 2020, setting up the "Teaching-Learning-Space Inclusion" was completed. The room at the ZLSB can be used, for example, for seminars, consultations, project days or exam preparation by students, lecturers, teaching staff, pupils and external interested parties. The focus is on inclusive teaching-learning settings, which can be tried out with the help of numerous didactic and technical materials.



#### From sound cans to the digital whiteboard

At the heart of the room's configuration, completed in 2020, is the most flexible and adaptive use of space possible. Freely movable tables, chairs with height-adjustable footrests, a sofa corner that can be broken up into modules, and mobile lighting allow use of the room with different and diverse target groups. For the purposes of digitalization, the "Teaching-Learning-Space" was equipped with an interactive whiteboard, ten iPads, 2D and 3D cameras, and digital picture





frames. Numerous didactic materials were purchased in cooperation with special needs teachers. Since 2020, for example, the room has been equipped with touch and sound games, a talking cube, magnifying (loupe) glasses, a wide range of new literature, and much more.

#### From theory to practice

In order to make the concept and the available materials transparent to outsiders, digital picture frames are now in use. These show which materials are available and how they can be used. All cabinets are labeled or lettered with various symbols and Braille, as well as with the Anybook Reader.



The further needs of the users of the room and the potential for using the room are constantly evaluated with the help of feedback forms. The "Teaching-Learning-Space" is to be used in a variety of ways in the coming years.

# Establishing collaborations and network partnerships

Despite the difficult situation due to the Corona pandemic, it was possible to establish some network partnerships. The equipment of the room and the labeling and lettering of the cabinets was driven forward with the support of the "Förderschule (Special needs school) Astrid Lindgren" in Dresden Gorbitz. The cooperation with the QuaBIS team of TU Dresden should also be mentioned in this context.

Furthermore, it was possible to start a cooperation with the "Behindertenverband (Association for the Disabled) Leipzig e.V." The association acted as a sponsor for the "Teaching-Learning-Space" in 2020 and donated numerous games, books and audio material on the topic of easy accessibility for prospective teachers.

Finally, the entry into the Inclusion Network Saxony as a networking opportunity needs to be mentioned.

#### Outlook: Inclusion at the ZLSB in 2021

In 2021, the focus is on using the room. Various seminars are planned, such as "Inclusion and digitalization" and once again, "Gender competence in the teacher training degree program".

To make it possible to access inclusive teachinglearning materials during the Corona pandemic, the project "Inclusion? - Do it yourself!" was launched. This catalog of services is intended to be presented to prospective teachers as a way to create inclusive teaching-learning materials themselves. The "Teaching-Learning-Space Inclusion" aims to open up opportunities for use and creativity for all interested parties. In this sense, it will also be a port of call for many international students and scientists in the future, in this way putting inclusion on the agenda from an intercultural perspective as well.

#### Gender and diversity sensitivity

In close cooperation with the Staff Unit Diversity Management, the topic of gender and diversity sensitivity in teacher training was also strengthened, and a block seminar entitled "Wenn das Geschlecht zum Nachteil wird – über Genderstereotype im Schulalltag" (When your gender becomes a disadvantage – gender stereotypes in everyday school life) was successfully held with teacher training students from all types of schools. [Beier/Czaja]

Further information: https://tu-dresden.de/zlsb/ forschung-und-projekte/lehr-lern-raum-inklusion

Contact persons: Dr. Frank Beier, Tina Czaja



# 6th State Competition "WTH/S" in Saxony

The sixth state competition "WTH/S" ("Wirtschaft-Technik-Haushalt/Soziales", Economy-Technology-Household/Social affairs) took place at TUD on 24 September 2020. Eight boys and three girls who are now in the 10th grade competed against each other. In the various regional competitions of Bautzen, Chemnitz, Leipzig and Dresden, they won 1st to 3rd place.

The tasks consisted of fashioning a kitchen tray in the wood workshop and cooking potato soup in the training kitchen. After two hours of work in the workshop and the training kitchen, the participants presented their results to a jury of experts during a five-minute talk.

This year, the two pupils taking joint first-place with the same number of points came from Frankenberg and Leipzig. Erik Kluge from the "Erich-Viehweg-Oberschule" Frankenberg and Leonard Thieme from the "TÜV Rheinland Oberschule" in Leipzig impressed the jury with their performance. Second place went to Dominik Nixdorf from the 36th "Oberschule" in Dresden.

This year's state competition was supported by the "Sächsisches Staatsministerium für Kultus" (Saxon State Ministry of Education and Culture), who funded the prizes for the three first-placed pupils, materials, and catering for the pupils. [Lenk]

Further information on the state competition: http://wth-wettbewerb.de

#### Contact: Michael Lenk



6th "WTH/S" state competition in Saxony (Photo: Lenk)

# Focus: New school teachers working at the university



The ZLSB is supported in the fulfillment of its tasks by teachers seconded from a school to work at the university. We are pleased to welcome four new colleagues to the team for the new school year 2020/21.



#### Johannes Köhler

When I came to the ZLSB as a seconded teacher in August 2020, I had a very enriching time at "Oberschule Schmiedeberg" behind me, where I taught "WTH" ("Wirtschaft-Technik-Haushalt", Economy-Technology-Household) and ethics in addition to the subjects of "Gemeinschaftskunde/ Rechtserziehung" (social studies/basic and human rights education).

I would now like to share the experience I gained during this time with the students during practical school studies in the subject of history. Furthermore, it is my goal to broaden my didactic horizons with new perspectives through the interdisciplinary exchange with the students as well as with my colleagues.

Apart from the question of what history teaching must achieve in the 21st century, I am particularly interested in the history of the state of Saxony as well as the history of education in Saxony. In order to be able to devote myself to these topics, I completed the additional degree program of History (Master's) and would now like to investigate Catholicism in the Kingdom of Saxony in my doctoral project.

I am excited about the chance to join the team at the ZLSB and at the Chair of Modern and Contemporary History and Didactics of History, and I am very grateful to my colleagues for their warm welcome and their wide-ranging support.



#### Ulrike Lang

I have been working as a seconded teacher at ZLSB since September 2020. Previously, I taught Russian and German at secondary schools in Dresden. What I appreciate about working at ZLSB is the openness and willingness among colleagues to exchange ideas. The interdisciplinary orientation of ZLSB makes it possible to get into conversations across subject boundaries and school types.

This input is particularly valuable for my courses. In these, I would like to dovetail didactic theory and teaching practice even more closely in order to provide our students with the best possible foundations for their future vocation as teachers.

Another priority of my work at ZLSB is to strengthen the cooperation with our university and school partners in Central and Eastern Europe. In my doctoral project, I will continue my previous research in cultural studies by investigating the reception of yoga philosophy and practice in Poland after 1945.



#### Susann Reuschel

I am happy to have been working as a seconded teacher at the university since August 2020, and to gain varied and enriching experiences here. I would like to develop professionally as well as acquire further qualifications. I want to pass on my passion for geography not only in school, but also use it to contribute to teacher training and qualification and to enrich the didactics of geography at TU Dresden. At the ZLSB, I can impart my knowledge from school practice, design and conduct scientifically based courses for students, and also participate actively in continuing education events for teachers. I feel that the opportunity to work at the interface between theory and practice as well as between the individual phases of teacher training and continuing education is very rewarding.

In addition to teaching, I contribute to geographicdidactic journals and work for textbook publishers. What I appreciate about working at the ZLSB is the opportunity to devote myself to my own research, to exchange ideas across disciplines, and to find time for intensive scientific discussion, which is hard to come by in everyday school life.



#### Ines Röhrborn

As an primary school teacher, I help children find the right path for themselves. I would like to contribute my enthusiasm for this vocation in my role as pathfinder and companion to the students of the teacher training degree program for primary schools. In August 2020, I joined both the team of school teachers working at universities at the ZLSB and the team of the Chair of Primary Education/Social Studies and Science Education.

Previously, I taught the subjects of art, German, maths and multi-dimensional general science education at the primary school "Grundschule Naußlitz" in Dresden. In the past years, as a mentor, I supervised students during their practical sessions at school and held seminars in primary school pedagogy at TU Dresden.

I particularly enjoy the intensive collaboration with the students, appreciate the opportunities for a change of perspective and the interdisciplinary networking and cooperation, in order to help shape the education of tomorrow's teachers. The "cross-sectional task" of education for sustainable development is particularly close to my heart.

# **International Affairs**

# Internationalization@home

# Experiences abroad during the pandemic – a contradiction?

"How can teacher training students gain experience abroad even during the pandemic?" Starting in March 2020, IMPRESS staff members Maria Richter-Babekoff, Gesine Seymer and Anna Lorenzana Bäumler asked themselves this question and from then on pursued three approaches: Expanding information services, promoting digital formats, and involving students.

IMPRESS, the project for the internationalization of teacher training at the ZLSB, offers students information and advice on stays abroad, creates opportunities for intercultural education in the teacher training degree programs and supports the internationalization of teaching. To this end, it can draw on a rich network of international university and school partners.

#### Expanding information services

In the spring, it was already apparent that the need for information and advice among teacher training students regarding the subject of studyrelated stays abroad was increasing rather than decreasing, because limited mobility gave rise to many new questions such as: Which destination countries are safe? Can I postpone my internship abroad? What are the changed conditions in the funding programs for semesters and internships abroad? Is a school internship worthwhile if school only takes place virtually? In addition to flexible mobility counseling via e-mail and video chat, students were able to obtain information at the MTC Summer School workshop "Up and away - opportunities for stays abroad in the teacher training degree program" on 19 August, and at a digital information event in cooperation with the International Office and the Leonardo Office Saxony on 8 October. In addition, for the first time in the summer semester 2020, a seminar was held in the additional areas of study on "Preparation and follow-up of stays abroad in the teacher training degree program". The seminar was led by Dr. Gesine Seymer and also included a workshop on building intercultural sensitivity. Due to the demand of the students and the positive experiences with this format, the workshop under the direction of intercultural coach and teacher trainer Jyotika Dalal will also be offered in the following semesters.



Auslandserfahrungen im Lehramtsstudium – eine Vielzahl an Möglichkeiten

- Sie studieren Lehramt und möchten
- andere Länder und Kulturen kennenlernen?
   eine andere Perspektive auf Ihre studierten
   Fächer, das deutsche Bildungssystem und auf Ihre
   Rolle als angehende Lehr kraft gewinnen?
   besser auf die Arbeit mit heterogenen Lengrupper
- besser auf die Arbeit mit heterogenen Lerngruppen vorbereitet sein?
   hre Sprachkenntnisse ausbauen und interkulturelle
- Kompetenz entwickeln?

  Ihre Persönlichkeit und Ihr Selbstvertrauen stärken?

  innovative Lehrmethoden und Lernformen
- kennenlernen?
   neue Freunde finden und (berufliche) Netzwerke knüpfen?
- Ihre Berufs- und Karrierechancen verbessern?

Dann ist ein Auslandsaufenhalt eine attraktive Ergärzung für ihr Studien III. erkramt an der TU. Dresden bieten sich dafür zahlneiche Möglichkeiten. Ob ein kürzterer Aufenthalt in der Semsterfehren zur Teilhandman einerin riterratutnalen Summer School oder ein Sprachkurs. Praxeisensatze in Form von Schulparakta, Ferwilligendiest oder ein einer ausländlichten Gasthoftschuft Für alle Formen von Auslandsaufenhalten gibt es bei einsprechender Pfanung Möglichkeiten der Arrechnung und der finanziellen Förderrung. Also wannu warten? Letz Spie.

Information brochure on stays abroad

To provide students with a better overview of the options for study-related stays abroad, a brochure has been created. It can be accessed here:

#### https://tud.link/ycup.

#### **Promoting digital formats**

This second priority area aims to test digital formats in order to integrate international perspectives into teacher training degree programs even without mobility. This is best achieved through virtual exchange with students and lecturers abroad. IMPRESS used various formats for this purpose:

First, an English-language lecture series on the comparison of international educational systems, including an accompanying seminar, was organized in winter semester 2020/21 (see below). Thanks to an "international media library" on the ZLSB website, the specially created video lectures by international education experts as well as videos introducing schools worldwide can be used beyond the winter semester.

Also in winter semester 2020/21, the seminar "Virtual Intercultural Project" was organized in the additional areas of study under the direction of Dr. Wissam Tawileh. Approximately 60 students from Jordan, Georgia and Italy, as well as teacher training students from TU Dresden learned about cultural diversity not only theoretically, but also very practically through virtual exchange. In this way, they acquired important soft skills such as intercultural competence, ability to communicate, and media competence.

In addition, IMPRESS promoted participation in courses offered by universities abroad: In June and November 2020, teacher training students at TU Dresden were able to apply to have their participation costs in international digital summer and winter schools covered. The virtual exchange seminar "Collaborative Intercultural Learning" for teacher training students at TU Dresden and our partner universities is currently in development. It will comprise a Massive Open Online Course (MOOC) and will be available for the first time in winter semester 2021/22.

#### **Involving students**

Teacher training students had until 30 August 2020 to submit creative ideas on what internationalization could look like in times of the pandemic. This was part of an ideas competition entitled "At home in the world - international teacher education rethought!" IMPRESS received exciting submissions and was able to award prizes to four student entries:

- Ellen Hartmann: "Cultural Immersion Week. Active, Convenient, Social, Knowledgeable"
- Franziska Schütze: Digital short film festival " In der Welt zu Hause" (At home in the world)
- Jonas Hauswald: "Fragen, die die Welt umspannen. Interkulturelle Lehrer\*innenbildung im heimischen Wohnzimmer" (Questions that span the world. Intercultural teacher education in your living room).
- Lene Reichert: Seminarkonzept "Offene Fragen – viele internationale Antworten!" (Seminar concept "Open questions - many international answers!")

The ideas competition has given the IMPRESS project valuable input for the expansion of Internationalization@home and would like to thank all students who participated! [Seymer]



# Internationale Lecture Series "Educational Systems in (Trans)Formation – Facing the global challenges"



What are the special features of school and teacher education in international comparison and what results does it achieve? Comparative questions such as these have increasingly arisen for the ZLSB in recent years through exchange with international partners, and could previously only be discussed in conversations on the fringes of conferences. Thanks to a grant from TUD's flexible program for internationalization and to the organizational skills of the IMPRESS team, the ZLSB has now been able to address this heartfelt topic for the first time in an international virtual lecture series.

In video lectures, education experts from the IM-PRESS network highlighted the special features of the education systems and of teacher training in Germany, Israel, Japan, Poland, South Africa and the USA. These lectures were supplemented by archetypal school presentations in the form of videos to provide insights into school concepts and teaching practice worldwide. The series of lectures was accompanied by an interactive seminar led by Prof. Axel Gehrmann and Dr. Frank Beier, in which teacher training students were able to interact with the international experts in Q&A sessions to ask their questions. Finally, a plenary discussion took place in which all topics were once again discussed comparatively.

In this way, the lecture series gave students of TU Dresden the opportunity to get to grips with educational systems abroad, to gain an international perspective on school and teacher education in Germany, and to exchange ideas with educational experts as well as students from the IMPRESS partner network: A very good basis to see their role as future teachers from an international perspective, to prepare a school internship or a semester abroad or to dedicate themselves to a topic of comparative educational research in a seminar paper or thesis, using the insights gained! [Seymer]

All video lectures and school presentations can be accessed on the website of the lecture series:

# https://tu-dresden.de/zlsb/forschung-und-projek-te/impress/lecture-series.

Please note: For the purposes of research and teaching, access can also be granted to password-protected content on this website. Please direct your request to

impress@tu-dresden.de.





Datenschutzrichtlinie

Prof. Dr. Axel Gehrmann, TU Dresden:

"The Educational System in Germany after 1945 - Experiences with Transformations in East and West"

Zu Teil 2 bis 6 der Vortragsreihe von Prof. Axel Gehrmann

Dr. Frank Beier, TU Dresden:

"Teacher Training in Germany -Transformation and Current Trends"

# Internationalization of Teacher Education 2020 – Virtualization is all around

2020 was the year of virtual meetings - also and especially with the international partners of the ZLSB! Instead of the planned exploration, cooperation and conference trips to Israel, Russia and the USA, we had Zoom meetings, virtual get-togethers and online conferences. Was this a loss? It was - but only partly, because the new formats provided the ZLSB with many new opportunities, especially in the area of internationalization, and instead of occasional face-to-face meetings, we had the opportunity for much more frequent exchanges with our school and university partners worldwide, which were no less fruitful.

# New formats for international exchange: virtual get-togethers

In May and June, the ZLSB invited its international network partners to a purely virtual exchange for the first time. We had the pleasure of welcoming university representatives from Hong Kong, Indonesia, Ireland, Israel, Japan, Portugal, Russia, South Africa, the USA and Czechia - this time without jet lag and long journeys. The ZLSB not only gained insights into private living and work rooms, but also into the status of universities and schools worldwide. During this exchange, it was discussed in detail how to deal with the major challenges that are due to the large-scale discontinuation of face-to-face operations and what the possible solutions and research approaches could be. It became apparent that school and teacher education - despite different starting conditions - are facing similar challenges worldwide, which require innovative and creative solutions everywhere. On a positive note, the far-reaching contact restrictions have driven the digitalization of teaching at both universities and schools to an unprecedented degree. How to adapt curricula and teaching methods and how to design exams in the digital learning space is of concern to many of the partner universities in the IMPRESS network. Not only at TU Dresden, but also at most of the international university partners, school internships are an integral part of the teacher training curriculum. Coordinators here and elsewhere are therefore facing the challenge of finding new ways of organizing practical phases.

Conclusion: Although there is no substitute for personal contact with our partners worldwide,

technological opportunities enable us to stay in touch and work on joint projects.

#### VirtualIFTE-2020 in Kazan

Also in 2020, ZLSB staff members took part in the International Forum on Teacher Education (IFTE) at the Kazan Federal University in Russia - the difference being that for the first time, the participants from Dresden did not travel to the Volga, but had to make do with the Elbe. The conversion into a purely virtual format of the conference "Perspectives and priorities of teacher education in times of change, choice and challenge" - from 27 May to 9 June with more than 900 educational scientists from 275 universities worldwide - represented an enormous organizational achievement. This made it possible to overlook minor technical difficulties.

The lectures presented by TUD ranged from approaches to the internationalization of teacher training ("International cooperation in teacher training", Julia Koinova-Zöllner; "Opportunities and chances for encouraging multicultural teacher education", Martin Neumärker) via the lateral entry program of the ZLSB ("BQL.Digital: online services for second-career teacher programs", Thomas Bárány, Dagmar Oertel and Kerstin Koch) and the didactics of out-of-school places of learning ("Cultures in contact. Teaching and learning foreign languages by learning outside the classroom", Peggy Germer) to teacher education in rural areas ("More than Dresden: representation of rural educational areas in teacher education", Sebastian Schellhammer). [Seymer]

#### Contact persons: Maria Richter-Babekoff, Dr. Gesine Seymer



Virtual international get-together of the IMPRESS network (Photo: Ronalds Stikans/edited by ZLSB)

# Virtual continuing education event for teachers as part of the international ZLSB network IMPRESS



*Participants at the international continuing education event (Photo: Richter-Babekoff)* 

International exchange is more important than ever. For this reason, the international continuing education event, which the ZLSB had originally designed as a five-day face-to-face event for all its school and university partners, was changed into a virtual format. For participants from four continents and twelve time zones, Friday afternoons became a joint time slot that connected teachers, principals and educational researchers over a period of four months. Representatives from schools and universities in Germany, Poland, Czechia, Portugal, Israel, Jordan, Japan, Indonesia, South Africa, Costa Rica and the USA, who belong to the international ZLSB network IMPRESS, reflected together on topics and problems that affect schools worldwide and for which new answers and solutions are urgently needed.

questions of which skills and abilities the school of the 21st century must teach and in which ways it must teach them in order to make adolescents fit for the current challenges of our time:

- How can schools make use of the tools of digitalization?
- What facets are possible in democratic education in schools and how can out-of-school places of learning and project formats be embedded in the curricula?
- How can teachers and students learn to deal with otherness without fear?
- How can (trans)school landscapes for environment-centered learning be developed?
- What forms of school management and what kinds of leadership make school a happy and inspiring place of holistic development that inspires lifelong learning?

The continuing education event, which was held in English, was moderated by Kathi Ahl, author of the book "Schule verändern - jetzt!" (Changing schools – now!), published in 2020. Speakers were the participants themselves as well as ZLSB staff and other German experts. [Richter-Babekoff]

#### Contact: Maria Richter-Babekoff



At the heart of all panel discussions were the

Overview of the ZLSB network of partner universities and schools

# Digitalization

# Coordination Office "Digitalization in Teacher



The coordination office was part of the TUD-Sylber subproject "Digitalization as a Cross-Sectional Topic for Teacher Education" under the direction of Prof. Nadine Bergner (Chair of Didactics of Computer Science), and was established at the Center for Teacher Education and Educational Research (ZLSB) of TU Dresden. In spring 2020, the coordination office was able to move into its new premises at 3 Ludwig-Ermold-Straße.

# Teaching, counseling, information and support services across phases

In 2020, the coordination office further expanded its cross-phase teaching, counseling, information and support services. Creative solutions for designing digital teaching in teacher training were developed and made available as best-practice examples via the coordinating office's website. Eight new Media Fact Sheets were created, which served as the basis for the development of new stations for the "Stationen-Workshop zu digitalen Medien" (Stations workshop on digital media). The workshop, which was initially developed as a purely face-to-face format, was piloted in January with teacher training students and additionally implemented - due to the pandemic - as a digital format in summer semester 2020. With a view to the central digital services at schools in the Free State of Saxony, the 90-minute learning option "Lernen digital unterstützen - Mit einem Zugang die

zentralen Dienste an sächsischen Schulen nutzen" (Supporting learning digitally - using the central digital services at saxon schools with one single access point) was developed. It was piloted as part of the annual autumn academy with teachers in the 3rd phase, and was also conducted as an online event. Other ad-hoc services, such as the BigBlueButton video conferencing service or the WebCMS of TU Dresden, supplemented the activities, especially in the autumn of 2020.

# Online consultation hour for teacher training staff and students

In cooperation with BQL.Digital, an online consultation hour for teacher training staff and students has been held weekly since the summer semester. Both events served in particular the exchange of experiences as well as the discussion and joint development of solutions for teaching under pandemic conditions. In addition, the coordination office was continually available for a direct exchange on questions regarding digitalization in teacher education. More than 300 participants were reached, given information, advised and trained last year through the above-mentioned services.

#### Presented with the Teaching Award 2020 by the Society of Friends and Supporters of TU Dresden

For the above-mentioned activities, among others, the Society of Friends and Supporters of TU Dresden presented the staff of the coordination office and of BQL.Digital with the Teaching Award 2020 (see picture in the paragraph on BQL-Digital).

# Pooling and linking of actors in the context of digitalization of education

In addition to its specific information and learning services, the coordination office also supports the further pooling and linking of actors within and outside TU Dresden in the context of digitalization in education. In April 2020, the ZLSB working group "Interactive Media", which met until 2017, was reactivated and renamed "Digitalization and Media Education" under the direction of Prof. Nadine Bergner and Prof. Thomas Köhler (Chair of Educational Technology). The meetings were supported by the coordination office in terms of content and organization. The cooperation between the staff of the coordination office, the project BQL.Digital (digitalization in the lateral entry program) and PraxisdigitaliS (Project of the Quality Offensive in Teacher Training) was expanded, and represents the basis for establishing a digitalization team in the context of teacher education at the ZLSB as a future perspective.

#### Further collaborations in 2020:

- Working Group Continuing Education and Training
- Working Group Digital University Teaching

- Liaison Office Teacher Education
- Projects "DiKoLA" & Teaching with Digital Media in Saxony (UndiMeS)
- "Laborschule" (Laboratory School) Dresden / "Stifterverband" (Donor's Association) School in the Digital World
- Media Education Centers (MPZ)
- Network OPAL School
- State Office for Schooling and Education (Continuing education for teachers)

In order to systematically develop the coordination office further for the benefit of the entire teacher education and to be able to broaden the services, the transition from the Chair of Didactics of Computer Science to the ZLSB from 2021 onwards was prepared in December. From 1 January 2021, the coordination office will be located in terms of its structure and organization at the Center for Teacher Education and Educational Research, under the direction of Prof. Axel Gehrmann.

The coordination office is primarily aimed at lecturers and students in the teacher training degree program. However, it also addresses training supervisors and trainee teachers as well as teaching staff and those in continuing education. [Riebeck]

https://tu-dresden.de/zlsb/dil

Contact persons: Sindy Riebeck, Fritz Hoffmann



Online consultation hour for teacher training staff and students (Photo: Oertel)

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All publications of ZLSB staff are also available at:

https://tu-dresden.de/zlsb/publikationen



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