



TECHNISCHE
UNIVERSITÄT
DRESDEN

**2021 Annual Report
of the Center for
Teacher Education
and Educational
Research (ZLSB)**



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Dear Readers,



In 2021, the second year of the coronavirus pandemic and the fifth year of the Quality Offensive in Teacher Education by the federal and state governments, objectives and results in the context of teacher education were once more linked to coping with the crises experienced by society. SARS-CoV-2 in particular affected all spheres of work of the ZLSB and impacted the undertaking with regard to staff, organization and content, just like it did everywhere in the world. With regard to our staff, we had to continue the protective measures and our employees had to work from home for a long time. With regard to our organization, the pandemic required maintaining everyday operations remotely without significantly neglecting any tasks or limiting availability. And with regard to content, we had to make sure that projects stayed on track, were expanded further and initial major project results were also increasingly presented (often digitally).

Five years after the start of the Quality Offensive in Teacher Education, all our advised surveys of students while still at university, of seminar instructors in the 2nd phase of teacher education and of teachers in Saxony in the 3rd stage have been completed. Like pearls on a string, the respectively largest empirical surveys in our Bundesland since German reunification aligned with each other, allowing for successive evaluation and presentation of partial results. This project will continue to develop until 2023. In the process, the empirical findings confirmed previous experiences, as it became more "official" that, among other things, the project "overlap-free teaching" is on firm ground at TU Dresden, with the Academic Senate consequently deciding to introduce a time-slot model for teacher education in early summer.

Midyear, the target agreements in accordance with Section 10 (2) of the Saxon Higher Education Autonomy Act were signed by the universities in Saxony and the Saxon State Ministry of Science for the years 2021 to 2024. This may sound somewhat bureaucratic at first, but enables the ZLSB at TU Dresden to achieve further

visibility and a job description internally as well as externally. This had not been laid down in law in this form until now, but nonetheless, the ZLSB had developed exactly in this direction over time – in unison with many other locations in Germany. The target agreement now states that "TU Dresden is committed to a strong Center for Teacher Education and Educational Research with the appropriate resources and equipment, ensuring the fulfilment of tasks in the areas of coordination, study programs, research, quality management and continuing teacher education."

Dear Readers,

The ZLSB has continuously evolved over the last few years and has become a central point of contact for teacher education in Saxony and beyond. We are already involved in nationwide discussions on topics concerning the [institutionalization of teacher education](#) and are leading contributors to a [series of lectures](#) held all over Germany. In 2021, we have therefore decided to publish a [newsletter](#) every three months. The purpose of this newsletter is to provide timely information about current developments and activities in teacher education and associated fields.

If you are interested, you can subscribe for free to read news from the teacher education degree programs as well as continuing teacher education, reports about research activities and regional and international collaborations and announcements of interesting events. [Do not hesitate to register](#) in order to stay up to date with our topics and the ZLSB. It would be our pleasure!

Prof. Dr. Axel Gehrmann
Managing Director of the ZLSB

- ↗ Key issue paper on institutionalization in teacher education: <https://tud.link/1syo>
- ↗ Expert discussions on teacher education: <https://tud.link/f2zj>
- ↗ ZLSB newsletter: <https://tud.link/392z>

Report from the Head Office



Photo: Nils Eisfeld

Working from home

With the outlook of an imminent start of the vaccination campaign, the new year began with mobile work, but also full of optimism, in the hope that the pandemic would end soon and working conditions would return to normal. The procedures had been tried and tested all over the ZLSB. At the start of the year, nobody knew that we would spend even more time working from home in 2021 than in 2020. It was not before midyear that some life returned to SE II, although things never quite returned to normal. Increased working from home, single occupancy of offices and soon also proof of vaccination, recovery and testing would accompany us beyond the end of the year.

Internationalization of teacher education

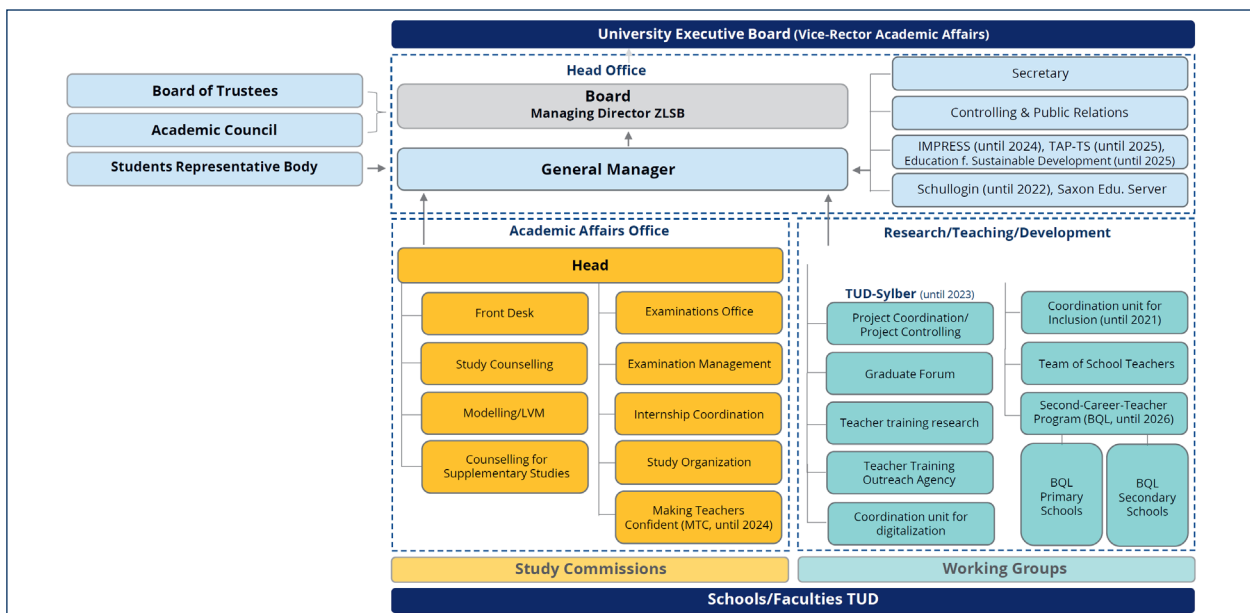
For this very reason, we were overjoyed to welcome our first international guests from the United States, Great Britain and Mozambique at the ZLSB in mid-2021. They gave us the good feeling of being connected with our colleagues all over the world, not only via videoconferencing.

We are nonetheless thankful for the achievements of digitalization, which offers an important contribution to maintaining and intensifying the varied contacts with our international colleagues in our IMPRESS network. Even if this exchange had to be continued in the digital space, it offered an important contribution to the further internationalization of teacher education.

Digitalization of schools

The ZLSB's digitalization portfolio was expanded right at the start of the year. The ZLSB has taken over the two projects "Schullogin" and "Saxon Education Server" from Didactics of Computer Science. Together with the Coordination Office "Digitalization in Teacher Education" of TUD-Sylber, the project coordination Praxisdigitalis and BQL.Digital, the employees form the new digitalization team at the ZLSB, which has been under the same roof since the summer, occupying a dedicated floor in Ludwig-Ermold-Straße.

Despite its project status, "Schullogin" has passed the litmus test during this time as the identity management system for the schools in Saxony and access point to the videoconferencing service BigBlueButton, among other things. Thanks to the strong commitment of its employees and technical support from the ZIH, the ZLSB has been able to reliably support the schools with "Schullogin". This is also documented by the fact that the service has now more than 90,000 users. Digitalization has taken a great leap forward and issues concerning the digitalization of schools will remain with us and will continue to be an exciting subject of research and development.



Organization chart of the ZLSB (last update: 21.09.2022), © ZLSB



Visit of the delegation from Maputo at the ZLSB on October 15, 2021, Photo: Rosenbaum

Management accounting and public relations

The first ZLSB newsletter was published in March 2021. The newsletter provides a good opportunity to catch up on news from the ZLSB and teacher education at TUD in compact form every quarter. You can subscribe to the newsletter and view previous newsletters on the ZLSB website.

➤ <https://tu-dresden.de/zlsb/die-einrichtung/newsletter>

The two major projects TUD-Sylber and Second-Career Qualification of Teachers have allowed the management accounting team at the ZLSB to substantially hone their skills in the administration and management of project finances. With the project OptLA of the Faculty of Education, the ZLSB has taken over the management accounting for an external project for the first time.



Retirement of Prof. Pospiech from the Board of Directors on July 12, 2021, Photo: Martin Neumärker

Board of Directors of the ZLSB

Prof. Dr. Thomas Kühn, member of the ZLSB Board of Directors and Dean of Studies for secondary school and grammar school teacher education, went into retirement in March 2021. We are deeply grateful for his support of teacher education and his commitment to the Board of Directors over the years. As of April 1, Prof. Dr. Uwe Israel, Professor for Medieval History, has become a member of the Board of Directors.

The entire ZLSB Board of Directors and the Managing Director Prof. Dr. Axel Gehrman were newly appointed by the University Executive Board on October 1. On her personal request, the University Executive Board discharged Prof. Dr. Gesche Pospiech as a member of the Board of Directors after 15 years. The entire ZLSB team would like to express their gratitude for her work. Her know-how and many years of experience made Prof. Pospiech an important cornerstone of the Center, which she accompanied during its growth and the fundraising for important major projects. She is succeeded by Prof. Dr. Andrea Hoffkamp, Professor for the Didactics of Mathematics. Prof. Dr. Manuela Niethammer, Professor for Construction Engineering, Wood Technology as well as Color Technology and Room Design/ Professional Didactics, continues to be a member of the Board of Directors.

Academic Advisory Council and Board of Trustees

The Academic Advisory Council addressed the financial resources of teacher education, the reform of the examination regulations in teacher education and the associated review of the study regulations, the incorporation of teacher education in the quality management of TUD as well as the introduction of the time-slot model.

The new term of the Board of Trustees also started on October 1. The Board of Trustees of the ZLSB is composed of 12 representatives from academic and applied fields. This in particular includes representatives from the second and third phases of teacher education, of education and research institutions, associations and public administration. The Board of Trustees advises the ZLSB in the fulfilment of its tasks, in particular networking of teacher education with educational tasks in the region.

In its constitutive session, the Board of Trustees confirmed the course followed by the ZLSB. According to the Board, the current work of the Center responds to societal challenges, such as the teacher shortage and digitalization. In addition, it shapes the envisioned transfer of knowledge in a special way.

Manager

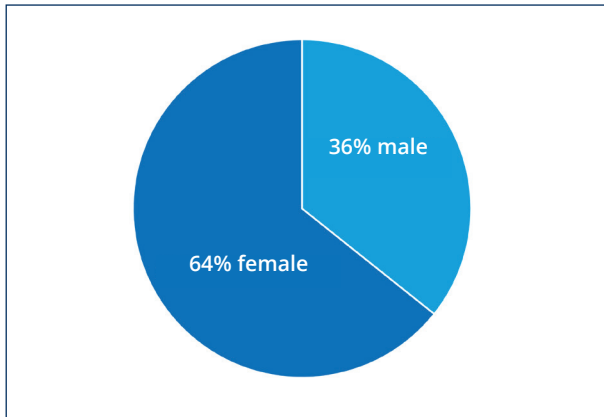
Martin Neumärker

➤ <https://tu-dresden.de/zlsb/die-einrichtung/gremien-und-arbeitskreise>

Transformation of the ZLSB

Substantial growth

Thanks to continuous fundraising for projects and development schemes, the ZLSB has experienced substantial growth. The number of employees has doubled over the last five years. This growth concerns both non-academic and academic staff, but is particularly pronounced in the academic area.



Ratio of female to male employees (last update: 01.10.2021), © ZLSB

As of October 2021, 67 employees were active in 77 employment relationships at the ZLSB. The largest team is found in the Research/Teaching/Development department with 36 persons, 15 of which are teachers delegated to the ZLSB by the Saxon State Ministry of Education (SMK). The second largest team is the Academic Affairs Office for Teacher Training (including associated projects) with 18 persons, followed by the Head Office with 13 persons (including the projects IMPRESS and Schullogin). At 64%, the majority of employees at the ZLSB is female. Two employees (also possess a non-German nationality).

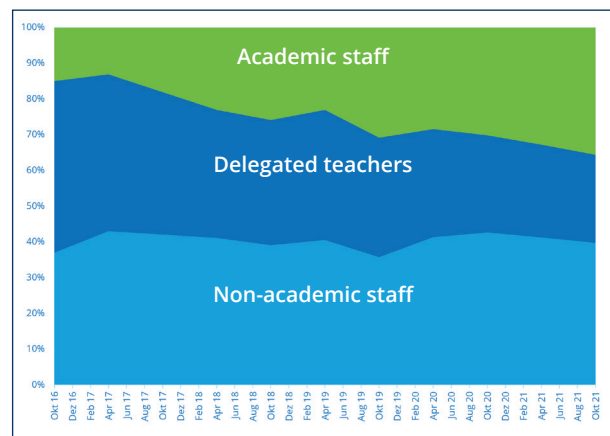
Funds raised for more than 40 projects since 2011

Since 2011, the ZLSB has raised funds with a total volume of EUR 34.5 million for more than 40 projects, of which EUR 32.5 have been acquired over the last five years alone. The two largest funding institutions are the Saxon State Ministry of Education and the Federal Ministry of Education and Research.

The number of research associates has doubled

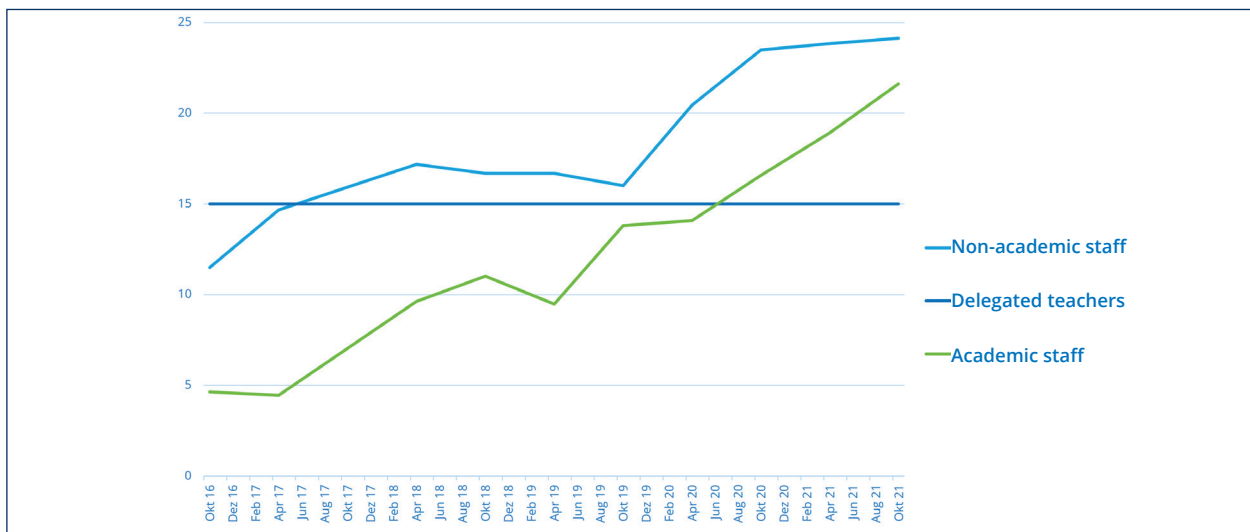
This also becomes evident in the ratio of non-academic and academic staff and delegated teachers.

While in 2016, delegated teachers still made up half of

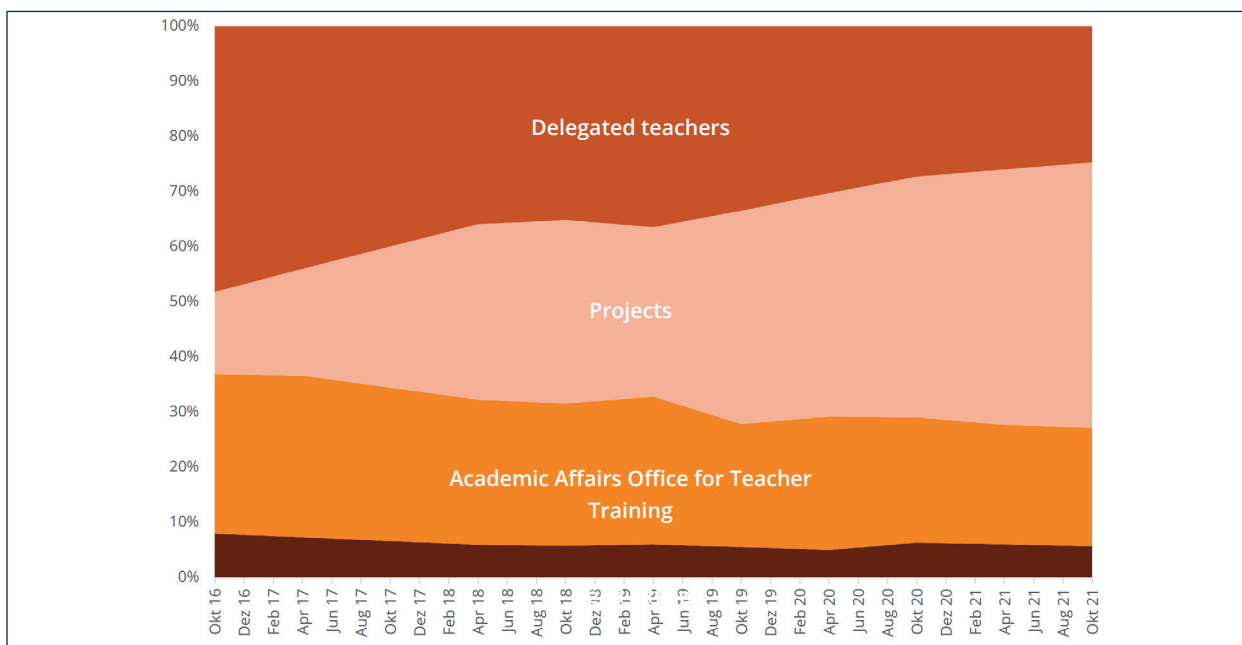


Ratio of academic staff, non-academic staff and delegated teachers (last update: 01.10.2021), © ZLSB

the employees at the ZLSB, they only amount to a quarter in 2021, while the overall number of employees has remained the same. Over the same period, however, the share of research associates has more than doubled, from 15% to 36%. On the other hand, the share



Evolution of positions at the ZLSB 2016-2021 in FTEs (last update: 01.10.2021), © ZLSB



Ratio Head Office – service department – projects – delegated teachers over time (last update: 01.10.2021), © ZLSB

of non-academic employees has largely remained the same (2016: 37%; 2021: 40%).

Expansion of services through the establishment of the Academic Affairs Office for Teacher Training

This marked trend of change can also be seen in the ratio between the teams. While in 2005, the ZLSB comprised only a small office, the employees of the Head Office (without projects) amounted to no more than 6% of the entire staff in 2021. While the ZLSB's growth was mostly due to the rise in the number of delegated teachers in the early years, the most substantial growth ten years later could be found particularly in the service department. The Academic Affairs Office for Teacher Training was established in 2016. Since then, as far as the ratio between the teams is concerned, the service department (29% to 21%) has been losing share to the benefit of employees in projects and development schemes, who already made up half of the entire ZLSB staff (15% to 48%) in October 2021.

Large share of project employees

On the other hand, the share of temporary employment relationships compared with those without a time limit has remained almost unchanged. Two thirds of the employees at the ZLSB are employed for a limited term only.

While time limits could be increasingly removed for employees at the Academic Affairs Office for Teacher Training and the Head Office in the last two years, which is also reflected in the data with a reduction from 77% to most recently 67%, the number of temporary employees remains high due to the now large number of project employees.

The establishment of the Academic Affairs Office for Teacher Training in the context of the TUD-Sylber project was to a large extent financed using third-party funds. During the first few years, one third of employees were funded via the project itself, another third via state funds and only the remaining third – intermittently even less than a quarter – via the TUD budget. Since its establishment, the Academic Affairs Office for Teacher Training has proven its worth, resulting in the University's Executive Board pledge to take over a majority of the employees in the context of the continuation of TUD-Sylber, which was then implemented until October 2021.

Strong third-party funding of the Center for Teacher Education

The change that has taken place at the ZLSB shows how the Free State of Saxony, the TUD and in particular the committed academic leadership of the ZLSB and last but not least its employees have succeeded in turning what was initially only an idea into a well-functioning center with strong third-party funding that fulfils its tasks in the coordination and administration of degree programs, in continuing education, but now also in the field of research. This development also highlights the important role of proper fundamental equipment with resources in order to be able, as a center, to raise funds for schemes and projects.

Manager

Martin Neumärker

↗ <https://tu-dresden.de/zlsb/die-einrichtung/leitung>

Academic Affairs Office for Teacher Training



Photo: PantherMedia / kasto

From the teacher education degree programs

Largest group of students at TU Dresden

In winter semester 2021/2022, 794 first semester students started one of the four teacher education degree programs (primary school, secondary school, grammar school, vocational school) at the faculties offering teacher education. Considering TU Dresden overall, 6,129 students started their 1st semester of study in this semester. With 12.7%, students in teacher education degree programs made up the largest group of first semester students at TU Dresden. The same is true when the number of students across all semesters of study is considered. As of December 1, 2021, TU Dresden counted a total of 30,591 students, of which 4,038 were enrolled in an undergraduate teacher education degree program (13.2%). With 306 students (39%) in the 1st semester of study, those in the grammar school teacher education program made up the largest group of students in all teacher education degree programs. This is followed by the primary school teacher

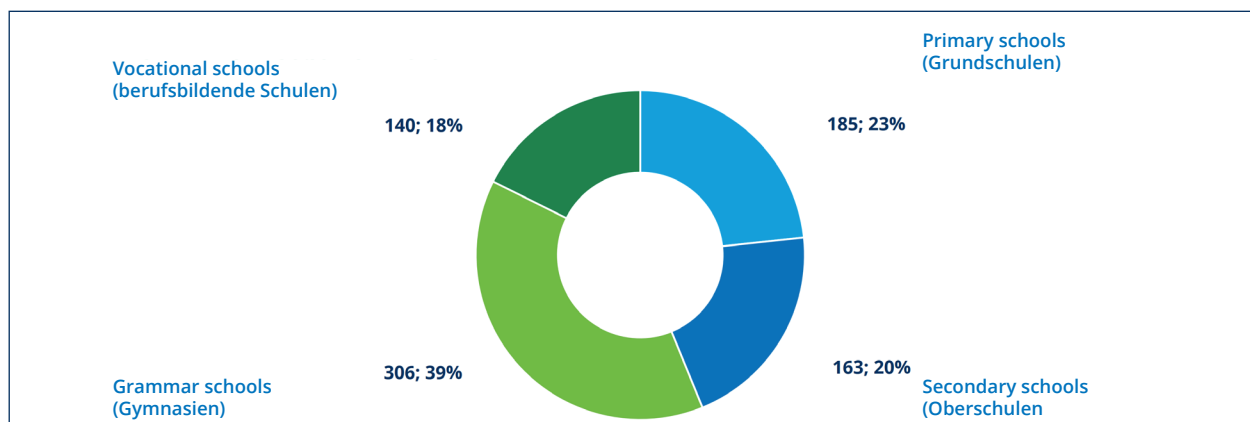
education program with 185 first-semester students (23%), the secondary school teacher education program with 163 students (20%) and finally the vocational school teacher education program with 140 students in the 1st semester of study (18%).

German, History and English the most popular subjects

Across all years, degree programs and semesters of study, German (1,338 students), History (701) and English (689) are the subjects with the largest number of students, while Geography (673) and Mathematics (647) also continue to be in high demand. The largest discipline in the vocational school teacher education program is Health and Nursing (276).

Head of the Academic Affairs Office for Teacher Training

Juliane Sichler



Students in the 1st semester of study in the teacher education degree programs (last update: 01.12.2021, university statistics of TUD), © ZLSB

Continuous development of student communication

Web pages are the source of information most frequently used by students

The student surveys regularly conducted by the ZLSB at the beginning of studies (most recently in 2020) show that the web pages of the university are among the sources of information most frequently used by the students. They gained even more importance during the pandemic, when in-person counseling at the Academic Affairs Office was not possible. However, the students only gave the previous online services a grade of "good to satisfactory". This motivated the Academic Affairs Office to expand its online services.

Services for specific audiences

In mid-September of 2021 and therefore in time before the start of the winter semester, the new services was finally made available to the students. In order to make orientation and obtaining information easier for prospective and current students, the already known structure of TU Dresden's central pages was reworked and the categories "Before Studying", "Within the Studies" and "After Graduation" were introduced (<https://tu-dresden.de/zlsb/lehramtsstudium>).

All the important deadlines in a single calendar

For a quick overview, a large number of keywords and frequently searched terms was subsumed under the tab "A-Z" and all sources and points of contact within TU Dresden and beyond were cataloged. The page "Calendar and Contact" makes the public calendar of the Academic Affairs Office for Teacher Training available to the students. It contains important dates and deadlines and can be imported into the user's own calendar, providing information about all deadlines (exam registration and opt-outs or internship registration, among others) and information events (on organizational aspects of the teacher education degree program or the First State Examination).

A separate category for prospective and beginning students

The page "Before Studying" explains the structure of the degree programs at TU Dresden to prospective students. From expectations to study options to detailed information brochures, these subpages offer insights into the different degree programs. The page "Beginning your Studies" offers the first-semester students each year a comprehensive overview of the services during the first-semester student week. In this context, the Academic Affairs Office offers tutorials on how to structure your timetable as well as campus tours and an information event, among other things. The services of the Faculty Students' Councils and the educational sciences are also presented.

All relevant topics for the degree program

The tab "Within the Studies" contains all topics for students from the 1st semester of study onward. From degree program documents to courses, information about the office hours and forms of all back office areas of the Academic Affairs Office can also be found (Complementary Studies, Internship Coordination, Examination Office and Study Counseling). This is complemented by comprehensive pages describing how to organize stays abroad and other services offering study support, such as tutorials and workshops.

Matters of interest at the end of the degree program and after graduation

The page "First State Examination" contains all important information and points of contact at the State Office of Schooling and Education (LaSuB). The tab "After Graduation" contains all central contents for alumni about the preparatory service (2nd phase) and also provides information about the alumni network of TU Dresden and the ZLSB.

Front Desk of the Academic Affairs Office for Teacher Training

Thomas Thielemann

➤ <https://tu-dresden.de/zlsb/lehramtsstudium>

The screenshot shows the website interface for 'LEHRAMTSSTUDIUM AN DER TU DRESDEN'. At the top, there is a navigation bar with a home icon and the word 'STUDIUM'. Below this, a dark blue menu bar contains the following items: 'A-Z', 'KALENDER UND KONTAKT', 'VOR DEM STUDIUM', 'STUDIENSTART', 'IM STUDIUM', 'ERSTE STAATSPRÜFUNG', and 'NACH DEM STUDIUM'. The main content area features a large image of a TU Dresden building on the left. To the right of the image is a dark blue header with the text 'LEHRAMTSSTUDIUM AN DER TU DRESDEN'. Below this header, the text reads: 'Wir freuen uns, dass Sie sich für ein Lehramtsstudium an der TU Dresden interessieren!' followed by 'Zur Zeit sind 4.300 Studierende in einem der vier Lehramtsstudiengänge an der TU Dresden eingeschrieben. Es stehen das Lehramt an Grundschulen, Lehramt an Oberschulen, Lehramt an Gymnasien sowie das Lehramt an berufsbildenden Schulen mit 329 Fach- und Fachrichtungskombinationen zur Auswahl.' At the bottom right of the content area, there is a red button with a white arrow icon and the text 'MEHR ERFAHREN'.

Website of the Academic Affairs Office for Teacher Training (last update: 03.04.2022), © ZLSB

Avoidance of overlap and time-slot model

Avoidance of overlap in teacher education degree programs

In joint work discussions with Prof. Dr. Michael Kobel, Prorector for Education, the central room and timetable planning body and student representatives, intensive preparations were made for the draft resolution to enable overlap-free studying in teacher education degree programs. This draft resolution was adopted on May 5, 2021 by the Senate Committee on Teaching with a majority recommendation.

The Senate mandates the ZLSB

An important project milestone was reached on June 9, 2021. Following the proposal of the Senate Committee on Teaching, the ZLSB was mandated with the organization of the further steps and the substantiation of a time-slot model to ensure the avoidance of overlaps of courses and examination performances in the teacher education degree programs. This decision by the Senate is a major step towards achieving the future overlap-free studying in the teacher education degree programs. The conceptual groundwork from the first and second phases of the TUD-Sylber project can now be put into practice.

Student survey confirms substantial demand

The efforts are also driven by the results of the student survey. A complete survey was conducted involving teacher education students of all degree programs, subjects/disciplines and semesters of study (N=3,829) in order to assess the conditions and contents of the degree programs. 80% of those surveyed stated that they had encountered overlaps, with up to 45% thereof stating that this was the case frequently to very frequently. The result substantiates the work on the project and in particular highlights the importance of the decision by the Senate.

What is going to happen after the Senate decision?

The time-slot model is introduced in coordination with the faculties supporting the teacher education degree programs. For joint and transparent cooperation with numerous actors, all supporting faculties involved as well as the "Carl Maria von Weber" College of Music were asked to designate persons of contact. They form a committee which serves as a forum for exchange and forwards the decisions made concerning the avoidance of overlap to the involved faculties.

Establishment of a committee

The committee is a forum for dialog, exchange and discussion, supports the management of the introduction process, coaches proposed process steps and also assumes oversight and control of the coordinated objectives. The first meeting was held on November 10, 2021. The committee has 23 members. Among them are the Prorector for Education, persons of

contact from each of the supporting faculties and the College of Music, representatives of the central room and timetable planning body, a representative of the teacher education programs' Deans of Studies, student representatives from the general and vocational school teacher education programs and actors of the ZLSB. The committee will meet at regular intervals once per semester.

Close cooperation with timetable planners

In the months to come, the model will be fleshed out in cooperation with the timetable planners of all involved faculties. In a first step, the needs and wishes of those involved will be collected, constraints of and requirements for the model will be drafted. Based on this, the time slots will be determined by means of mathematical optimization. The objective is to jointly arrive at a solution which allows students to smoothly complete their studies within the standard period of study and, in the process, offers long-term planning certainty to all parties involved.

Preparation of the model starts

In late 2021, we were able to carry out the coordination work for tendering with the funder and management accounting. The preparations for the conclusion of the contract with Prof. Dr. Alexander Kreuzer (University of Hamburg) were also finalized. This meant that the mathematical calculations for the time-slot model could start in January 2022. Once a first calculation was prepared and specific time slots for the subjects and disciplines an intensive exchange and work on the submitted model together with all involved parties took place from the spring of 2022 onward.

Web page provides information about project progress

A web page on overlap-free studying serves to exchange information. It contains all the latest information, access to the minutes of the committee and project updates. In addition, the internal exchange with all involved parties has been taking place via a separate functional e-mail address since November 2021.

Interview with Prof. Dr. Kreuzer, University of Hamburg

Prof. Kreuzer, which tasks of your profession suit you the most?

In mathematics, it was always teaching that inspired me as well as the subject itself. This started with tutoring during my studies, and is still the same for lectures today. There is really nothing difficult in mathematics. There are only facts and notions about which the learner may lack previous knowledge and the examples leading to the solution. In a nutshell: In addition to the freedom you have in research, I especially love teaching.

What problems have you faced at your university and/or in your department for which it was difficult to find a solution?

Oh dear. During my time as Dean, almost all of them, I think. Those problems could be of a human nature, but also contractual, almost unsolvable implementations of statutory requirements, etc., and planning in the area of teaching that was almost impossible to implement.

How did you arrive at the idea of developing a time-slot model for the organization and planning of courses?

The first occasion was to find two times for a course for students in teacher education programs offered twice in order to allow all students to attend. A more detailed analysis then showed that these two times were not available. This was hard to accept. But the initial analysis already showed that one subject alone, or also a group of subjects, cannot solve this problem. It simply concerns all subjects involved in teacher education (and also other subjects). Ultimately, the immense organizational pressure which arose after the introduction of module-based study programs resulted in the acceptance of central terms of reference.

What is special about the so-called "Kreuzer model"?

I don't know if I would speak of anything "special". It tries to find a feasible middle-of-the-road solution with a significant reduction of overlaps and better options for course planning. On the one hand, completely avoiding overlaps is not feasible technically, while on the other hand, you can't dictate everything in the subjects. The solution of choice is to provide the subjects with time blocks for their own planning and, above all else, optional times for multiple offers.

What are the differences between the respective models? Why not a single model for all universities?

Firstly, the requirements for teacher education programs differ from Bundesland to Bundesland. In

addition, besides a substantial consensus regarding the choice of subjects, there are also significant differences concerning the popularity of subject combinations. As complete avoidance of overlap is not possible – at least for grammar school teacher education –, these university-specific particularities must be taken into account for optimization.

What are the experiences of the universities? How satisfied are the universities following the introduction of the time-slot model? And how long does it take until the positive impact of the model is felt?

The problem is to change times people were used to. Related subjects have always coordinated their courses and there are usual times for the major courses. However, this rarely goes beyond a small group of subjects, whereas teacher education programs involve almost all subjects. While the previous agreements are maintained, the traditional times of courses may change, but will then constantly remain at a new time. This is partly considered an intrusion. However, feedback received after some time also shows great satisfaction among the subjects, provided that they are willing to adhere to the specified time slots. In addition, the overlaps experienced by the students improve immediately after introduction.

Which steps have to be considered for preparation in order to include all variables and do justice to all subjects?

Firstly, the local studying habits are documented, in particular concerning the choice of subjects. This already offers a basis to build on. Attempts are also made to document the particularities and special circumstances of the subjects and to take them into account to the extent possible. This can be done by means of an inquiry in the beginning but also by gathering feedback on an initial discussion draft – an approach that has proven useful, as it is not always obvious at the beginning what is worth reporting. The draft will then be revised in a second phase. The third version is the final one in most cases.

Prof. Dr. Alexander Kreuzer, born 1959, passed the Abitur at the humanist grammar school St. Stephan in Augsburg, then studied mathematics and physics at TU Munich and LMU Munich. After obtaining his doctorate in 1988, he qualified as a professor of mathematics at TU Munich in 1992. In 1997, he was offered a professorship in mathematics at the University of Hamburg.

Course Manager

Christine Hähnliche

➤ <https://tu-dresden.de/zlsb/lehramtsstudium/im-studium/Lehrveranstaltungen/ueberschneidungsfreies-studieren>

Making Teachers Confident (TUD_MTC)

A wide range of tutorials

As in the past year, summer semester 2021 started with the (digital) tutorials on scientific work, on exam preparation, on professional goals as well as the methods workshop. In this context, the tutors applied team teaching to support approx. 100 students in teacher education degree programs.

Insights into state examination and preparatory service

In 2021, TUD_MTC organised a course series on the First State Examination and the preparatory service for the first time. In addition to the already established information event offered by the State Office of Schooling and Education, (LaSuB), the organization of which has been supported by the Academic Affairs Office for Teacher Training for many years, the course series was intended to offer students in higher semesters even more comprehensive insights into the upcoming final examinations and the subsequent preparatory service.

A successful course series

10 courses were offered overall, which were grouped into thematic clusters. Information events were held on the topics of appointment as a tenured civil servant and finances during the preparatory phase as well as options for stays abroad. Workshops were offered on topics such as competence-oriented preparatory service and thesis writing. Discussion groups with current trainee teachers, students in the final phase and lecturers on finding topics for the written academic thesis as part of the First State Examination rounded out the event. A total of 460 participants attended the formats offered by the course series.

Starting to study during the pandemic

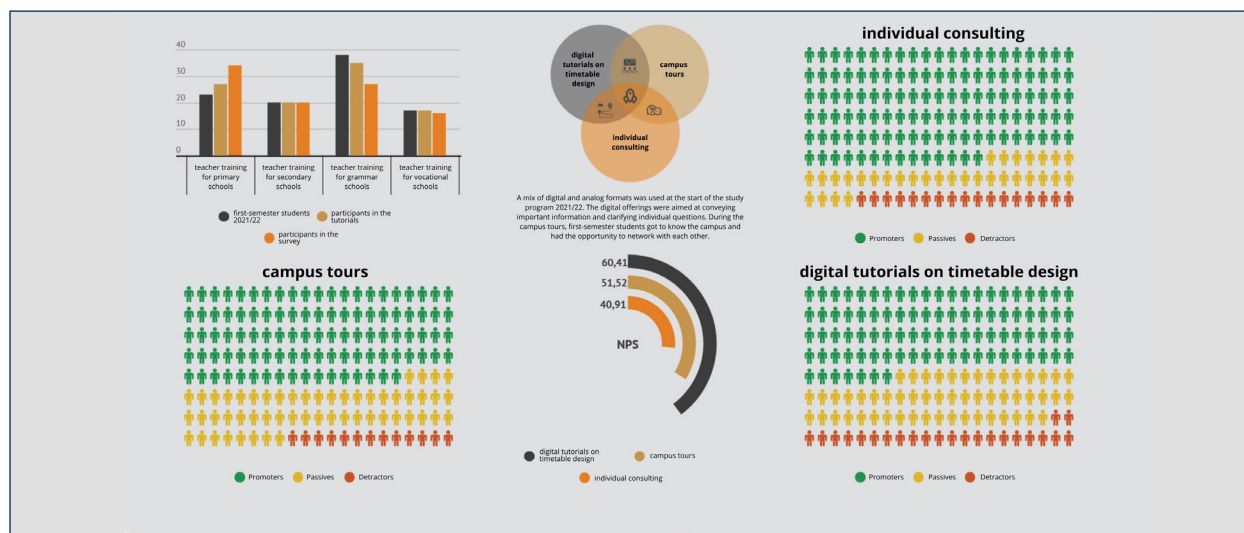
As had already been done in 2020, the MTC team also offered campus tours at the start of winter semester 2021/22. Besides introducing the buildings and institutions, the focus was again on the social integration of the first-semester students. The groups were divided by subject and/or school type to ensure that the students have a shared basis and can support each other over the further course of their studies. The tours were complemented by digital tutorials on timetable design, in which the students discussed their individual timetables with the qualified tutors and could ask questions.

The tours reached almost two thirds of all students

Of almost 800 first-semester students, nearly 500 teacher education students took advantage of this offer and assessed it as an important and helpful offer for the beginning of their studies. In addition, the students were given the opportunity to have their complete timetable reviewed by the tutors. The cross-subject tutorials were also held again over the course of the winter semester, partly as in-person events and partly in a digital format.

Peer learning formats

The evaluations of these tutorials repeatedly demonstrate the advantage of the peer learning formats: knowledge is communicated in an agreeable atmosphere on equal footing and tools are provided which enable the students to master organizational challenges arising during their studies.



Evaluation of MTC services offered at the beginning of studies 2021/2022, © ZLSB



Photo: Nils Eisfeld

ZLSB podcast

Six additional episodes of the ZLSB podcast were produced over the course of the year together with the Examination Office, the Teacher Education Liaison Office and with the Faculty Students' Council for Vocational Education, among others.

Episode 13: Faculty Students' Council for Vocational Education - Your student union

Episode 12: Teacher Education Liaison Office - Bridges across the different phases of teacher education

Episode 11: Internships in teacher education degree programs - Gaining practical experience with confidence

Episode 10: Examination Office - Particularities of registering for and opting out of examinations in the teacher education degree programs

Episode 9: BQLearn - Using digital media for teaching

Episode 8: Podcast special: Digital literacy in school



For more information go to:

➤ <https://tu-dresden.de/zlsb/publikationen/podcasts>

Since June 2021, the newly constituted project MTC@TUD (Making Teachers Confident) has received funding in the third phase of the Higher Education Pact, running at the ZLSB until December 31, 2024.

Project Coordinator

Anja Schanze

➤ https://tu-dresden.de/zlsb/forschung-und-projekte/mtc_tud-MakingTeachersConfident

Orientation Platform Research and Practice (OFP)

The "Orientation Platform Research and Practice" (OFP) project for successful studying has been offering insights into the practice of the teaching profession since 2019. In this context, the seminar "Fit4Stex – Research into coping with heterogeneity" was held during summer semester 2021, attended by 28 participants.

More research in the context of the academic thesis

The objective was to prepare for research in the context of the academic thesis as part of the First State Examination in the subject area of heterogeneity by combining contents from the subject area of inclusion with the basics of empirical social research. Students received support in developing a research issue, choosing suitable empirical methods and defining a research design. In addition, schools contacts were provided if required.

Academic careers

The exchange format "Academic careers" with professors and doctoral students was organized in the winter semester 2021/22. The 2-hour format "Is a doctorate the right thing for me?" was attended by approx. 70 participants. The project will continue at the ZLSB until December 31, 2023 and is funded by the Higher Education Pact.

Research Associate

Mathis Heinig

➤ <https://tu-dresden.de/bereichsuebergreifendes/ofp>

Research and Development



Photo: Crispin-Iven Mokry

Accompanying research in teacher education

Following the teacher survey in 2019 and the survey of the main and specialist training supervisors in 2020, the series of comprehensive surveys in the different phases of teacher education was complemented in 2021 by a student survey across all semesters and subjects concerning the study situation in the teacher education degree programs at the TUD. Results of the surveys were presented and published over the course of 2021. For instance at the International Forum of Teacher Education in Kazan in May 2021 with the presentation “The Challenge of Inclusion in Schools and Classrooms: Teachers’ Opinions Results from a Survey of Teachers in the State of Saxony/Germany” (Gehrmann/Schmechtig 2021) or in the context of the 6th TUD-Sylber Conference with a keynote by Dr. Frank Beier on the findings of the survey of training supervisors in Saxony.

Student survey by the ZLSB about the teacher education degree programs - first results available

Since the fall of 2020, the teacher education degree programs have been integrated into the quality management system of TU Dresden. In order to elucidate the study situation in teacher education from all points of view and in addition to the university-wide student survey by the Center for Quality Analysis (ZQA), the ZLSB conducted an online survey in May and June 2021 which targeted the specifics of the four teacher education degree programs and was addressed to all students in these degree programs.

Besides the assessment of the study conditions by means of aspects such as the frequency of overlaps of courses and examinations, practical relevance of the teacher education degree programs and coordination between the specialist science, specialist didactics and educational sciences parts of these degree programs, the students were asked for a self-assessment of their own competences regarding central cross-cutting topics of teacher education. This included the perceived acquisition of media education competence at the time of the survey and skills needed for the interaction with heterogeneous groups of learners.

High student participation rate

Around 1,000 students participated in the survey, corresponding to almost 26 percent of all students. The results are indicative of high satisfaction overall: More than 70 percent are satisfied, all things considered, with their studies in a teacher education degree program and 78 percent would choose a teacher education degree program again in retrospect; the vast majority would also choose their currently studied subjects again.

High degree of satisfaction overall – some criticisms

Despite this overall positive mood, the students also express criticism with regard to various aspects of their degree programs. For example, the content-related links between the specialist science, specialist didactics and educational sciences parts of these degree programs are described as insufficient by many.

Delays caused by overlaps in teaching and examinations

There is also a need for action as far as the implementation of overlap-free studies is concerned. Students in teacher education degree programs attend courses offered by different faculties. This means that the dates and hours of courses and examinations often overlap and it is not uncommon that this results in delaying the students' progress. However, the introduction of a time-slot model in the context of TUD-Sylber will offer a solution to this problem.

University-wide discussion of the results

The survey results are thoroughly evaluated by the ZLSB and then presented in detail and discussed university-wide. Several events on this are planned in 2022.

Quality assurance in the teacher education degree programs

Anna Schwalbe M. A.

The point of view of teacher training institutions in Dresden concerning academic teacher education

Results of the 1st Dresden Main/Specialist Training Supervisor Survey

One objective of the ZLSB in the context of the Quality Offensive in Teacher Education is to intensify the exchange between instructors in the first and second phases of teacher education (degree program and preparatory service). In order to provide an empirical basis for these efforts, the ZLSB organized a survey of main and specialist training supervisors in the context of the project "Synergetic Teacher Education" (TUD-Sylber) in coordination with the State Office of Schooling and Education in 2020. The survey data was evaluated in 2021,

published and put up for discussion at the TUD-Sylber Conference in November 2021.

Convictions and views concerning the university phase of teacher education

The main focus of the study was on the views and convictions of the instructors with regard to the teacher education degree programs, the distribution of tasks and roles in two-phase teacher education as well as the potential for cross-phase cooperation and collaborations. 122 of a total of 327 main and specialist training supervisors at two selected training institutions in Saxony participated in the standardized online survey, which corresponds to a response rate of 37 percent.

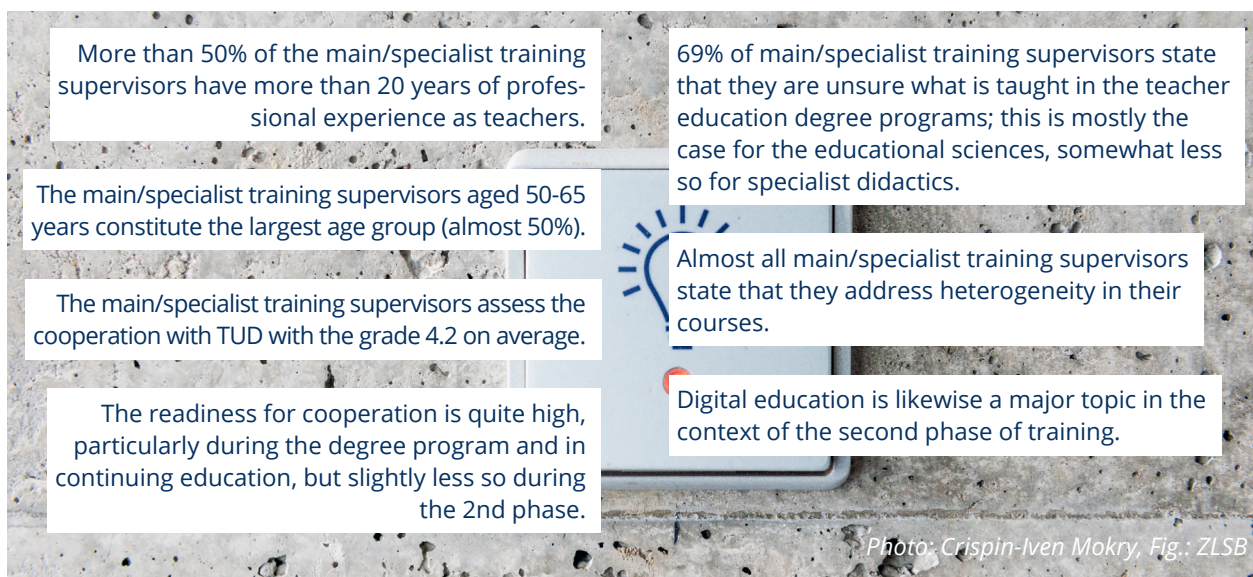
Great interest in cooperation and exchange

The available survey findings from Saxony show that, despite a critical attitude towards the current teacher education degree programs and the structure of academic teacher education, many of the instructors in the second phase take a great interest in an intensive exchange with the university and express a concrete readiness for cooperation. The instructors consider teacher education as the joint task of second-phase teacher training institutions and universities, with shared responsibilities in many areas of training. The understanding and the acceptance of the state of teacher education in the respective other phase as well as of the positions and the understanding of the other actors' roles can serve as the basis of more intensive cooperation – as could be observed during the 6th TUD-Sylber Conference "Shaping Teacher Education Together", for example.

Main/Specialist Training Supervisor Survey

Dr. Frank Beier

↗ <https://tu-dresden.de/zlsb/forschung-und-projekte/forschung>



Dialog and cooperation across the different phases

Towards more unified teacher education

The involvement of a ZLSB team in service counseling at Department 41 of the State Office of Schooling and Education (LaSuB) Dresden, which is in charge of the specific organization the preparatory service in the region, constitutes a new chapter of cross-phase cooperation. Driven by the project activities in TUD-Sylber, supported with regard to the research direction by a survey of main and specialist training supervisors conducted last year, and guided by the common will to deliberate on teacher education together, questions such as which forms of cooperation appear suitable and which potentials for change should be harnessed were addressed.

Promotion of exchange across the different phases

Already during the past months, cooperation across the different phases was systematically promoted. Mediated by the Teacher Education Liaison Office, there is more and more subject and school type-specific exchange across the different phases, such as in basic education didactics for the subject of mathematics. A working group of Department 41 pools activities on communication across the different phases, with the result of a new compact seminar about the preparatory service for students in teacher education degree programs in March 2022.

Cooperation in the working groups of the ZLSB

Traditionally, several working groups of the ZLSB have also been open for representatives of the 2nd phase. Challenges to be addressed jointly in the months to come are how a good working mode can be developed here and how the cooperation across subjects and school types can be designed. The path towards more unified teacher education is still long, but the current steps taken together are very promising!

Intensive cooperation between universities and second-phase teacher training institutions of Saxony at the 6th TUD-Sylber Conference

Every year, the TUD-Sylber Conference is a highlight of the cross-phase discussion across the different institutions involved in teacher education in Saxony. True to the motto "Shaping Teacher Education Together", the sixth edition of the event was for the first time organized jointly by the ZLSB and the Department for Teacher Training and Continuing Education of the State Office of Schooling and Education (LaSuB). The focus was on the question how a more unified

form of teacher education, in which university degree programs and preparatory service are coherently interconnected, can be achieved in Saxony. The joint presentation of the meeting and jointly organized workshops highlighted that dialog and exchange can result in joint action.

Prerequisites for success and obstacles

Keynotes from Austria and Hamburg served to broaden the horizon of the more than 150 participants right from the start. Prof. Christian Kraller of the University of Innsbruck described prerequisites for success and obstacles to joint teacher education he has encountered in the development of curricula for teacher education degree programs across institutions. Prof. Dr. Eva Arnold, Director of the Center for Teacher Education Hamburg, talked about her experience with the cooperative structures of teacher education in Hamburg.

Strong commitment to cooperation

But what about the path taken in Saxony? Incoming impulses were provided by a survey of main and specialist training supervisors in Saxony, which the ZLSB conducted last year. It shows that the readiness for cooperation across the different phases of the preparatory service instructors is high, despite existing differences in opinion, e.g. regarding the relevance of academic knowledge for the teaching profession.

Organization of jointly designed workshops

The workshops largely organized and implemented across the different phases, in which the necessary competences of future teachers were discussed, as where specific teaching formats and current cross-cutting topics of teacher education, such as digitalization and inclusion, demonstrated that differences can be overcome. The openness and curiosity with which the teacher education instructors of the different institutions encountered each other speaks for the fact that the 6th TUD-Sylber Conference was a further step on the path towards the coherent training of teachers across the different phases.

TUD-Sylber Project Coordinator

Rolf Puderbach

↗ <https://tu-dresden.de/zlsb/forschung-und-projekte/tud-sylber>

Enrich your lesson! Module components & support for instructors in teacher education



Photo: Crispin-Iven Mokry

Services for teacher education instructors and teachers

“Enrich your lesson!” - under this heading and together with contributors from four different faculties, the ZLSB has pooled 16 service and support offers addressed to all lecturers involved in teacher education at TU Dresden.

Focus on cross-cutting topics

Lecturers in the teacher education degree programs face numerous requirements. In addition to the specialist contents of their discipline, they are also intended to address numerous cross-cutting topics important for the education of future teachers, such as digitalization, inclusion, interdisciplinary teaching or skills required for academic work. Fulfilling these requirements is very demanding for the instructors and sometimes almost impossible to achieve without any additional resources.

Transfer of project results

At the same time, there are projects at TU Dresden which strive to evolve the contents and the didactics of the teacher education degree programs and want to make their ideas, developments and formats available to a wider public. The catalog “Enrich your lesson!” comprises offers of these projects which support lecturers in enriching their teaching with regard to the aforementioned cross-cutting topics. The range of services offered includes teaching units taken over by project employees in the context of courses, online courses which can be integrated into seminars, and various counseling and support services. All services are free of charge and can be individually coordinated with the people offering them.

Digital media services

Among others, the Coordination Office “Digitalization in Teacher Education” is represented with two teaching/ learning options on the cross-cutting topic of digitalization which have reached more than 300 participants from the teacher education degree programs, lateral entry programs and continuing education. The stations workshop is a good option to enable students in teacher education degree programs, lateral entrants as well as university instructors to try various digital media themselves and discuss their potential uses in lessons and courses.

Stations workshop on digital media and workshop on SchullogIn

In 90 minutes, various digital media are presented based on the media profiles and immediately tried out by the participants to the extent possible. Media stations such as CryptPad, H5P, LearningApps.org or Padlet/TaskCards are available to the participants. Another workshop presents “SchullogIn”, the state-wide uniform identity management system for schools in Saxony, and shows how teachers and pupils alike can use it to gain access to centrally provided digital services (file drop location, videoconferencing, LernSax, OPAL Schule, among others). The workshop is particularly suited for incorporation into seminars of the educational sciences and specialist didactics, e.g. to prepare students for school internship studies.

You can find the “Enrich your lesson!” offers at:

➤ <https://tud.link/tz2s>

Teacher Education Liaison Office



Photo: Crispin-Iven Mokry

Teacher education with a regional impact: Forum at the programmatic conference of the Quality Offensive in Teacher Education

Universities offering teacher education degree programs contribute significantly to the qualification of future teachers and, in doing so, have a substantial impact on the school and education landscape of the regions. In addition, through research in the fields of specialist sciences, specialist didactics and the educational sciences as well as continuing teacher education activities, they provide impulses which have a positive effect on the location of education and beyond.

Opportunities and challenges of teacher education with a regional impact at universities

At this year's programmatic conference of the "Quality Offensive in Teacher Education", the projects of TU Dresden (TUD-Sylber), the University of Potsdam (PSI-Potsdam), from Mecklenburg-Western Pomerania (LEHREN in M-V) and Christian Albrecht University of Kiel (LeaP@CAU) together assumed different points of view of the opportunities and challenges that result from teacher education with a regional impact at universities. How can improvements in the supply of teachers also be achieved in rural areas? This is a task the ZLSB and the Teacher Education Liaison Office consider to be of particular importance. How can multi-professional research in teacher education, specialist sciences and schools succeed? In this context, the network of campus schools of the University of Potsdam can be considered a good example. And how can students in teacher education degree programs gain comprehensive practical experience already during their studies?

This is an issue the peer mentoring program at the University of Greifswald has taken up successfully. The focus of the forum was on learning from each other in order to further promote the regional impact of the individual universities.

It's a match: Finding a suitable internship school

Schools in the rural regions of Saxony are still too rarely the first choice for the compact internship: the visibility of their commitment is too low and problems of mobility too often predominate. In order to provide students who have been unable to find a suitable placement via the internship portal with a real alternative, the Teacher Education Liaison Office and the Academic Affairs Office for Teacher Training organized the virtual workshop "It's a match" in cooperation with the program "Rural Perspectives" and the LaSuB offices in Chemnitz and Bautzen.

Making schools beyond Dresden more attractive

Besides funding options for accommodation and commuting expenses and convincing presentations promoting the attractiveness of the school landscape beyond Dresden, the main focus was on individual talks with the students. Which schools are still offering placements for my subject? Will I receive good mentoring? Can a school offering interesting content make another space available? Can I also intern at a secondary school? All the participants worked hand in hand and were able, in the process, to provide more than 40 students with an attractive internship placement. This is a success that offers a positive perspective and motivation to make this format permanent.

School symposia put the focus on schools in the demand regions

First school symposium “Maths@School”

The “Maths@School” symposium, held on March 30, 2021, included presentations by dedicated teachers who showed the students in the teacher education degree program what good mathematics lessons can look like. Not only determine the mathematical constant π by means of experiments, but also illustrate it artistically? Use a set square on the board with pupils even in digital lessons? Make use of playful and active lesson starters to foster an interest in mathematics?

A variety of ideas to create interesting mathematics lessons

It became clear how great the variety of ideas to make mathematics come alive is. This was also the motto of the inspiring keynote by Dr. Rahel Brugger of the Technische Sammlungen museum. More than 60 students from all over Saxony attended this event, which was jointly organized by the Teacher Education Liaison Office and “Rural Perspectives”, a program of the German Children and Youth Foundation. This was the kick-off for a new virtual series of events which will provide practical impulses for students from the classrooms of the regions of Saxony beyond the big cities several times a year, establishing personal contacts in the process. These contacts will help to convince more students of an internship, or even a career, at one of the schools involved.

Offering students insights into professional practice

To quote one of the participants:

“This was great!! Please offer more courses of this kind. As a student, I often lack insight into practice and how many great schools there are. Sometimes, all you need is something to get you thinking and get inspired.”

Ambitious geography and local science education

Following “Maths@School” in the spring, the second digital school symposium was dedicated to the creation of appealing and ambitious lessons in geography and local science education in schools. More than 30 students from all over Saxony attended this event.

In cooperation with schools from the Bautzen and Wolkenstein regions

For students in primary school teacher education programs, the focus was on local science education this time. Discovering the countries of the world by means of the “country box” at Bürgerschule Wolkenstein or active lesson starters at Johann Gottlieb Fichte Primary School in Bautzen: the students experienced authentic insights into teaching and received a multitude of impulses for their own first attempts at teaching.

A variety of methods for exciting geography lessons

The second school symposium highlighted secondary schools and their innovations in teaching geography. Secondary School Chemnitz Altendorf excelled with a variety of methods for more lively lessons. Prepare your own teaching materials using PowerPoint? Not a problem at Josephinenschule Chemnitz. At Martin Andersen Nexö Secondary School in Zschopau, experiments are not only a part of chemistry or physics lessons, but also help to promote a deep understanding of geography. And Jenaplanschule Markersbach showed which opportunities project-based lessons involving all age groups have to offer. To quote one of the participants:

“The contents communicated were very interesting and helpful for my future work as a teacher. It’s worth it in any case.”



Photo: Crispin-Iven Mokry

Cooperation with educational actors outside of schools

But the demand regions are not only characterized by their schools alone; the educational landscape is also enriched by educational actors outside of schools. The Station for Young Natural Scientists and Technicians Weißwasser and terra mineralia in Freiberg showed how they complement school lessons.

School symposia to continue in 2022

The success of the symposium makes us already look forward to the next event for the subject of English on April 27, 2022, in which students will again receive practical impulses from the classrooms of the regions of Saxony beyond the big cities.

Teacher Education Liaison Office

Dr. Sebastian Schellhammer

➤ <https://tu-dresden.de/zlsb/die-einrichtung/verbindungsbuero-lehrerbildung>

Graduate forum

NELE Summer School – “Empirical Research for High Quality Teaching and Teacher Education”

Numerous international guests

More than 115 researchers from all over Germany as well as numerous international guests attended the NELE Summer School on September 9-10, 2021. Thanks to its hybrid format, the event offered both the opportunity for in-person exchanges and interaction with researchers from countries such as South Africa and Israel.

In-person event with live broadcast

Almost 40 participants at least created a familiar meeting atmosphere at the ZLSB, which could be experienced only rarely in times of the coronavirus pandemic. Thanks to the implemented hygiene measures and the option to broadcast all events live via BigBlueButton, we were able to organize an intensive academic exchange.

Interconnection with numerous continuing education options

The event not only offered the opportunity to discuss one's own research work with an expert audience, but also offered numerous continuing education options, such as workshops on qualitative and quantitative research methods, a keynote presentation by Prof. Dr. Colin Cramer, and personal counseling. The agenda of the meeting showed the diversity of research work carried out by researchers in the context of their further qualification. Many of the presented dissertations are part of the nationwide Quality Offensive in Teacher Education. The addressed topics ranged from

the cross-cutting topics of heterogeneity, inclusion and digitalization to professional and educational research.

Summary

The Summer School contributed to further strengthen empirical educational research in teacher education and promote a further research-oriented development of the academic education of teachers.

About the network

The Summer School is an event of the Lecture Series for Young Talents in Teacher Education (NELE), a cooperation with teacher education institutions in Dresden, Halle, Jena, Potsdam and Erfurt aiming to support doctoral students in fields relevant to teacher education.

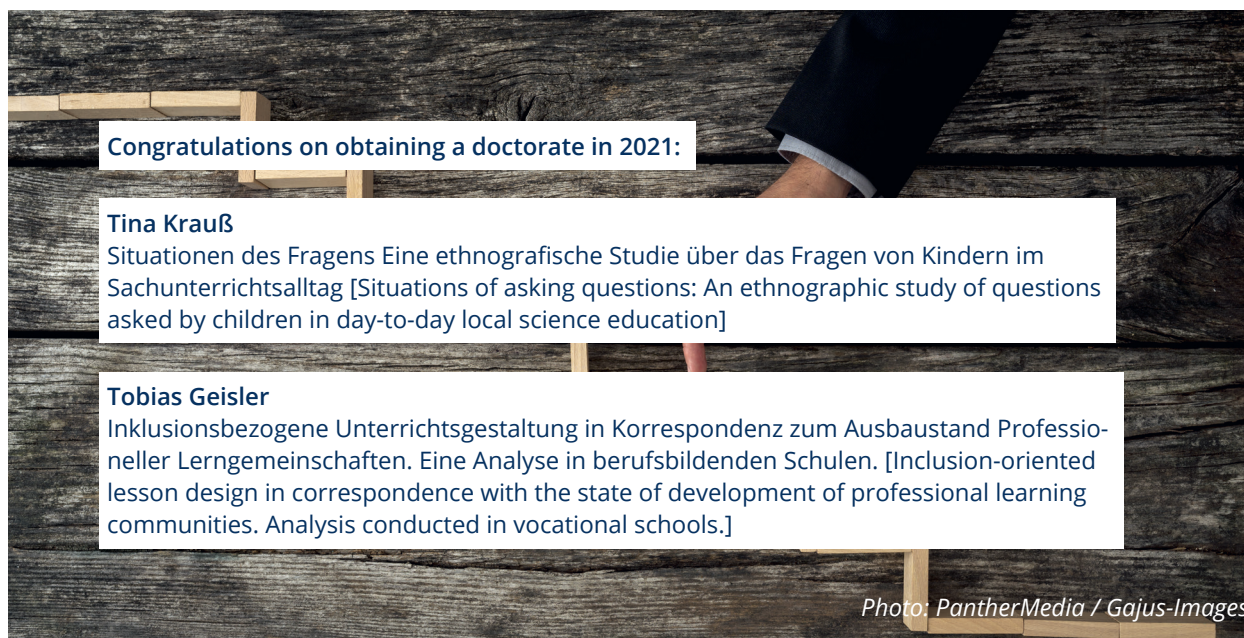
Open-access volume documenting the meeting

The event will be documented in the form of an open-access volume, which will be published by the Waxmann Verlag publishing company in late 2022. The contributions published in this volume offer profound insights into innovative empirical research work providing valuable impulses for the evidence-based continuous development of teacher education.

Graduate forum

Dr. Frank Beier

➤ <https://tu-dresden.de/zlsb/die-einrichtung/graduierenforum>



TUD-Sylber-BBS: Synergetic Teacher Education for Teaching at vocational schools

The project “TUD-SYLBBER-BBS” started in the spring of 2020 and funded by the federal and state governments in the context of the Quality Offensive in Teacher Education, which specifically focuses on the continuous development of vocational school teacher education, achieved the envisioned goals in the six sub-projects also in the second year of the project period despite the restrictions imposed due to the coronavirus pandemic.

Focus on the recruitment of students

The industrial-technical and commercial-administrative fields of vocational school teacher education are particularly affected by recruitment difficulties. In order to develop appropriate solution strategies, sub-project 1 focused on the creation of suitable instruments for the empirical analysis of this teacher shortage, the results of which are intended to contribute to the future design of fit-for-purpose student marketing. In addition, work on an image and information film for the vocational school teacher education degree continued despite the coronavirus pandemic and filming was completed in November 2021.

In the context of sub-project SchulAQ, assessing which professional qualifications without Abitur can qualify for the vocational school teacher education degree program within the framework of a dual-study model, the 3rd group of “School Assistants in Qualification” have already started their studies at TU Dresden in winter semester 2021/2022. In addition, the comprehensive support services for this audience have been expanded further and tailored even better to the needs of the students.

Focus on quality enhancement and structural development

Aiming to achieve a more thorough interconnection of contents from specialist sciences, specialist didactics and the educational sciences, prototypical complexes of teaching/learning arrangements were developed in sub-project 3 in close cooperation with representatives of various specialist sciences which are characterized by authentic application/exercise references, interactivity and multiple representations. We have already been able to test this in a series of courses and continue the development based on an evaluation design created specifically for this purpose.

Strengthening reflective references to the professional world as well as to school practice in the person-focused professional disciplines is at the center of sub-project 4. The concept of university didactics for professional field analysis designed in the first project year for this purpose, which is oriented towards research-based learning and the project method, has

been successfully integrated in several existing modules and underwent a comprehensive evaluation last year. In addition, we have started to establish an online archive of didactically prepared professional action situations which will be made available to both instructors and students in the future.

A focus of the work in sub-project 5 is on establishing regular discussions with the students for each academic year as an instrument of quality assurance in the vocational school teacher education degree program. These discussions were held for the first time last year based on previous empirical surveys among the students. The discovered problem areas were translated into specific measures and made available for targeted further development. Another opportunity for organizational and content-related optimization of the degree program is provided by the analysis of the development of professional competences over the course of the studies. Comprehensive empirical work was undertaken for this purpose last year to test already existing elicitation instruments with regard to their suitability for the specifics of vocational school teaching and adapt them accordingly.

Across all focus areas, the project pursues a strategy to strengthen the interaction across all phases. For this purpose, sub-project 6 involved detailed surveys on the current state of collaborations across all phases and the need for interaction between the professorial chairs contributing to the project. The results were also discussed with representatives of the first and second phases at the TUD-Sylber Conference in November and provided the basis for the joint creation of specific interaction formats, which were tested in 2022 and are intended to be integrated into the structures of the university and at the teacher training institution over the further course of the project.

Project Manager

Prof. Dr. Manuela Niethammer

↗ <https://tu-dresden.de/zlsb/forschung-und-projekte/tud-sylber-bbs>

Teaching



Photo: PantherMedia / luminastock

Despite the pandemic, a record number of students in teacher education degree programs have completed their school internships

Varied and innovative solutions

The end of the summer semester and the school year in July 2021 meant that the school internships also came to an end. The preparation and implementation of the practical phase during the semester under pandemic conditions proved to be a challenge for both the responsible supervisors in the specialist didactics and the mentors at the schools. Despite all the organizational hurdles, varied and innovative solutions for practical support could be found.

Individual and beneficial concepts for practical supervision

For the shared supervision of classes or courses in alternating lessons, students created asynchronous digital learning opportunities in coordination with the mentors or assumed responsibility for synchronous lesson units for groups of home learners via videoconferencing in parallel to in-person teaching, among other things. The students did not view the necessary organizational adjustments as a deficit, but as a valuable opportunity, e.g. to gain teaching experience also in smaller in-person groups or contribute their skills to hybrid formats.

To make these formats possible, a teacher and a trainee teacher supervised the school internship participants together as a tandem of mentors at a school in Meißen, for example. Students taught lessons in the form of hybrid team teaching. In a comprehensive school in Dresden, students assumed responsibility for the individual supervision of pupils with special

educational needs. Some students will continue to provide individual support to their “protégés” beyond the school internship period in the context of the school’s full-day program.

Digital concepts to include schools in rural areas

Digital concepts also made the inclusion of schools in rural areas possible. The students sometimes contributed to the lessons via videoconferencing and prepared digital learning opportunities for home learning.

A central purpose of the school internships is to interconnect specialist didactics perspectives of lesson planning with the practice of teaching in schools. Thanks to the good individual solutions and the close cooperation of the supervisors at the university with the dedicated mentors, this was also done in the challenging summer semester of 2021.

Significant increase in the number of participants

The number of students in teacher education degree programs to be supervised by the specialist didactics and the ZLSB has been continuously increasing over the last years. The growing demand for internship places became particularly clear in the past summer semester. For instance, the number of registrations for a school internship increased by more than a third compared with the year before, to 744 students in more than 160 groups. Many new mentors at the schools in the region had to be recruited in order to cope with this record number of groups. Together with the experienced mentors, who have often cooperated

with TUD for many years, good supervision could still be achieved, even under the challenging current conditions.

Qualification of mentors

The registration numbers for the winter semester on the internship portal show a further increasing demand for qualified mentors. The school teachers in university service at the ZLSB offer certified mentor training at regular intervals for the corresponding qualification and organize an annual mentor meeting.

Alumni meeting of school teachers in university service “NET-working for the Future”

Delegation by the Ministry of Education

Since its establishment, the ZLSB has been supported by teachers delegated to TU Dresden by the Saxon State Ministry of Education for specific periods. On September 11, 2021, many of the 41 former and current school teachers in university service met at the first alumni meeting at the ZLSB.

Continuing academic qualification

The school teachers in university service are delegated to the ZLSB. While delegated, they support the school internship studies at the faculties, offering courses which focus on the professional training of teachers as well as mentor training. The students particularly like the school experience of the school teachers in university service, which enables them to contribute valuable professional aspects to academic teacher education. The mentors benefit from the close relationship of the school teachers in university service with teacher education at the University. In addition to their work as instructors, the school teachers in university service also contribute to research work with a focus on school and teaching in the faculties and at the ZLSB. This means that the school teachers in university service further their academic qualification while delegated and can even obtain a doctorate during their time at TU Dresden.

School Teacher in University Service

Steven Weiß

Internship Coordinator

Manuela Wehner

➤ <https://tu-dresden.de/zlsb/lehramtsstudium/im-studium/schulpraktika/spue-und-blockpraktikum-b>

Establishing a network of universities, schools and educational administration institutions

Dr. Eva-Maria Stange is only one of many examples of these school teachers continuing to provide important impulses in school administration, ministries or the State Office of Schooling and Education. In 2005, the former Saxon State Minister was the first delegated school teacher at the ZLSB. Not least, the school teachers in university service offer substantial contributions to the establishment of a network of universities, schools and educational administration institutions with their professional biographies that involve multiple institutions.

Establishing a network of all former and current delegated teachers

This was reason enough to bring together the different generations of school teachers in university service. The positive response shows that their time at ZLSB was a defining career steps for many school teachers in university service and networking offers great potential for the continuous development of teacher education from multiple points of view.

School Teachers in University Service

Ines Röhrborn, Ulrike Lang

➤ <https://tu-dresden.de/zlsb/die-einrichtung/lehrkraefte-im-hochschuldienst>



School teachers in university service as mediators and networkers in teacher education

Fields of activity of the school teachers in university service

The team of school teachers in university service consists of teachers with multiple years of professional experience who have already been tenured by the Free State of Saxony. Currently, 15 teachers have been delegated to the ZLSB by the Saxon State Ministry of Education. In addition, the school teachers in university service are assigned to a professorial chair in specialist didactics, the educational sciences or vocational education. The work profile of the school teachers in university service comprises the preparation and supervision of school internship studies, the organization of teacher training sessions and research work with a focus on school and/or teaching. For their teaching tasks (in particular the school internship studies), the school teachers in university service are assigned to the professorial chairs. The academic qualification usually also takes place in the research area of the professorial chairs.

School teachers in university service as mediators between science and school practice

Since they are assigned to more than one institution, the school teachers in university service strengthen the internal network of the University and the communication between the ZLSB, the specialist didactics and the educational sciences. In the context of these networking activities, the school teachers in university service provide an experiential background that may be unique: They have themselves completed the education and training in all three phases of teacher education. They have been students, trainee teachers and finally teachers and have therefore experienced the challenges of the different phases of the professional training process.

Survey of former and current school teachers in university service from all over Saxony

In the context of a survey of 36 current and former school teachers in university service from all over Saxony conducted by the ZLSB in the summer of 2021, almost half of those surveyed stated that they had the impression the university actors held their practical experience in particularly high esteem. According to the school teachers in university service, this appreciation is most pronounced in the students. The school teachers in university service differ from the research associates that have followed a traditional university career in the area of research. More than half of the school teachers in university service surveyed stated that they were interested in other research topics than their colleagues at the professorial chairs. These topics apparently have a specific association with the practical challenges the school teachers in university service encountered during their own day-to-day work in school. Slightly more than half of those surveyed expressed the view that school teachers often found it difficult to interpret scientific

studies in school and teaching research. At the same time, many have the impression that school-related research results only offer a limited contribution to the solution of specific problems in school practice. School teachers in university service on the one hand know the specific challenges of day-to-day school life and the common expectation that it should be possible to directly derive strategies for action in school from the results of school and teaching research. On the other hand, their continuing academic qualification in the context of their delegation allows the school teachers in university service to familiarize themselves with the logic of scientific work. Consequently, the school teachers in university service see themselves as mediators and translators between science and educational practice.

Intensive academic socialization

Their integration into the research activities and academic discourses of professorial chairs in specialist didactics and educational sciences allows the school teachers in university service to experience an intensive academic socialization. Professors supervise their doctorate projects, they participate in research colloquia and interact with other doctoral students in the same discipline. In addition to the professorial chairs for which the school teachers in university service work, the ZLSB supports the academic qualification and the interdisciplinary academic discourse through the postgraduate forum in teacher education. While teachers used to find it difficult, in the past, to get accustomed to academic discourse after their return to university, develop the research questions for their dissertation and come up with suitable research designs, they now succeed more quickly thanks to their participation in the postgraduate forum in teacher education. The number of successful doctorates has increased significantly in the past years. Between 2019 and 2022 alone, seven school teachers in university service successfully completed their doctorate at TU Dresden.

Orientation towards professional teacher agency

Besides integration into academic discourse, the school teachers in university service also contribute to teaching. They enrich it with offers that in particular highlight a consistent orientation towards professional teacher agency, thus strengthening the relevance for professional practice. This is beneficial to the acceptance and appreciation of the teachers by the colleagues at the professorial chairs and by the students.

This is an abbreviated version of the article "School teachers in university service as mediators and networkers in teacher education. The role of the school teachers in university service at the Center for Teacher Education and Educational Research (ZLSB) of TU Dresden" by Peter Schulze, Georg Ronny Müller and Rolf Puderbach, which will be published in the conference volume of the Federal Conference 2021.

Focus on: School teachers in university service

We are happy to welcome two new school teachers in university service at the start of the school year 2021/2022:

Annett Wrede

I am happy to be given the opportunity to support the team of the ZLSB and primary school education in the subject of German, having done so since August 1, 2021. I would like to thank my colleagues for the warm welcome and their continuous support.

What I appreciate most about my work at the ZLSB is the opportunity for new points of view, interdisciplinary networking and cooperation in order to deliberate on the education of tomorrow's teachers, contribute to it and pursue my own research questions.

Before starting work at the ZLSB, I taught as a primary school teacher at the primary school in Grödnitz and at the Niederlöbnitz Primary School in Radebeul.

I am especially looking forward to the intensive cooperation with the students in the school internships in order to supervise and support them in combining their knowledge from the specialist sciences and from specialist didactics for the planning, organization and reflection of lessons.

A matter I am particularly interested in is to establish alternative forms of learning and teaching at the schools, especially in the subject of German, and to enable the children to pursue individual learning paths in writing and orthography (according to Beate Leßmann). For this reason, I also want to examine in my dissertation which discourse skills primary school children acquire in discussion circles about writing.



Annett Wrede, Photo: private



Dr. Volker Kreß, Photo: private

Dr. Volker Kreß

Since August 1, 2021, I have been a member of the team of school teachers in university service at the ZLSB and I am deeply grateful to be given the opportunity to join and strengthen this circle of dedicated and creative campaigners for modern schools that meet the requirements of the future. From day one, I was allowed to participate in the cooperative atmosphere and was integrated into academic discourse at the same time.

I have many years of experience in the school system of Saxony – primarily as a teacher in various types of vocational schools and in different roles (head of department/consultant), but also in the second phase of teacher training (as a main and specialist training supervisor), and I can now make my specialist and educational know-how available to the university education of future teachers. In the school internships I have supervised, but also in the seminars in the subject of Economics/Technology/Home Economics/Social Studies, to which I have been assigned, my focus is mainly on the acquisition of competences for forms of teaching that are true to life and based on individual learning conditions.

For several years now, my particular interest has focused on achieving sustainability – first and foremost with regard to sustainable learning results in all educational institutions. Inspired by my role as the school climate coordinator for Saxony in the school year 2019/20, the issue acquired a wholly new dimension again, to which I will increasingly dedicate myself in the context of several projects in the field of education for sustainable development.

Second closed cross-phase meeting on teacher education for vocational schools

TUD as the largest university location for vocational school teacher education

TU Dresden is the largest university location for vocational school teacher education in all of Germany. Despite this, recruiting new students is a major challenge. On October 6-7, the closed cross-phase meeting on teacher education for vocational schools was held with the objectives of developing sustainable solutions to this problem, discussing central topics of vocational school teacher education and promoting the networking among the actors in this area. This is the continuation of a meeting held in 2019, which brought together representatives of teacher education for vocational schools in Saxony from TU Dresden and the State Office of Schooling and Education for an exchange across institutions for the first time.

New ways to recruit students in teacher education degree programs for vocational schools

During the closed meeting, persons in positions of authority for teacher education degree programs and preparatory service discussed the question of how (future) teaching staff can develop the competence for lesson planning during these training phases. In addition, ways to recruit students in teacher education

degree programs for vocational schools were debated together. About 40 participants from different teacher education institutions reflected on the points of view specific to the respective phases based on these content priorities and searched for opportunities for joint action.

Working group "Vocational Training" as a forum for interaction and exchange

Beyond the closed meeting, the working group "Vocational Training" of the ZLSB is available permanently as a platform for exchange and interaction. This platform can be used to continue the discussion of topics, exchange information and develop joint teaching projects and research perspectives.

Working group "Vocational Training"

Prof. Dr. Stephan Abele (Head),
Dipl. Bp. Peter Schulze (Supervision ZLSB)

➤ <https://tu-dresden.de/zlsb/die-einrichtung/gremien-und-arbeitskreise/arbeitskreise/arbeitskreis-berufliche-bildung>

Inclusion as a cross-cutting topic

Inclusion? Do it yourself! Variety of materials in inclusive education

Option catalog with inclusive teaching/learning materials

Against the backdrop of the coronavirus pandemic and the closure of the Teaching/Learning Room "Inclusion", we published "Inclusion? Do it yourself! Variety of materials in inclusive education", an option catalog containing numerous inclusive teaching/learning materials that you can build yourself. All materials are based on the materials that were available in the Teaching/Learning Room, and have been prepared in detail and linked to application scenarios for several subjects. There is also a category "Inclusion and Digitalization", in which several teaching/learning tools and teaching/learning apps are presented.

Research Associate

Tina Czaja

➤ <https://tu-dresden.de/zlsb/forschung-und-projekte/lehr-lern-raum-inklusion/diy-inklusion>



The varied and comprehensive collection of materials can be accessed online. © ZLSB



Photo: Pixabay

Escape from your classroom: Digitally inclusive teaching and learning

Combining inclusion and digitalization

The combination and discussion of the cross-cutting topics of digitalization and inclusion was at the centre of attention in 2021. On the one hand, the goal is to make optimal use of the potentials of modern technology for knowledge management in modern classrooms, while on the other hand, all pupils should be given the best conditions for a successful school career, regardless of their background, gender, cognitive and physical condition and performance level.

Inclusive digital learning environments and inclusive teaching/learning materials in digital format

Teacher education at TU Dresden makes students in the corresponding degree programs fit for this task. The purpose of the project seminar entitled "Escape from your classroom! Digitally inclusive teaching and learning" by Dr. Frank Beier and Tina Czaja (Research Associates) at the ZLSB in 2021 was to develop inclusive digital learning environments and digitized inclusive teaching/learning materials together with students in teacher education degree programs, taking into account the varied differentiation potentials of digital learning environments. The results are exhibited in the Teaching/Learning Room "Inclusion".

Multiple funding for the team's commitment

The importance of this innovative approach which highlights interdisciplinary competences and combines inclusion and digitalization is also reflected in the multiple instances of funding the academic associates received for it in 2021. Firstly, the lecturer team received funding in the amount of EUR 14,280.00 from the Digital Learning and Teaching Fund of TU Dresden. In addition to that, Tina Czaja received a Digital Individual Fellowship for commitment in the area of digitally based teaching and learning in 2021. The EUR 12,000 fellowship was awarded in the context of the joint project "Digital University Education in Saxony" by the University Didactics Center Saxony and the e-learning workgroup of the State Rectors' Conference Saxony.

The funding is provided by the Saxon State Ministry of Science, Culture and Tourism (SMWK).

Gender stereotypes in day-to-day school life

Importance of gender, gender sensitivity and diversity

Dr. Frank Beier and Tina Czaja once more successfully organized the seminar "When gender becomes a disadvantage – on gender stereotypes in day-to-day school life". Together with their guests Anne Liebeck (Gerede e.V.), Vera Ohlendorf (LAG Queer Network Saxony), Prof. Dr. Hannelore Faulstich-Wieland, and Prof. Dr. Isabell Diehm, the lecturers communicated fundamental and practically applicable knowledge about the meaning of gender, gender sensitivity and diversity to students in teacher education degree programs. A part of the course was also made accessible to the university public for the first time.

Implementation of gender and diversity competence

It was decided in 2021 to make this funding permanent until 2025 for the realization of measure 6.4 of the TUD equality concept to implement gender and diversity competence as interdisciplinary offers, in particular in the teacher education degree programs. The ZLSB will now receive EUR 5,000 annually to communicate gender competence to students in teacher education degree programs.

In the fall of 2021, Dr. Frank Beier and Tina Czaja were given the teaching award for diversity-sensitive teaching of TU Dresden for their diversity-sensitive work at the ZLSB. The prize worth EUR 4,000 was awarded in an online format by Prof. Dr. Roswitha Böhm, Prorector for University Culture. The two award recipients invested the prize money into the continuation and improvement of their seminars.

↗ <https://tu-dresden.de/zlsb/forschung-und-projekte/lehr-lern-raum-inklusion>



Photo: private

Second-career qualification of teachers for schools in Saxony (BQL)



Photo: PantherMedia / Daviles

Second-career qualification during the pandemic

Digital academic education – this was the leading motto of second-career qualification of teachers in the second year of the COVID-19 pandemic. A majority of courses and examinations again had to be held in a digital format. Team BQL can nevertheless look back on an exceptionally successful year 2021. For instance, 178 teachers in the subjects of basic education didactics, mathematics, physics, informatics, German and economics/technology/home economics/social studies moved forward to practical training and the teaching profession. At the same time, 104 new teachers in the program started their academic education at TU Dresden.

Program to be continued until 2026

In the summer of 2021, it was agreed with the Saxon State Ministry of Education to extend the academic education until the year 2026. The BQL program of the ZLSB of TU Dresden therefore continues to play an important role in the academic qualification of teachers in Saxony. In addition, the spectrum of second-career offers in the context of the third phase was expanded significantly.

Expansion of the offer with training and certificate courses

From now on, BQL will also be synonymous with certificate courses and training addressed to interested teachers in all school types. This results in new

challenges for a high-quality educational option tailored to the existing needs in addition to academic education which is characterized by synergetic program development of all three areas.

The BQL team is looking forward to new and exciting areas of creativity in the continuing professional training of teachers in the Free State of Saxony.

Project Coordinator

Thomas Bárány

↗ <https://tu-dresden.de/zlsb/fort-weiterbildung/Seiteneinstieg>

	Primary school	Secondary schools					Total
		Mathematics	WTH	Informatics	German	Physics	
Capacity	150	46	92	46	46	46	426
Occupancy	114	30	79	38	48	5	314

BQL group capacity in winter semester 2021/2022

Activities in second-career qualification of primary school teachers in Saxony (BQL GS)

Impressions from the first digital BQL GS Workshop Days on the topic "Digital thinking in analog areas"

Those who attended the training in the field of basic education didactics on June 7-10, 2021 experienced a very special kind of course format: workshop learning. It promotes the autonomous learning of teachers in academic qualification programs by means of discovery. While the workshop days on the topic of "differentiation" had been held in an in-person format in 2020, they were held entirely in digital format in 2021.



The BQL GS team during the digital workshop week 2021, Photo: Malte Krone

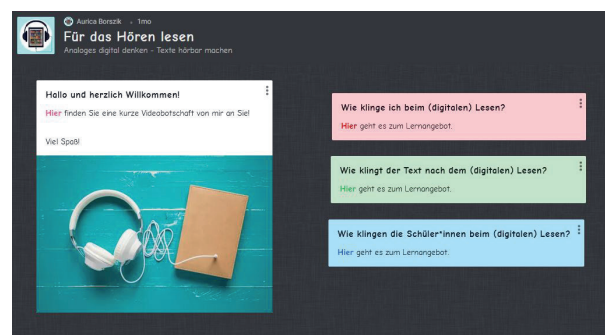
The learning option: "The #digital garden#" by Dr. Anja Mede-Schelenz promoted school gardens to the central location for encountering and experiencing nature in local science education. In the context of the learning workshop, a shared #digital garden# was set up as a place of exchange and discussion. For example, the participants were able to create their own learning modules in the form of matching plant pairs via H5P and got to know various plant identification apps, such as "PlantNet".



Padlet by Dr. Anja Mede-Schelenz, © Anja Mede-Schelenz

Lisa Roch from the mathematics department provided impulses for the familiarization with apps in mathematics lessons. Katharina Weinhold asked in a multi-modal manner: "Would you prefer to be smarter or more proficient?" Padlet contents were intended to encourage approaching the topic of competence documentation by means of self-assessment and assessment by others. Dr. Melanie Wohlfahrt from the educational sciences department had prepared a learning option on the topic: "Digital initiation and maintenance of education and attachment". From the German department, Dr. Olga Bazileviča contributed the following topic: "Making use of irritation: creativity in (digital) everyday life". The animated discussion was continued by a second learning option of the department: "Reading for hearing" by Aurica Borszik.

Dagmar Oertel and Malte Krone (Coordination of digital services in lateral entry program, BQL.Digital) and Fritz Hoffmann from the Coordination Office "Digitalization in Teacher Education" of the ZLSB also supported working with digital tools in workshop learning with examples and opportunities for use in primary school: LearningApps, Padlet, Kahoot! and H5P. With "Escape from your classroom!", Tina Czaja from the Coordination Office "Inclusion" of the ZLSB invited the participants to think about the cross-cutting topic of inclusion.



Padlet by Aurica Borszik, © Aurica Borszik

In addition to learning options, expert slots and workshops, there were opportunities to relax in the digital break room with yoga, a quiz and coffee. The evaluation circles made it clear that the digital workshop week was perceived as a great success by the almost 180 participants.

Project Manager BQL GS

Peggy Germer

➤ <https://tu-dresden.de/zlsb/fort-weiterbildung/Seiteneinstieg>

Evaluation of the digital semesters – presentation of the findings



Photo: PantherMedia / nataliia

Surveys on the topics of teaching, learning, examinations and support

Evaluation is an important part of long-term improvement of digital teaching for lecturers and training participants. Since the summer semester of 2020, surveys have been organized on the topics of “teaching, learning, examinations and support” in primary schools and the subjects of economics/technology/home economics/social studies and mathematics in secondary schools.

Participatory design of remote learning

At the annual meeting “DikoLa – Digital competence in the teaching profession” on November 25, 2021, BQL presented the study results for the digital evaluation of the last three semesters entitled “Participatory design of remote learning in lateral entry careers at primary schools – What should continue? What can be discontinued?”.

Coping with challenges

Peggy Germer (Project Manager BQL GS) and Malte

Krone (Coordination of digital services in lateral entry program) discussed selected findings on learning, examinations and the support by BQL.Digital. In addition, several challenges were discussed: the implementation of digital cooperation, motivation in the context of seminar-type learning in the digital space, and the transfer of digital competences from academic education to primary schools.

Examinations in digital format successfully implemented

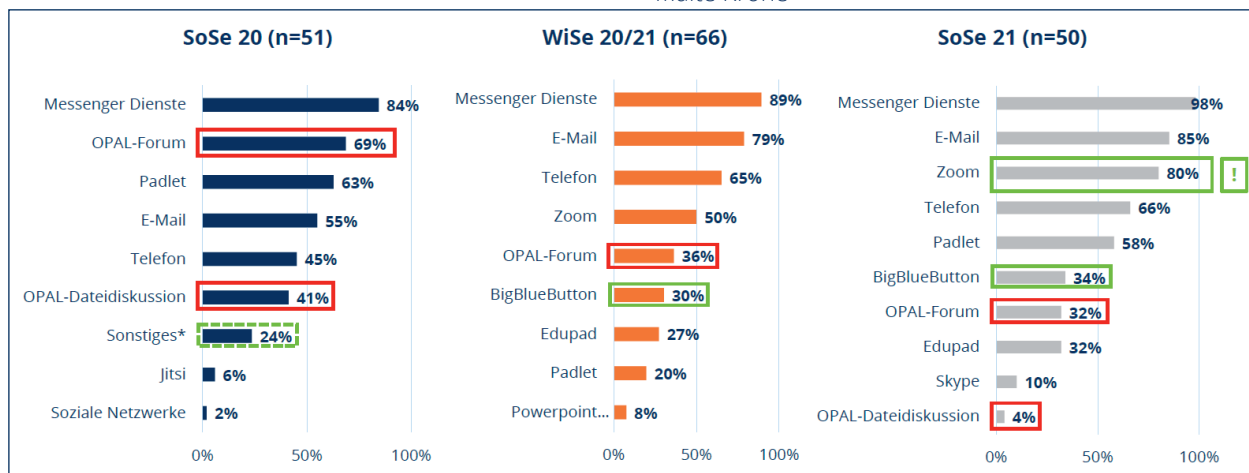
As a result, it was shown that digital examinations, among other things, had successfully found their place within the modules. The cooperation among training participants improved and the support options (continuing education series, workshops, office hours and tutorials) of BQL.Digital were received very positively.

Project Manager BQL GS

Peggy Germer

Research Associate

Malte Krone



Results on the use of collaborative means of communications by participants working in teaching, © ZLSB

Continuing professional training of teachers – presented internationally

In 2021, the professional qualification of teachers was also a topic of discussion at different meetings, conferences and training sessions at the international level.

7th International Forum on Teacher Education

On May 25-28, 2021, the “7th International Forum on Teacher Education” and the “1st International Early Career Educational Researchers’ Conference” with the main topic: “Teacher Education: New Challenges and Goals” were held in Kazan (Russia). In joint symposia with the colleagues of Kazan Federal University (KFU), the actors of the ZLSB presented results of their current research. The focus of the participants from Dresden was on inclusion and digitalization in basic and second-career teacher education at TU Dresden and a survey of teachers at schools in Saxony.



ZLSB employees give a virtual presentation in the context of international conferences in Kazan (Russia) © Dagmar Oertel

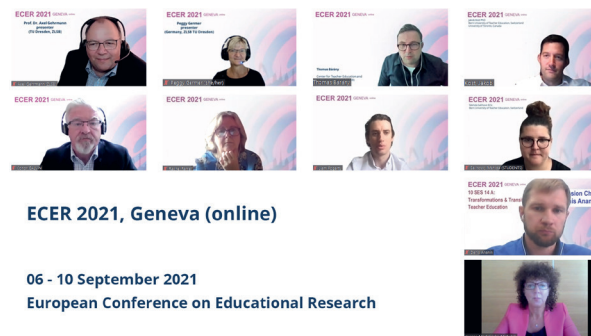
Enhancing Teaching Practice in Higher Education in Russia and China

Also in May, two-day online workshops were held in the context of the project “Enhancing Teaching Practice in Higher Education in Russia and China” (ENTEP) for approx. 230 Russian and Chinese teachers and lecturers, which served to improve the quality of teaching and learning in schools and universities at the international level.

European Conference on Educational Research

On September 9, 2021, actors of the ZLSB together with colleagues from Poland, Russia, Ireland and Switzerland organized a teacher education symposium at the European Conference on Educational Research (ECER), which is one of the major educational research conferences in Europe.

The focus of the presentation by the participants from Dresden was on measures to tackle the teacher shortage. Prof. Dr. Axel Gehrmann, Peggy Germer and Thomas Bárány of the ZLSB outlined national and regional development lines in the context of the



Attendees of ECER 2021, © Malte Krone

national Quality Offensive in Teacher Education and the second-career qualification of teachers in Saxony (“Approaches, Antinomies and Realities: Professionalization for Opening Systems of Teacher Education”). The different national points of view will soon be published in a joint article in the “European Journal of Teacher Education” (EJTE).

Germanistik Digital [Digital German Studies]

On October 13-15, 2021, lecturers of the ZLSB and Dresden International University (DIU) gave presentations at a virtual international training activity of the Erasmus+ project “Germanistik Digital (GEDI)” hosted by “Univerzita sv. Cyrila a Metoda v Trnave” (Slovakia). They offered insights into subject-specific digital university didactics for foreign-language teaching. Peter Schulze (ZLSB, delegated school teacher in university service) spoke about the “importance of constructive support in digital teaching/learning options”. Aurica Borszik (lecturer of German in the BQL GS program) shed light on the use of podcasts in the foreign-language didactics of university teaching, with a focus on German, and presented examples from her own teaching activity. In this context, Peggy Germer (Project Manager BQL GS) and Malte Krone (Coordination of digital services in lateral entry program) addressed the function and the added didactic value of Padlet and Edupad as collaborative teaching/learning formats.

Project Manager BQL GS

Peggy Germer

International Affairs



Photo: PantherMedia/Rawpixel

Review and outlook

Implementing our internationalisation strategy for teacher education was especially challenging in 2021, due to the global pandemic. Making use of valuable insights and solution approaches gained in 2020, the IMPRESS team increasingly relied on virtual mobility and designed new course formats, which were offered to both the students in the teacher education degree programs and the international colleagues.

Promoting student mobility

One of the most important objectives in the context of the internationalization of teacher education is the promotion of student mobility. The Academic Affairs Office for Teacher Training and the IMPRESS project are closely cooperating in this area to support students in teacher education degree programs with preparing their stays abroad. International experiences and inter-cultural learning are intended to optimally prepare future teaching staff for their future professional activity. This undertaking is accompanied by continued efforts to internationalize our teaching. To achieve this, the ZLSB again supported innovative inter-cultural teaching and learning options and offered regular inter-cultural sensitivity workshops for students in teacher education degree programs in 2021.

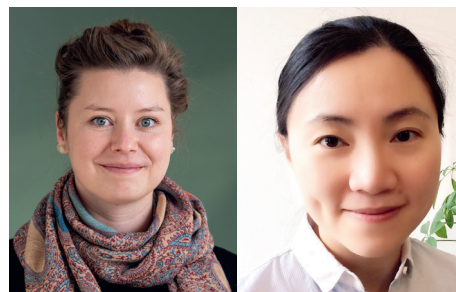
Cooperation with international colleagues

Another focus was on the continuous opportunities for exchange and networking with our international colleagues. The virtual workshop series “The New Normal: Challenges and Chances for Schools, Teachers and Students”, organized in late 2021, served to intensify the stable relationships with our partner schools and universities. We would like to seize the opportunity to thank our international colleagues for the close

and trusting cooperation which will guide us through another year under pandemic conditions and will continue to be a positive influence.

New IMPRESS team members

Since May 2021, Laura Mitzscher has worked as a new public relations employee for the IMPRESS project. The focus of her work is on the development of strategies for a good public representation of the project and support for internal and external communication, in particular with our international partners. Dr. Yi Li has been the new Student Mobility Coordinator within the project since December 1, 2021. Having studied ecology and with a doctorate in business education, she has twelve years of experience in the project management for international master's degree programs at German universities. Besides the establishment and continuous development of international degree programs, she is interested in research, development and organizing inter-cultural training sessions for exchange students.



Laura Mitzscher, Photo: ZLSB, Dr. Yi Li, Photo: private

International continuing teacher training



Photo: PantherMedia / FrameAngel

Virtual exchange across four continents

International exchange in research and teacher education has never been more important. For this reason, the international continuing teacher training which the ZLSB had originally planned as a five-day in-person event for all of its school and university partner institutions was transformed into a digital format. This meant that Friday afternoons become a shared time slot for teachers, principals and educational researchers from four continents and twelve time zones, connecting them over four months. Representatives of schools and universities in Indonesia, Japan, Hong Kong, Israel, Jordan, South Africa, Poland, the Czech Republic, Russia, Costa Rica, the United States and Germany discussed topics and problems concerning schools worldwide and for which new answers and solution approaches are urgently needed.



Photo: ZLSB

Competences for the 21st century

The central focus of all panels was the question which capabilities and skills a school must communicate in the 21st century, and in which ways it must do this in order to raise the awareness of young people for the current challenges of our time: How can schools make use of the tools of digitalization? Which aspects can democratic education in school comprise and how can places of learning and project formats outside of schools be integrated into the curricula? How can you develop conditions in school (and beyond) for learning with a focus on the environment?

Education for sustainable development

The participants also discussed topics such as school design, inter-cultural competence, diversity management in classrooms and sustainability as a classroom discourse. The presentations on the main topics of "Digitalization", "Civic and Inter-cultural Education", "Environmental Education" and "School Management and Leadership" continue to be available to the participants also beyond the workshop series, as online resources.

Intensive subject-specific networking

This time also, the format permitted intensive subject-specific networking of the ZLSB members with international colleagues. The participants themselves as well as ZLSB employees and other experts from Germany acted as presenters of the workshops. The English-language training session was accompanied and presented by Kati Ahl.

Continuation planned

It is planned to offer the format of teacher training that benefits German and international teachers and teacher educators equally also in 2022. The specialist topics are determined by continuous demand analyses in the IMPRESS network and fleshed out by members from schools and the university alike.

Consultant International Affairs

Maria Richter-Babekoff

➤ https://tu-dresden.de/zlsb/forschung-und-projekte/impress/internationale-alumni-lehrerweiterbildung;set_language=en

International Lecture Series “Educational Systems in (Trans) Formation – Facing the Global Challenges”



Photo: PantherMedia/Rawpixel

Particularities of national education systems in comparison

School and teacher education in international comparison was the subject of the virtual lecture series “Educational Systems in (Trans)Formation – Facing the Global Challenges” which we were able to hold in winter semester 2020/21 thanks to funding of TUD from the flexible program for internationalization and the organization by the IMPRESS team.

In this series, educational experts from the IMPRESS network made use of video lectures to present the particularities of the education systems and of teacher education in Germany, Israel, Japan, Poland, South Africa and the United States.

They addressed questions such as:

- Which significant reforms have been initiated in the education systems all over the world in the last decades? What are the differences between them?
- How do the individual countries fare in comparative international studies?
- What are the most pressing challenges in teacher education and how are these challenges faced?
- What role models and expectations exist with regard to the teaching profession?
- How do schools all over the world address the challenges posed by the COVID-19 pandemic?

The lectures were complemented by exemplary school presentations in the form of videos, offering insights into school concepts and applied teaching worldwide.

Exchange with international educational experts from six countries

The lecture series was accompanied by an interactive seminar organized by Prof. Dr. Axel Gehrmann and Dr. Frank Beier, in which students from the teacher education degree programs were given the opportunity to interact with the international experts in Q&A sessions and ask them questions. The event was concluded by a plenary discussion in which all the topics were once again comparatively discussed.

The lecture series provided an opportunity for students of TU Dresden to consider education systems in other countries, gain an international point of view of school and teacher education in Germany, and interact with education experts and students from the IMPRESS partner network.

Academic Support

Prof. Dr. Axel Gehrmann, Dr. Frank Beier

IMPRESS

Maria Richter-Babekoff

↗ https://tu-dresden.de/zlsb/forschung-und-projekte/impRESS/lecture-series?set_language=en

Education for sustainable development in the tri-border area



Photo: Ulrike Lang

A contribution from teacher education

Education for sustainable development has many aspects: protection of the environment, social justice, economic equality, and cultural diversity. In winter semester 2021/22, students in teacher education degree programs at TU Dresden, Charles University in Prague and the University of Lower Silesia in Wrocław experienced and tried out how these and other topics can be prepared didactically in the workshop series “Dimensions of Teaching Sustainability”.

Tri-national groups

In German-Polish-Czech groups, the students developed innovative teaching/learning concepts for interdisciplinary lessons in primary, secondary and vocational schools. Lecturers with experience in education for sustainable development supervised the process of work on the didactic concepts concerning climate change and climate justice, consumerism, global health, educational equity and nutrition. The results therefore reflect the current academic and methodical state of the debate about education for sustainable development.

Integrating education for sustainable development into teacher education

With this course, the ZLSB contributes to the further integration of education for sustainable development into teacher education, thereby strengthening the inter-cultural competence of future teachers. The digital presentation of the teaching/learning concepts on December 11, 2021 raised the interest of members of the ZLSB's international IMPRESS network. Students, lecturers and the interested specialist public equally benefited from the insightful discussions. It is planned to continue the project in 2022, when the students will implement their concepts at schools in the region and the materials will be made available to teachers.

School Teacher in University Service

Ulrike Lang

➤ <https://tu-dresden.de/zlsb/forschung-und-projekte/impress/nachhaltigkeit-in-der-lehre>

Inter-cultural courses offered by IMPRESS

Inter-cultural sensitivity in teacher education

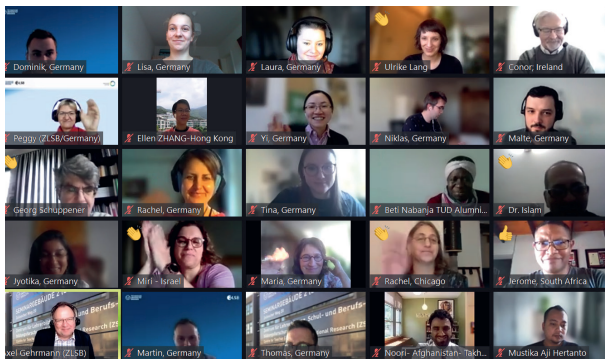
An essential objective of the IMPRESS project is to enable students in teacher education degree programs, by means of inter-cultural sensitivity, to consider diversity and heterogeneity in their work in the classrooms. Innovative inter-cultural workshops for future teaching staff were developed for this purpose in which the main topics are addressing different points of view and different education systems. The focus of these workshops is on study groups with international members and on the implementation by means of digital formats, making “Internationalization@home” possible.

The course “**Inter-cultural Awareness for Future Teachers**” has been designed to optimally prepare future teachers for critical situations in day-to-day school life. In the workshop, students in teacher education degree programs addressed important cultural factors and learned more about how they are shaped by their own culture. They considered selected aspects of other cultures, primarily in association with teaching and learning, and addressed differences in communication. One of the workshop sessions involved an inter-cultural exchange with students of Stellenbosch University. Together, the two student groups analyzed inter-cultural dialogs and critical incidents from the school milieu in order to develop awareness of cultural misunderstandings and acquire different options for taking action.

Another course offered by Stellenbosch University International and entitled “**Inter-cultural Competency Program**” (ICC) aimed to enrich the learning experience of the students by using this format to communicate inter-cultural knowledge and competences.

In addition, “**Inter-cultural Competence in Teaching**” (INTERACT) enabled an intensive examination of culture, the impact of cultural shaping on behavior and the importance of inter-cultural competence of teachers. The course consisted of a series of complementary modules which encouraged the students to think about the contents and apply them in situations relevant to school practice. The course participants worked in teams consisting of students of TU Dresden and students of international partners in order to ensure a maximum of interaction between the two universities and cultures.

➤ <https://tu-dresden.de/zlsb/forschung-und-projekte/impress/lehrveranstaltungen-von-impress>



Get-together at the end of the workshop series, ZLSB

International Workshop Series 2021/22

The New Normal – virtual international exchange between schools and universities

Global networking between schools and research institutions is more important than ever under pandemic conditions and the international network of the ZLSB is also dependent on this exchange and the encounters. In winter semester 2021/22, the IMPRESS project therefore organized the virtual workshop series *The New Normal: Challenges and Chances for Schools, Teachers and Students*.

Global Weirding

Human-Environment Estrangements in Literature, Art, and Theory

Until late 2021, IMPRESS supported teaching projects that integrate co-teaching and the virtual exchange with instructors and students at universities abroad in order to strengthen the international exchange in teacher education at TU Dresden. This was intended to foster cooperation between students in teacher education degree programs from different countries of origin, integrate international perspectives into teaching and promote inter-cultural, communicative and digital competences of students and teachers.

Cooperation with leading international researchers and authors

The seminar was offered as an international teaching tandem at the Institute of English and American Studies by Jun.-Prof. Dr. Moritz Ingwersen. Students in the teacher education degree programs attended the seminar in the context of their complementary studies. The course also included contributions by Dr. Alison Sperling (TU Berlin), an American expert in science fiction studies, and complemented by four public evening lectures by leading international researchers and authors in the field of environmental humanities. The objective of this course was to raise the students' awareness of the political, aesthetic and cultural dimensions of the climate crisis by taking a critical look at literary and artistic representations of the alienation between human beings and the environment.

Participants from the IMPRESS network

The event series brought together different actors of teacher education. Participants from Ireland, Poland, the Czech Republic, Slovakia, Israel, Jordan, South Africa, Uganda, Kenya, Hong Kong, Japan, Indonesia and the United States belonging to the international ZLSB network used the workshops as a platform to deliberate on current problems and solution approaches together.

Variety of topics offered

The topics of the individual workshops ranged from "Innovation through Collaboration" to "Innovative Approaches in Education: STEAM (STEM plus Art)" to trying out new tools, such as "SELFIE for TEACHERS" or "Working with MIRO Boards". Presentations were given by well-known experts, such as Kati Ahl, Uwe Brandenburg, Sachiko Nakajima as well as members of TU Dresden and the participants themselves.

Project IMPRESS

Maria Richter-Babekoff, Dr. Yi Li

➤ <https://tu-dresden.de/zlsb/forschung-und-projekte/impress/international-workshop-series-the-new-normal>

Photo: PantherMedia / AntonMatyukha



Teacher education students report on their experiences abroad as part of their degree programs



Photo: PantherMedia / yanlev

When is the best time during the teacher education degree program to go abroad? How can I find an internship at a school abroad? How can I fund my stay abroad? These are some of the questions most frequently asked to Study Counseling by students interested in mobility. The Academic Affairs Office for Teacher Training and the Student Mobility Coordinator within the IMPRESS project will be happy to assist you with information and counseling. Students can often get highly valuable hints from experienced fellow students who have already spent time abroad and can therefore provide first-hand information.

Podcast series “Going Abroad”

In the new podcast series “Going Abroad – students in teacher education degree programs talk about their experiences abroad” produced in the spring of 2021, students receive background information about various ways to gather international experience as teacher education students and are given hints for the planning of their own steps abroad. In the published interviews, students talk about their stays in France, South Africa, Japan, Denmark and Italy.

School internship in South Africa – Observing giraffes, lions and elephants on a safari

“I was surprised, in a positive way, how smoothly learning together went and that the differences were of much less importance than the things we shared. This enabled me to learn how successfully inter-cultural learning can work.”

Working as a foreign language assistant in France – from the collège to a city rally in a single day

“I can't imagine ever being able to gain more practical, methodical and didactic experience than as a foreign language assistant!”

School internship in Japan – class excursion to the United Nations University in Tokyo

“In many other degree programs it is a common thing to do now. And that's why I thought: why not also in a teacher education degree program, even if you're not studying a modern foreign language?”

Continuation of the series with a focus on mobility during the pandemic

Many roads lead abroad – whether in an Erasmus semester, as a foreign language assistant or in a school internship! The students report what is important for planning, how to make examinations taken abroad count towards your degree and all the exciting insights they have gained during their stay abroad. The publication of a second series of student experience reports with a focus on “international experiences during the pandemic” is planned for 2022.

Student Mobility Coordinator

Dr. Yi Li

➤ <https://tu-dresden.de/zlsb/lehramtsstudium/im-studium/auslandsaufenthalte/erfahrungen>

Digitalization



Photo: PantherMedia/ArturVerkhovetskiy

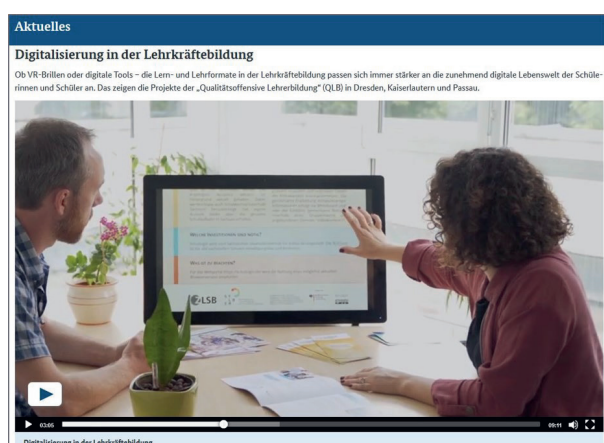
Coordination Office “Digitalization in Teacher Education”

The integration of the Coordination Office “Digitalization in Teacher Education” at the ZLSB in 2021 was the start of a realignment of the positioning of topics relating to digitalization. In order to pool the teacher education activities in this area within the university and make more targeted use of synergies, all digitalization projects at the ZLSB have been brought together in rooms on a dedicated floor in the university building in Ludwig-Er-mold-Str. 3.

This strengthens the close cooperation and networking between projects of the Quality Offensive in Teacher

Education (TUD-Sylber, PraxisdigitaliS), the digital support actors of BQL.Digital, the lateral entry program of TU Dresden, the Schullogin project on behalf of the Saxon State Ministry of Education, and the Saxon Education Server. The activities of the ZLSB in this area are structurally pooled in the new Digitalization Team. Weekly exchange meetings of the team strengthen the cooperation.

The Coordination Office acts as an element providing structures for the handling of digitalization in education as well as the resulting challenges and impacts. This is done accordingly across all phases, subjects and school types and along the entire teacher education chain. Its employees provide information and counseling to lecturers and students in teacher education, offer various learning options on digital media, and support the networking of the different actors across all phases with expert knowledge about teaching and learning in the context of digitalization. For instance, the learning options in 2021 reached a total of 475 participants in teacher education degree programs, lateral entry programs and continuing education.



Counseling situation at the Coordination Office “Digitalization in Teacher Education” of the ZLSB, Photo: [Federal Ministry of Education and Research](#)

Coordination Office “Digitalization in Teacher Education”

Sindy Riebeck, Fritz Hoffmann

➤ <https://tu-dresden.de/zlsb/dil>

PraxisdigitaliS

The objectives of the joint project “PraxisdigitaliS – Shaping Digital Practice in Saxony” of Leipzig University and TU Dresden, funded within the framework of the Quality Offensive in Teacher Education, are to sustainably establish and improve digitalization-related competences of (future) teachers. At TU Dresden, PraxisdigitaliS has two bases: one of them at the Chair of Didactics of Computer Science with the subproject “Digital Lehr@mt Lab”, and the other one at the ZLSB, integrated into the Coordination Office “Digitalization in Teacher Education” and the Digitalization Team.

Specialist meeting of the interdisciplinary cooperative project PraxisdigitaliS

In order to sustainably integrate digitalization-related competences into the teacher education degree programs in Saxony, PraxisdigitaliS is working across all locations on a corresponding concept as well as on the development and implementation of teaching/learning scenarios. This also includes testing your informatics agency in the “Teaching Lab” of Didactics of Computer Science (DDI), which was developed as a part of the project. At the online meeting “Digitalization in Teacher Education: Designing Digital Practice” in September 2021, the presenters discussed results from the sub-projects for the design of future lessons under digital conditions with participants from different areas of teacher education and training.

Cooperation and networking

In the joint project PraxisdigitaliS, TU Dresden cooperates with Leipzig University, taking various measures to establish and improve digitalization-related competences of (future) teachers. In the process, the project contributors regularly hold (virtual) meetings of the joint project and of the workgroups to discuss the results of their research and develop deliverables together.



Photo: PantherMedia / Artur Verkhovetskiy

PraxisdigitaliS specialist meeting

The multi-faceted topic of digitalization in teacher education has also brought together the project contributors with actors from different institutions and departments at specialist meetings and conferences, where they were given the opportunity to shed more light on the issue in jointly organized events that offered a variety of points of view. At the PraxisdigitaliS specialist meeting, for example, at which employees of the Center for Teacher Education and School Research (Leipzig University), the ZLSB's Digitalization Team and the State Office of Schooling and Education discussed with the participants how the practice of digitalization-related continuing education for universities and schools can be developed together to the benefit of all. In addition, PraxisdigitaliS contributed to the program workshop of the Quality Offensive in Teacher Education with their own symposium in June 2021. In combination with several individual presentations at the symposium on the PraxisdigitaliS measures and sub-projects about issues of sustainable implementation of digitalization-related competences into teacher education, the interconnection of digitalization and inclusion as central cross-cutting topics was addressed. Employees of the Coordination Office “Digitalization in Teacher Education”, of BQL.Digital and PraxisdigitaliS attended the Fall Academy of the State Office of Schooling and Education in November 2021 and offered a portfolio of joint continuing education events for teachers.

Digital media in school

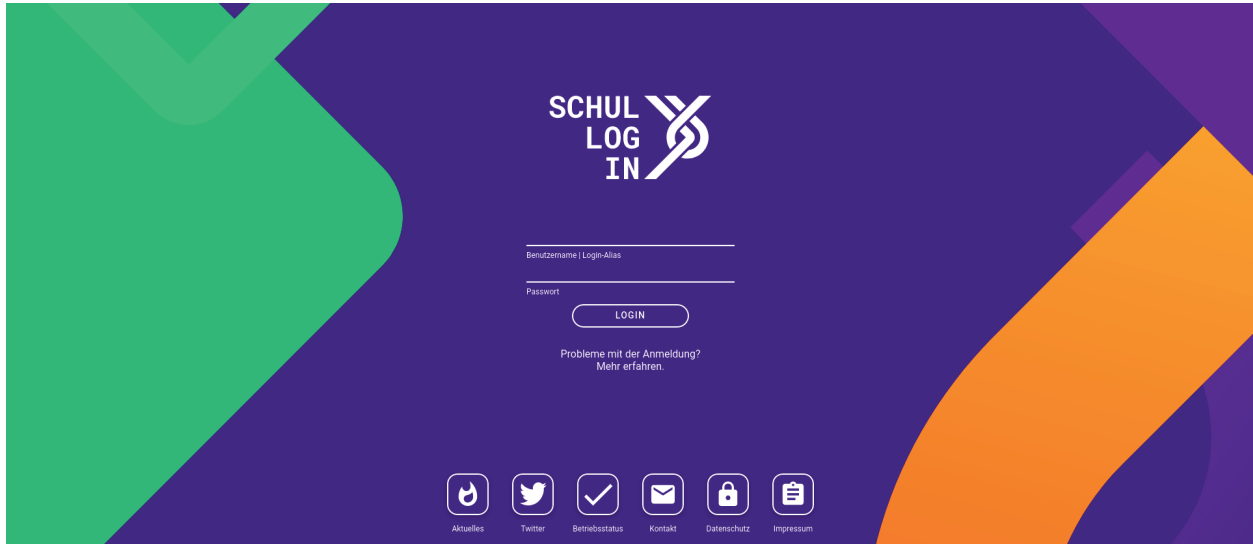
The module “Digital media in school” at Leipzig University, which was attended by students in teacher education degree programs of TU Dresden already in winter semester 2020/21, could be offered as a lecture with the same name within the framework of the complementary studies at TU Dresden in winter semester 2021/22, with a focus on its informatics-related dimension. In the context of the cooperation with Leipzig University, the course was initially offered in a hybrid format, with the students from Leipzig attending the course in person, while the students from Dresden attended virtually. Over the course of the semester, the lecture moved to the virtual space entirely due to the pandemic. The objective of the course is to communicate to the students which informatics-related competences will be required in their future work as teachers and how they can also teach them to their pupils.

Project Coordinator

Dr. Nicole Zabel

➤ <https://tu-dresden.de/zlsb/forschung-und-projekte/praxisdigitalis>

Schullogin – the access portal for web-based educational services at schools in Saxony



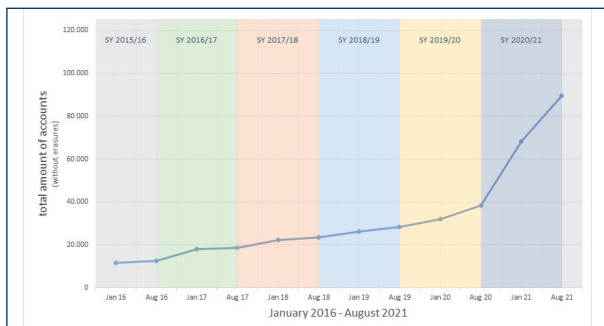
Login page www.schullogin.de, © Schullogin/ZLSB

Integration of digital media into day-to-day school life

Videoconferencing, cloud storage, learning management with LernSax, OPAL Schule and Moodle: How can schools in Saxony incorporate digital media into their daily lives in a useful and user-friendly way? The service “Schullogin” provides support: A single access point offers teachers, trainee teachers and pupils at schools in Saxony pooled access to the central digital services. Since January 1st, 2021 the continuous development of the statewide identity management system (IDM) Schullogin and the support of the ongoing productive operations has been handled by the ZLSB on behalf of the Saxon State Ministry of Education.

90,000 users

Schullogin is provided free of charge to all schools in Saxony. More than half of the around 38,000 teachers in Saxony already use Schullogin to access the videoconferencing service BigBlueButton, the cloud storage provider Nextcloud, and the OPAL Schule learning platform. As of late 2021, more than 90,000 personal Schullogin accounts were in use. This means that the number of users has almost tripled in only one and a half years.



Increase in created schullogin accounts over the school years, © ZLSB

Digital services for schools during the pandemic

The beginning of the year and the spring of 2021 in particular were marked by the pandemic and characterized by the cancellation of in-person lessons and learning from home. The use of digital platforms was a huge challenge also for pupils and teachers in Saxony during this time – especially concerning reliability, availability and support for the services. To support the schools with a capable system during the pandemic, additional resources of the ZIH data center of TU Dresden were allocated to Schullogin and a part of the services was migrated to scalable servers.

Heavy utilization of the videoconferencing service

Demand for the videoconferencing service BigBlueButton was particularly high. With more than 15,000 active users on average in video conferences at the same time (and peaks of more than 25,000), with high demand during the morning hours, Schullogin provides one of the most important digital services for the support of schools.

Pilot projects for the integration of Schullogin into teacher education

Familiarizing the students in teacher education degree programs with important digital applications used at the schools and with their didactic potential will also be a part of the preparation for school internships, preparatory service and their later work as teachers. TU Dresden offers a particular synergy potential in this context, since Schullogin is continuously developed and operated at the ZLSB. The Schullogin team based here supports schools starting to use Schullogin and offers associated continuing education courses via the State Office of Schooling and Education. In close cooperation

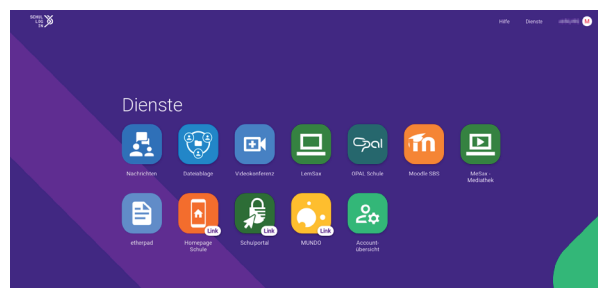
with the Coordination Office “Digitalization in Teacher Education” (TUD-Sylber?), initial ideas for the potential use of Schullogin within the framework of the teacher education degree programs were also developed and tried out in selected courses in the summer semester of 2021. For instance, students in teacher education degree programs got to know basic approaches to school development, organizational development, innovation and change processes in the applied seminar “Developing School Together”. Following an introductory session on Schullogin and the services integrated into it, the students receive a guest account and can experience the platform in the role of a teacher, try out different scenarios and derive suggestions for school development work.

Trial in school internships

Schullogin was also integrated into the preparation and organization of the school internships in the didactics for the subjects of physics and geography. In the context of a course, the student groups were introduced to the Schullogin service, objectives and potential uses were identified and instructions on the use of a personal guest account for the school internship were given. After logging in of the guest account, the students were able to use the integrated platforms and services for their work at the schools. A concluding discussion with the students based on a short list of questions followed after the school internships.

Contribution to the QLB programmatic conference

The pilot projects with Schullogin in the context of teacher education were presented at the programmatic workshop “Teacher Education after the Digital Turn Caused by the Pandemic” by the “Quality Offensive in



Start page of Schullogin after logging in, overview of the central digital services for schools (view for teachers/trainee teachers), © Schullogin/ZLSB

Teacher Education” on June 25th, 2021 and discussed with participants from all over Germany. The keynote presentation was held at the symposium on “Interconnection of Institutions and Phases in Times of Digital Transformation”.

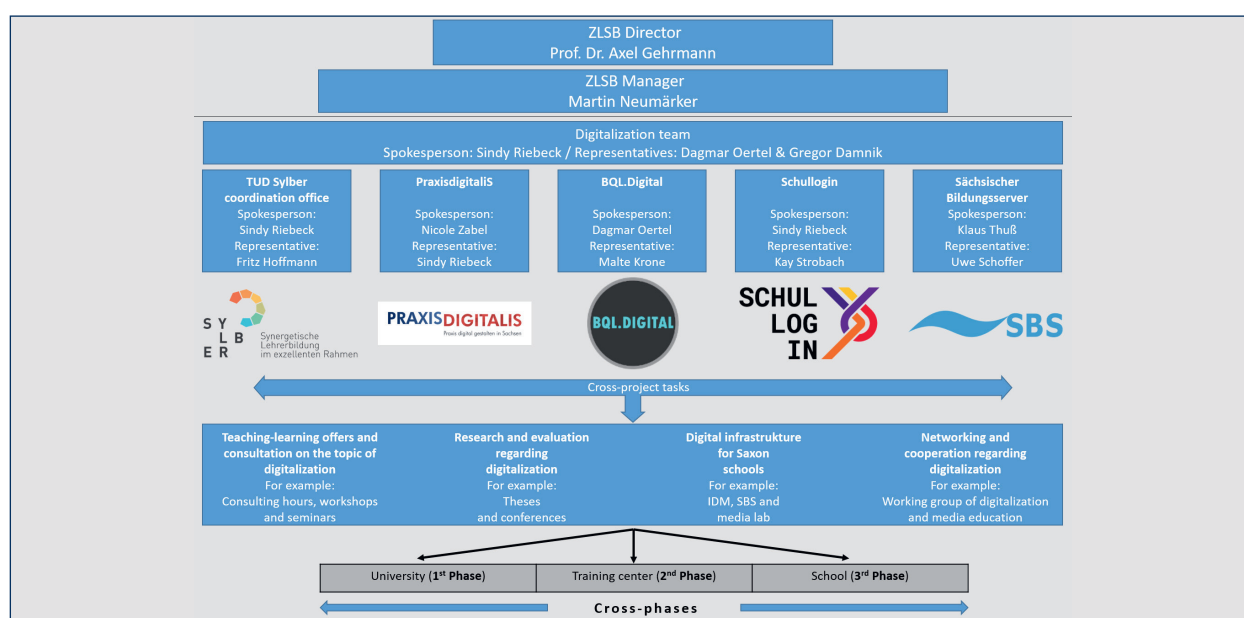
Additional pilot projects for the integration of Schullogin into teacher education are planned. Seminars or tutorials in both specialist didactics and the educational sciences or media education are suitable for this.

Project Coordinator

Sindy Riebeck

➤ <https://schullogin.de/>

➤ <https://tu-dresden.de/zlsb/forschung-und-projekte/schullogin>



Organization chart of the ZLSB's Digitalization Team, © ZLSB

Sächsischer Bildungsserver (Saxon Education Server)

Web page of the Saxon Education Server, © SBS

Joint project of the SMK and TUD

The 'Sächsische Bildungsserver' (Saxon Education Server, SBS) went online in 1996 as one of the first school-specific Internet services, being a joint project of the Saxon State Ministry of Education and TU Dresden. Since then, the services have been expanded continuously, always oriented towards the requirements of the schools. Since 2021, the Saxon Education Server has been based at the ZLSB.

Technological updates for school operation during the pandemic

In 2021, a particular focus of work was on technologically ensuring the availability of the services in existence at the schools. The technological infrastructure of the Saxon Education Server was almost doubled for this purpose in the first quarter of 2021, ensuring smooth operation also under increased access loads.

Identity management with SchullogIn

The learning platform Moodle, which is provided by the SBS, is becoming more and more popular. The very easy access via the identity management system SchullogIn integrated into the SBS means that the teachers in the schools do not have to worry about additional user administration. Providing support for the creation of dedicated course spaces, the use of dedicated school instances, and the integration of the mobile app Moodle marked the work in 2021 and will continue to do so in 2022.

Update of the homepage design kit

Another focus in 2021 was and continues to be the update of the homepage design kit (school CMS based

on TYPO3). An update of the software is provided. This is accompanied by adjustments of the design and an expansion of the functionality. In the near future, it will be possible to provide the more than 400 websites of schools in Saxony which are created and published in this way with a modern and functional interface.

Support for the new Learning Map Saxony

Places of learning outside of schools are utilized too infrequently in many cases. In order to make it easier for teachers to find proper places of learning outside of school, but as close by as possible, a large quantity of data was collected and visualized in the TUD-Sylber project "Places of learning outside of schools in the learning landscape of Saxony".

The technical platform was made available and is managed by the SBS. The service will also be promoted more intensively via the web pages of the SBS in 2022.

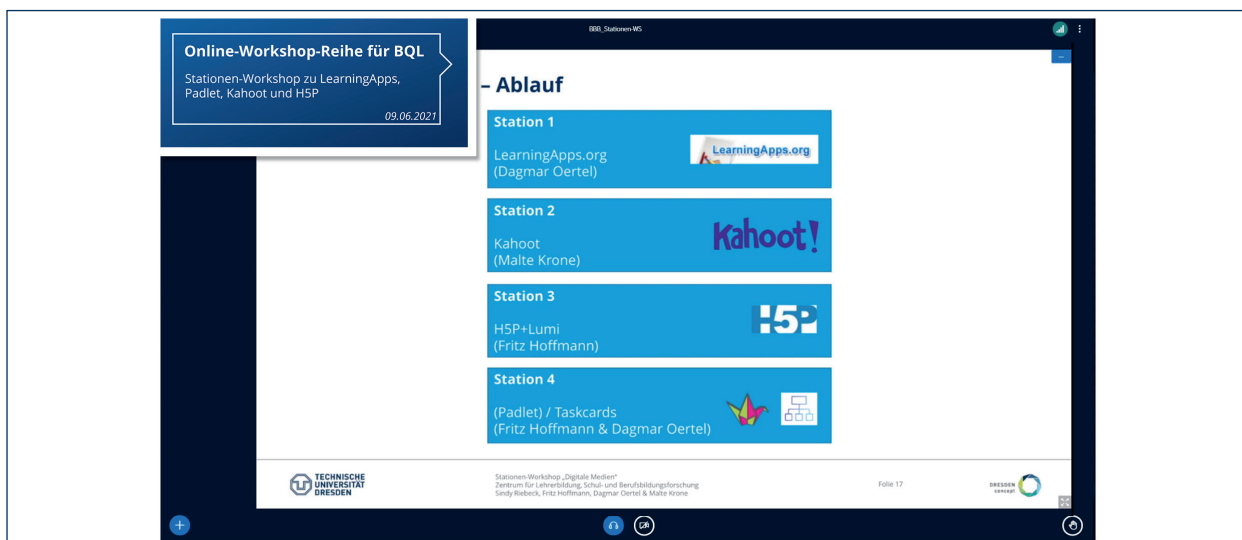
↗ <https://lernorte.sachsen.schule>

Contributors

Maik Oemisch, Robert Püschner, Uwe Schoffer, Klaus Thuß

For further information about the SBS and the services offered please refer to:

↗ <https://www.sachsen.schule>



Stations workshop: Digital tools (LearningApps, Padlet, Kahoot! and H5P) for use in school, © Malte Krone

Since 2018, “BQL.Digital” has been a central online service for the participants in the second-career qualification of teachers (BQL) at the ZLSB. Information about the lateral entry programs as well as numerous learning options for the use of digital media in school lessons can be found there. Support for digitalization topics is provided to continuing education participants and instructors by e-mail, over the phone, during online consultation hours tailored to demand or directly in the context of courses.

Synchronous and asynchronous digital services

The blended learning contents of TUD's own learning platform OPAL developed in 2020 could be complemented by further learning modules for digital tools and software solutions for teaching in schools. These include “H5P/Lumi”, “Learning Snacks” and “Miro”, among others.

Online workshop series for students and qualification participants

In the “Online Workshop Series for BQL” held from May 12 to July 13, 2021, BQL.Digital together with further actors of TU Dresden communicated digital topics to more than 70 continuing education participants and students in basic teacher education degree programs. In addition to the learning modules, this included Schullogin, BigBlueButton as well as copyright and data protection.

Within the scope of the “Online Symposium Bremen” on November 4, 2021, Fritz Hoffmann (Coordination Office “Digitalization in Teacher Education”), Malte Krone (Coordination of digital services in lateral entry program) of the ZLSB and future teachers presented a forum on the topic of “Digital teaching/learning formats

for learning with digital media in all three phases of teacher training”. They presented their experience gained during the workshop series to a large audience. They also presented results of the evaluation study on the topic “Teaching, learning, examinations and support in digital teaching in the lateral entry program for primary schools”. An exchange on perspective in the three phases of teacher training took place over the further course. Potential services and offers, challenges and solution approaches were also conceptualized.

New rooms – new media lab

The geographical proximity of the ZLSB's actors dealing with the issue of digitalization is particularly beneficial to the continuous exchange and the joint development of project ideas. A first joint activity is the establishment of a media lab in cooperation with the Coordination Office “Digitalization in Teacher Education”, BQL.Digital and other actors. It will enable the recording and editing of videos in the context of events for BQL, for teacher education, for internal projects of the ZLSB and for continuing education courses.

The technical equipment for lighting, audio and video recording as well storage required for this purpose will be purchased progressively. The establishment of the media lab with projection screens and work options as well as the expansion of the technical equipment are planned for 2022.

Research Associates

Malte Krone, Dr. Stephan Bloße

↗ <https://tu-dresden.de/zlsb/fort-weiterbildung/Seiteneinstieg/bql-digital>

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Photo: PantherMedia / stokkete

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