

**2022 Annual Report
of the Center for
Teacher Education
and Educational
Research (ZLSB)**

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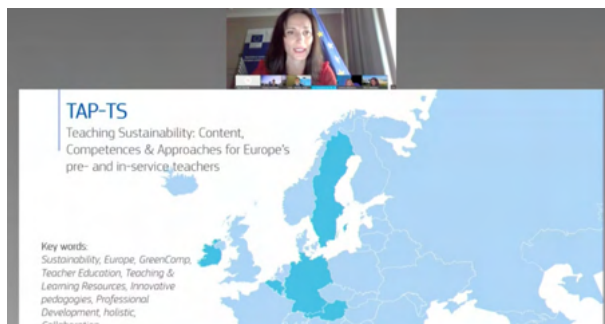
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Dear Readers,



9:6:0 would be the story if I did not include this very photo in the editorial at the beginning of this year's ZLSB Annual Report. It shows Mariya Gabriel, the European Commissioner for Innovation, Research, Culture, Education and Youth at a video conference the ZLSB participated in on February 21, 2022 at 10:00 am. In the moment this photo was taken, she digitally announced the eleven Teacher Academies that are being created by the European Union and, for the first time, financially supported in order to advance teacher education from 2023 to 2025. The ZLSB was one of three institutions selected in Germany and, as a result, one of the first eleven in Europe.

In fact, however, due to this photo, it should be 9:6:1. That is because for me, the numbers are not a kind of extended goal ratio in this year's soccer matches, but the number of photos with digital embedding from video sessions via Zoom, BigBlueButton or WebEx that appeared in the ZLSB's annual reports in 2020, 2021, and 2022. By this, I want to say that in 2022, we returned to the old standard of in-person events and everyday life after the peak of the COVID-19 pandemic. We were back in our offices and photos from digital spaces are disappearing from the following 50 pages of our annual report. Of course, we have been talking about the "new normal" since 2022, and not without reason. It is not just at the university that in-person and digital formats have been brought into the workplace and work is either done remotely or on site, as needed.

Nevertheless, a lot has changed due to covid. Students remained strangers in their first encounters, because social contacts were missing for many months. In-person relationships with our regional and international partners needed to be revived. After all, we as employees at the ZLSB were also getting reacquainted with seeing each other again outside the computer monitor after many months. In 2022, we have mastered all these new hurdles and have since been able to handle a wide range of formats, digital and in person, or even a combination of the two. In 2022, TEACHERMANIA was the central event for establishing new relationships and reviving old connections in a regional context. The first festival for teacher education at the TUD Dresden University of Technology was intended to strengthen the identity of

local students and, at the same time, to bring local players in conversation with each other about the phases of teacher education in a relaxed atmosphere. The lively participation showed us that we took the right path here. Information, music, dance, beer, and wine also serve as a form of connection in teacher education...

Thinking of teacher education as a service to the local community or as a responsibility in the national context, as well as developing internationality, is by now part of the ZLSB's DNA, just like it is at a lot of other centers in Germany. In this respect, in 2022, we were also active in both national and international contexts. For example, we received a wide range of inquiries, such as on lateral entry into the teaching profession or on the topic of teacher training. The need to see best practices is constantly increasing, because schools' demand for replacement teachers is obviously not becoming smaller. As a result, positive examples are being sought everywhere, such as our Berufsbegleitende Qualifizierung von Lehrkräften [Second Career Qualification of Teachers] (abbreviated as BQL in German) program for lateral entrants into the teaching profession. Unions made inquiries, as did the media, the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany, and the Standing Scientific Commission of the Standing Conference of the Ministers of Education and Cultural Affairs. In this way, we are promoting the TUD, the Free State of Saxony, and the ZLSB.

As I already mentioned, the photo with EU Commissioner Gabriel has become and remained very symbolic for us in the international context of the ZLSB over the year. It marks what is almost the end of our total digital presence online, and at the same time, shows us that we have developed a new international project context, which we are establishing under the heading of Bildung für nachhaltige Entwicklung - education for sustainable development. Fifty-six applications were received in Brussels and eleven were accepted. Three of these applications that received positive evaluations came from Germany, and one of those was from us in Saxony. This just goes to show that teacher education is continuing to internationalize, and we are working on a project that will connect phases and content as well as the people who care about the next generation and are trying to meet it with their eyes wide open.

Prof. Dr. Axel Gehrmann
Managing Director of the ZLSB



Photo: Lassig

Report from the Head Office

TEACHERMANIA: The First Teacher Education Festival at the TUD

The pandemic has greatly changed the way we study. Support structures also had to adapt to the new situation. During the transition to the endemic phase, the question arose as to how to get the students back to campus and help them get to know and be comfortable with their fellow students, lecturers, and other staff members at the university. This is important, as, over the past two years, they had hardly had the chance to get to know each other in person. At the same time, teacher education students should also find common ground as a group and strengthen their identities as aspiring teachers. Although they represent the largest group of students at the TUD, in everyday life, they usually study in significantly smaller groups within the faculties. There are usually only a few opportunities for them to meet. These opportunities are also usually limited to the large, compulsory lectures on the educational sciences. The ZLSB addressed the need to promote networking and inter-group exchange at the first teaching festival, TEACHERMANIA, on June 2, 2022. By doing so, they helped to revive campus life for teacher education students and faculty. At the same time, many players from the three phases of teacher education were involved. The festival was not intended to be a mere information event, but rather offer teacher education students from all semesters, subjects, and subject combinations the opportunity to finally experience social togetherness again and to bring life back to campus. The format was a great success, also thanks to the generous support of its sponsors, and will be continued in the future.

Teachers on a Secondment

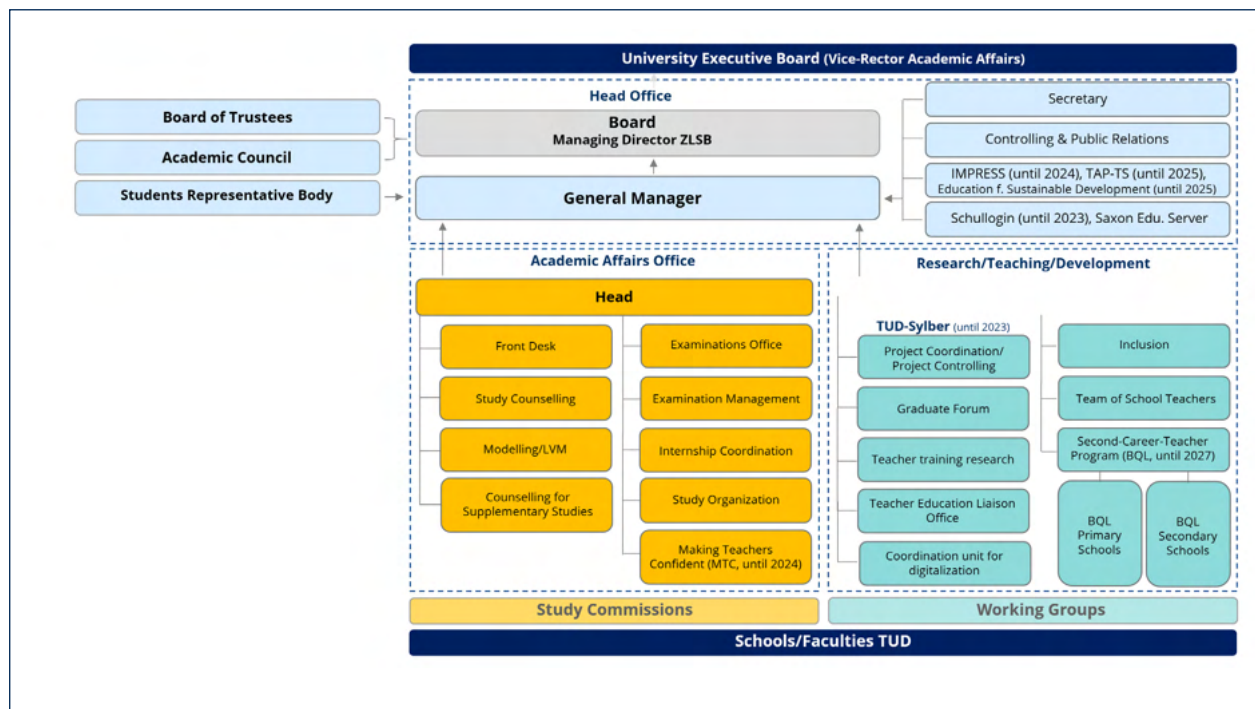
At the end of the school year, we said goodbye to seven members of our team, just under half of all of the school teachers who were on a secondment to our team. On average, they spent five years teaching and researching at the ZLSB and their chairs. The colleagues are taking on positions in the Saxon State Ministry of Education and Culture, as principals, or will continue to be fully involved in research and teaching at the university level. In addition to supporting the placement of teacher education students at schools to gain practical experience and the interplay between theory and practice in subject didactics and the teaching of educational sciences, one of their tasks was to also earn further qualifications. During their secondments, four teachers received their doctorates on topics related to schools or teaching. They benefited from constant support from the Graduate Forum, which was established within the framework of TUD-Sylber. At the beginning, the focus is on an introduction to the methods of empirical education research. Later, they use the opportunity for interdisciplinary exchange in research colloquia and workshops.

The Internationalization of Teacher Education

After virtual exchanges had dominated in previous years, 2022 was the first year in which students could once again spend time at partner universities and schools. The students benefited from the close network that emerged with IMPRESS. In 2023 and 2024, IMPRESS will also continue to receive support via the Lehramt.International line of funding. In those years, the focus on student mobility, which was hit particularly

Photo: © ZLSB, Robert Lohse





Organizational chart of the ZLSB (last update: 06/01/2023), © ZLSB

hard by the effects of the pandemic, will be even stronger. In addition, our internationalization team received a mid-year expansion through the Teacher Academy Project – Teaching Sustainability (TAP-TS). TAP-TS is one of eleven European projects run by the Erasmus+ Teacher Academies, funded by the EU Commission from June 2022 until May 2025. The project aims to strengthen the competences of school teachers and teacher education students at primary and secondary school levels on the topic of teaching sustainability. As a lead partner, the ZLSB is assuming the role of project coordination. In October 5-7, 2022, the project partners from seven EU countries were invited to Dresden for the first time for the Project Planning and Partnership Meeting.

The ZLSB's Board of Directors

On March 1, 2022, Prof. Birte Platow, Professor of Religious Education, took over Prof. Uwe Israel's position and has since been a member of the board. We would like to thank Prof. Israel for his dedicated work on the board. At the same time, the board of directors re-allocated its responsibilities. Prof. Gehrmann will continue to act as Managing Director and will manage the acquired projects. Prof. Hoffkamp is the Deputy Managing Director and also responsible for the group of school teachers on secondments. Prof. Platow is working in the context of education for sustainable development and internationalization. Prof. Niethammer is responsible for matters relating to the degree program and project management for TUD-Sylber-BBS.

Academic Advisory Council and Board of Trustees

The new term of office for the academic advisory council began in the summer semester of 2022. Prof. Wieser handed over the leadership to Prof. Raschke. The ZLSB

would like to thank Prof. Raschke for her willingness to take over the position and also Prof. Wieser and Prof. Hoffkamp for the work they did during the previous term of office. Prof. Wieser will also continue to serve as a representative on the council. In the new term of office, the council will focus on dealing with the results of a student survey, the lack of coherence in degree programs that became apparent through the survey, and the acquisition of new inter-faculty projects after TUD-Sylber ends.

The board of trustees advises the ZLSB regarding the fulfillment of its tasks, especially in the networking of teacher education with players in the field of education in the region. At its meeting on November 11, 2022, the board of trustees supported the TUD's intensive and noteworthy activities. The quality management, ZLSB's integrated empirical research, the continuous acquisition of projects, and the introduction of a time slot model all enable important contributions to the further development of academic-based teacher education across all phases, and contribute to student success. The increased attention afforded simultaneously to both cross-cutting issues and to further and continuing education for teachers was expressly welcomed.

General Manager

Martin Neumärker

➤ [ZLSB Management](#)

The Highest Number of Teacher Education Students at the TUD in 15 years

In view of the high need for replacement teachers at Saxony's schools, the number of teacher education (TE) students, especially those enrolling in freshman courses, is becoming the focus of political action. Expectations placed on the universities are high, and as many fully qualified graduates as possible should fill the numerous vacancies in the schools. Looking back over the past 22 years, enrollment in TE programs at the TUD has shown impressive momentum. The constant ups and downs reflect the consequences of policy decisions more than in other degree programs at universities, but they cannot be explained solely by them.

Growth, Decline, and Reforms

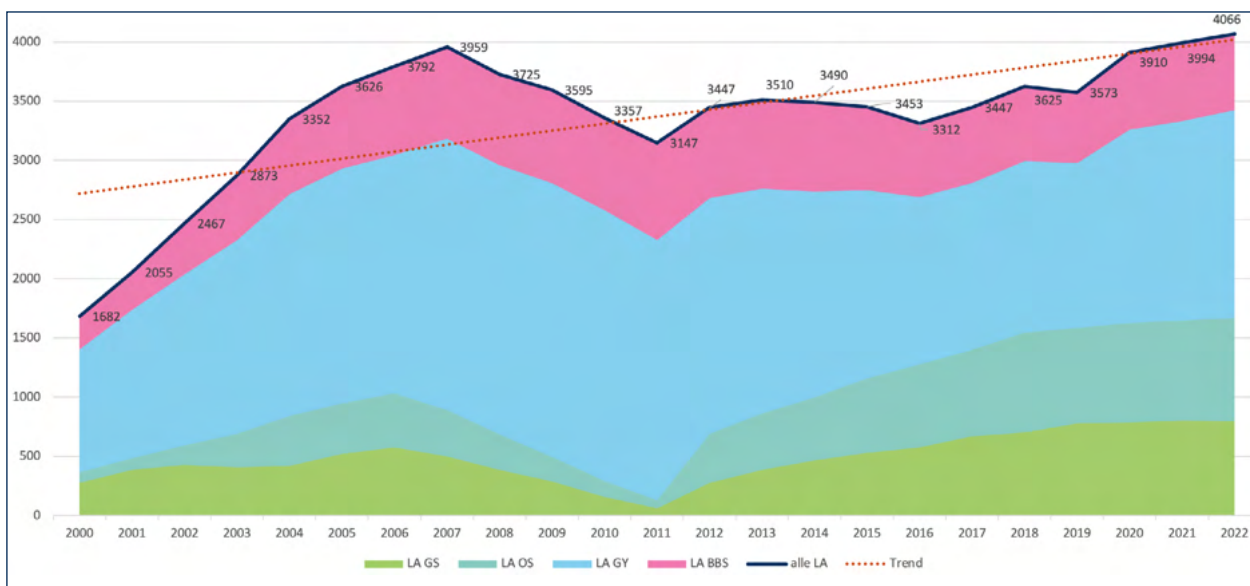
Since 2000, the number of teaching students at the TUD has grown considerably. After peaking in 2007, the number of students declined significantly. As part of the implementation of the Bologna reforms, the new Saxon model of TE and higher education development planning meant that the two master's degree programs, for Primary Schools and Secondary Schools, were offered exclusively in Leipzig by 2010. For the TUD, this was accompanied by a massive reduction in capacity, which is also reflected in freshman enrollment. At the same time as the supply shortage, Saxony recorded having half as many high school graduates with university entrance qualifications as in the past (2000: 15,480, 2010: 6,916). The trend reversal in TE was achieved by the reintroduction of the TE programs for Primary Schools and Secondary Schools.

Trend Reversal since 2012

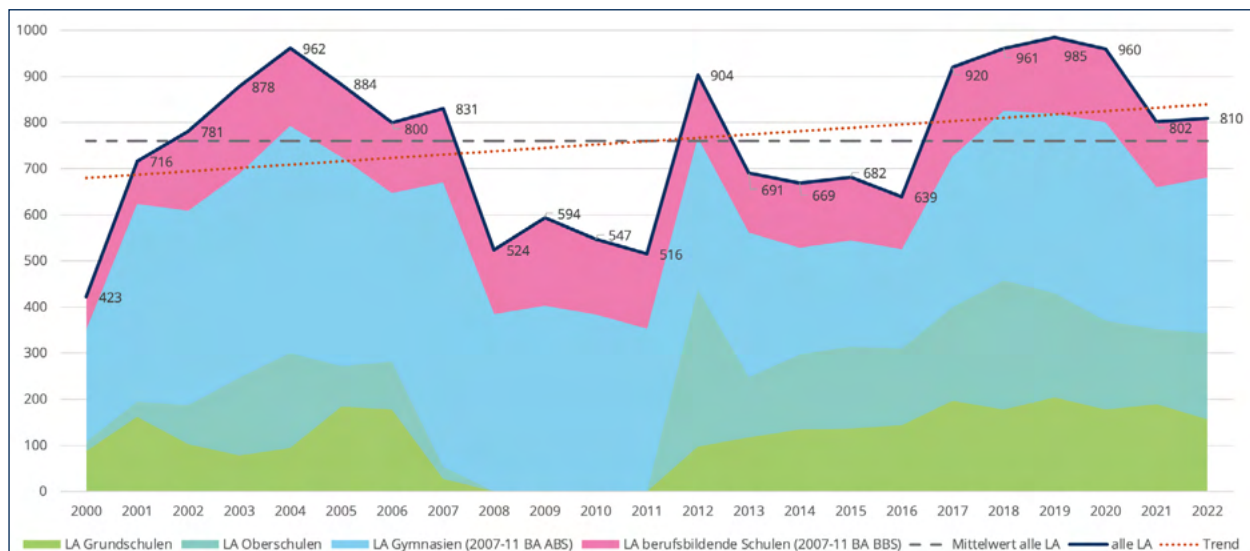
In the face of the increasingly imminent shortage of teachers, in 2010, the cabinet decided to reform TE (state examination). For the first time, the ministries

also agreed on target figures (650 students enrolled in all four degree programs) with the university, which were gradually increased (2016: 785, 2021: 890). Increasingly, the political focus has been placed on meeting the needs in certain types of and subjects for TE, which the TUD cannot meet in all cases. With the re-introduction of TE for Primary and Secondary Schools, freshman enrollment in teacher training has recovered more strongly than the number of individuals who received university entrance qualifications in the same period, which has stabilized at approximately 10,000.

The proportion of students in different study programs has changed only slightly since 2000. Nevertheless, it is clear that the proportion of students for Grammar Schools has decreased slightly in favor for Primary and Secondary Schools, where the need in schools is greater. Student numbers for Primary and Secondary Schools have been shown better development since 2012 than they did in the first decade of the 21st century. Therefore, the reintroduction is considered a great success. Nevertheless, ten years of growth were necessary for the total number of students in TE to reach the 2007 level again. The number of students in TE increased, in contrast to the general trend. TE students now make the largest group of first-semester students at the TUD (12%). All TE students in all semesters comprise the largest cohort of all students at the TUD (14%). The growth in TE for Primary Schools has slowed down since 2018, due to the limited number of places available in the degree program. The target numbers have been met consistently since 2012. The same can be observed in the TE program for Secondary Schools, although almost all restrictions were lifted there and therefore, all students were admitted. Here,



Enrollment in teacher education since the year 2000 (as of: 02/17/2023), © ZLSB



Enrollment in the first semester of teacher education since the year 2000 (as of: 02/17/2023), © ZLSB

unlike in the TE program for Primary Schools, where the continued high demand has led to higher minimum requirements for admission, a growth limit appears to have been reached. Higher target numbers do not lead to more students.

The Increased Attractiveness of TE for Grammar Schools

The TE program for Grammar Schools is generally more attractive for applicants to the university. Over the past 20 years, it has had the greatest number of applicants and students enrolled in the program by far. The reason for this is the applicants' own biographical connection with this type of school, but also a more objective as well as subjective attractiveness (status, perception in the public and one's own environment, etc.). The majority of those interested in TE for secondary education choose TE for Grammar Schools (e.g., English: In 2022, after passing the language test, 89 students chose Grammar Schools and only 11 students chose Secondary Schools).

Management Challenges

The universities can take action by managing enrollment, in that they reduce the capacity in favor for Secondary Schools, as opposed to Grammar Schools. A corresponding "redirection" of applicant will take place, but also leads to dissatisfaction among students. Especially among students for the Secondary Schools, there is a large percentage who would have preferred another teaching course (Primary: 53.6%, Grammar: 41.6%; ZLSB 2020 - Reasons for Choice of Studies). The overall picture shows that TE for Secondary Schools benefits in terms of enrollment whenever the general demand for teaching places is high (e.g., 2004, 2012, 2018, 2019). When looking at teacher training for both types of secondary schools, the TUD has, over the last ten years, almost always met the target figures.

Major Differences in TE for Vocational Schools

The TUD is the largest institute for TE for vocational schools in Germany. Most of the enrollments are in people-oriented services (health and nursing, food and nutritional science and domestic science, social pedagogics). These students represent the majority of those enrolled. There are fewer students in the industrial and technical fields. The situation remains unchanged. The professions associated with people-oriented services have comparatively higher numbers of apprentices. A move to TE for vocational education is attractive, as it is associated with clear occupational-biographical advancement. In contrast, the technical and industrial professions are in strong competition with trades and engineering study programs. In addition, in connection with vocational training, the length of training for TE for Vocational Schools is the longest of all TE programs (nine to ten years).

Stable Enrollment Numbers with a Positive Trend

Nevertheless, the number of students enrolled in the Vocational Schools program at the TUD is stable and ranges from 110 to 190 freshmen per year. On average, 150 students start each year. The trend has been slightly increasing since 2000. However, since 2016, the target numbers have been steadily and noticeably moving away from the average (2012: 204, 2016: 210, 2021: 240). Here, too, higher target numbers do not automatically lead to more students. Without the introduction of further subject areas with high student potential, the target numbers of more than 200 freshmen per year cannot be reached. Further contributions can be made by maintaining amplified advertising campaigns and continuing projects to tap into more student groups (e.g., OptLA).

General Manager

Martin Neumärker

Academic Affairs Office for Teacher Training



Photo: Steffen Schreiber

Return to Life on Campus

Back to Being Here in Person for the Teacher Education Students!

After two years of almost continuous support and advising by telephone and in writing, the Academic Affairs Office for Teacher Training reopened its doors for students on April 1, 2022. As a result, the tried and tested concept of front desk and back office (supplementary studies, internship coordination, examination office, and study counseling), introduced within the framework of teacher education, is back in full effect. Having said this, it turned out that in the summer semester, the personal consultation hours were increasingly used again, but at the same time, the number of inquiries from prospective and current students by phone and in writing remained very high.



The Academic Affairs Office for Teacher Training opens its doors, © ZLSB

Teacher Education is Once Again the Largest Group of Students at the TUD

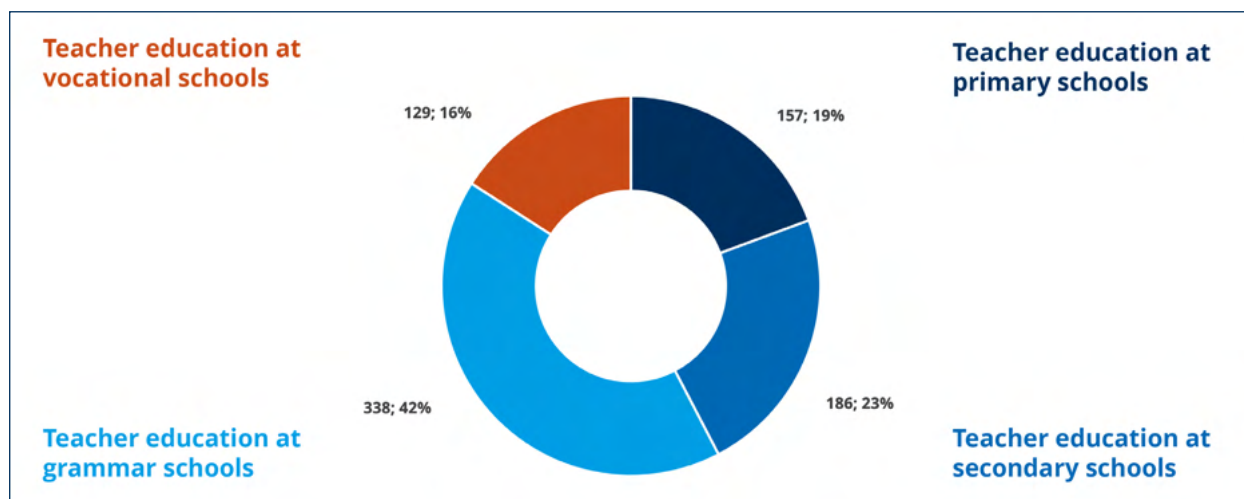
As mentioned in the previous entry, in the winter semester 2022/23, 4,066 of the overall 29,166 students at the university were enrolled in the four teacher education programs. This means that all of the teacher education students together make up almost 14% of all students of the TUD. Of the 6,723 freshmen enrolled at the university, 810 were teacher education students. These 12% of TU freshmen are distributed across the teaching programs as follows: Teacher education for Gymnasium [grammar school] had the highest number of freshmen at 338, followed by teacher education for Oberschule [career prep oriented high school] at 186 and teacher education for Grundschule [primary school] at 157. 129 new students were welcomed in teacher education for BBS, or vocational schools.

The Most Popular Subjects and Disciplines

Across all subjects and semesters of study, the most studied subject is German, with a total of 1,400 students enrolled. This is followed by the subjects history, geography, mathematics, and English, with nearly 700 students. The most frequently chosen subjects in the vocational education program are health and nursing, with 271 students, and social pedagogics, with 184 students.

Freshman Welcome at the Hörsaalzentrum Building

The freshman event for all newly enrolled teacher education students for the 2022/23 winter semester took place on October 4, 2022. For the first time in two



Freshmen in teacher education programs in winter semester 2022/23 (as of: 12/01/2022, university statistics from the TUD) © ZLSB

years, it took place in person in the Audimax auditorium in the Hörsaalzentrum building. Approximately 700 of the 810 freshmen students took part in the event. After introductory words from Prof. Wustmann, Dean of the Faculty of Education, and Prof. Gehrman, Managing Director of the ZLSB, students received important information from the academic affairs office staff to make the start of their studies at the TUD easier.

The focus was on advice on how to use important sources of information and how students can find their way during their studies. Furthermore, support services were also presented, such as the additional tutorials for creating class schedules from the MTC@TUD project. Information on the registration for language courses via TUDIAS, relevant deadlines, and rules for examinations in the first semester of studies was also presented. With the support of the two faculty students' councils for general education and vocational education, as well as other players in teacher education, the popular gift bags given out at the start of university were distributed to the freshman education students. In addition, the academic affairs office organized an information fair on the ground floor of the Hörsaalzentrum building, where the two faculty students' councils were also represented.



Photo: PantherMedia / Freeograph

Graduation Ceremony for Teacher Education Graduates with Special Honors

Like in previous semesters, in summer 2022, the festive graduation ceremony for the teacher education graduates in general education (Grundschule, Oberschule, and Gymnasium) was organized by the faculty students' council for general education. On July 29, 2022, 100 of the 180 graduates from the programs in general education were gathered in the Audimax auditorium.



A celebratory graduation ceremony in the Audimax auditorium © FSR ABS

The diplomas were presented by employees of the State Office for Schooling and Education. A speech was given by Prof. Platow, who is a member of the board, and further congratulations were conveyed by Prof. Lasch. For the first time, the Sächsische Lehrerverband [Saxon Association of Teachers] (SLV) presented a prize for outstanding academic work by a graduate.

Head of the Academic Affairs Office for Teacher Education

Juliane Sichler

➤ [More information on studying teacher education](#)

On the Path toward Studying without Course Overlapping

Development of an Overlap-free Time Slot Model

In order to avoid overlapping courses, Prof. Alexander Kreuzer was commissioned to advise the ZLSB in this undertaking. Prof. Kreuzer is a professor of mathematics at the University of Hamburg and a recognized expert in the field of geometry. He is supporting the TUD-Sylber sub-project “Freedom of Overlapping and Student Communication” and is working out a time slot model for studying teacher education at the TUD without overlapping. The first step was a mathematical calculation by Prof. Kreuzer on the basis of the number of students and the chosen subject combinations for all subjects and subjects in the teacher education programs. The results of this calculation were then used as a basis for creating subject groups and an algorithm for optimizing the course times. Prof. Kreuzer was provided with the data required for this by the ZLSB.

Needs Assessment of the Subjects

In order to involve all players in the teacher education programs at TUD in the planning of the needs analysis, a second advisory board meeting on overlap-free studying in teacher education was held on May 2, 2022. Attendees included the vice-rector of academic affairs, the members of the respective faculties, staff from central space and schedule planning, student representatives, and representatives from the ZLSB. Following the meeting, on May 6, 2022, the needs inquiry was sent to all faculties via the vice-rector of academic affairs. This inquiry primarily collected information on required courses, traditional events, required laboratory and workshop times, and other specifics related to the subjects and areas of specialty. After the return of the vast amount of data, Prof. Kreuzer was able to carry out a detailed optimization of the course planning for the subjects/areas of specialty/areas of study and prepare a first draft for the time slot model for all disciplines, subjects, and areas of study of the teacher education degree programs by the end of June 2022. The sponsoring faculties then received the first draft of schedules corresponding to their subjects, areas of specialty, and educational sciences with the specific time slots of the first draft. The faculties were asked to check whether the specified time slots could be implemented in the course planning for their responsible faculty and institutes. In addition, discussions were held by the Academic Affairs Office for Teacher Training with the central space and schedule planning as well as the schedule planners in the faculties to discuss further details.

Close Cooperation and Coordination with Professor Kreuzer

On September 7, 2022, during a visit to the TUD, Prof. Kreuzer and representatives of the ZLSB were able to clarify specific questions from the faculties in a personal



Photo: PantherMedia / Phovoi R.

on-site meeting and to reach more detailed agreements on the planned time slot model and further proceedings. On September 21, 2022, he also participated in the third advisory board meeting with all of the representatives from the faculties. This meeting served as an exchange on the first draft of the time slot model and provided an initial overview of the collected feedback from the faculties. Prof. Kreuzer answered questions from the representatives and collected feedback for the further adaptation of the time slots. Prof. Kreuzer had developed a second draft of the model by the end of 2022. It is now complete, with the final changes made at the beginning of 2023.

Further Action

At its meeting on April 12, 2023, the senate of the TUD decided to introduce the time slot model for the non-overlapping planning of teaching in the teacher education degree programs. This decision is the basis for introducing the time slot model for all of the teacher education faculties during the winter semester 2023/24. The model developed should enable students to study seamlessly and without any overlap within the standard period of study, while giving all of the participants long-term planning security in teaching organization.

Head of the Academic Affairs Office for Teacher Education

Juliane Sichler

Course Manager

Christine Hähnliche

➤ [More information on overlap-free studying](#)

Academic Success in Teacher Education



The teacher education festival TEACHERMANIA © ZLSB, Robert Lohse

Support for Teacher Education Students at the TUD (MTC@TUD)

Since the end of 2017, the Making Teachers Confident (MTC@TUD) program has supported TUD's teacher education students, from the start of their studies to the transition into their future careers, and to further their personal development. By providing needs-based support, MTC@TUD aims to positively influence and increase the overall success of teacher education students. The focus is on the active support and transparent design of the transitions between school and university as well as between the university and future careers. That is why the orientation tutorials for the start of the semester were extremely important. A total of 36 courses on creating course schedules as well as 26 guided tours of campus ensured that the majority of freshmen had an informative and positive beginning to their studies and that they already had a chance to network with their fellow students.

TEACHERMANIA: Networking and Exchange for Teacher Education Students at TUD

The popular 'What the Stex? What the Ref?' event series again helped students with the transition into their future careers. In 2022, for the first time, it was integrated into TEACHERMANIA, the teaching festival at the TUD. The development of this event aimed first and foremost to also reach those students in the middle of their studies and connect them to the ZLSB, since this target group is more difficult to reach. In addition, MTC@TUD has taken up the efforts of the Vice-Rector University Culture to promote networking and cross-group exchange, and has helped to enliven campus life for the students and faculty once again. The pilot event had the motto the three phases of teacher education (studies, preparatory service, and further education). On June 2 at Weberplatz square, around 1,000 students, lateral entrants, and teachers from all, programs and subjects took part in the 22 workshop offerings and possibilities to exchange ideas on topics such as civil service and school law, conflict management, digitalization, and

teacher health. During the breaks, many guests visited the booths at the information fair, including the State Office for Schooling and Education, the Academic Affairs Office for Teacher Training, and the Teaching-Learning Room 'Inclusion'. They also enjoyed the musical stage performances and culinary offerings. The consistently positive feedback from the participants as well as many inquiries from lecturers means TEACHERMANIA will be hosted again in June 2023.

Orientation Platform Research & Practice (OPF)

Since 2019, the Orientation Platform Research & Practice (OPF) project for student success has been offering insights into professional practice in teacher education. In 2022, a new project film was created, which provides an insight into the OPF's various offerings and events. In addition, in the summer semester of 2022, together with the Duden Institute, the vocational field of learning therapy was highlighted. In addition to OPF's popular all-you-can-ask format, a field trip took place to the Duden Institute in Dresden, where all of available places were taken. During the study day about learning therapy, students had the opportunity to attend several information events on topics such as dyslexia and dyscalculia. A total of more than 170 students took part. Of those, about 100 passed an examination. It was another successful year for the Orientation Platform Research & Practice.

Project Coordination

Anja Schanze, Mathis Heinig

➤ [Making Teachers Confident Project](#)

➤ [Orientation Platform Research & Practice](#)

Research and Development



Photo: PantherMedia / stokkete

Research Accompanying Teacher Education

Students' Opinions of the Teacher Education Programs at the TUD

For the first time in several years, detailed information has been available on the students' views of the TUD's teacher education programs. The results of an online survey conducted by the ZLSB included responses from 1,000 teacher education students and paint a detailed picture of the strengths and weaknesses of the programs from the students' perspectives.

Need for Action Despite High Levels of Satisfaction

The results show a high degree of satisfaction with the degree programs in many places, but also the potential for optimization and a need for action. According to the survey results, almost all students are affected by overlapping courses, which in many cases also leads to students exceeding the standard number of semesters



Photo: PantherMedia / kadettmann

for graduation. Furthermore, in contrast to overwhelmingly positive assessments on school placements, there are much more critical opinions about the practical relevance of university courses. There is also a need for improvement in content-related links between the study areas of the educational sciences, subject didactics, and specialist science (horizontal coherence). Up to now, students have only partially perceived links these in their teacher education studies. The findings presented have already prompted a quality discourse between faculties, which should lead to the targeted further development of the programs and a gradual optimization of the study conditions.

Results in the Form of a Brochure

The results of the survey are now available in the form of a comprehensive brochure. The questionnaire, which was designed as an exhaustive survey, allowed for subject- and school-specific evaluations on key topics in teacher education. After two university-wide thematic discussion events and various presentations on the subject-specific results during the year, the brochure now also provides a comprehensive written overview of the survey results.

Quality Assurance in the Teacher Education Degree Programs

Anna Schwalbe

➤ [More information on research in the area of teacher education](#)



Photo: Crispin-Iven Mokry

Project Reports

“Enrich Your Lesson!” for Lecturers Continues in the Next Semester

Numerous requirements are placed on teacher education which lecturers are expected to implement in their lectures and seminars. In addition to the subject content in the respective disciplines, many interdisciplinary topics are relevant for aspiring teachers, such as digitalization, inclusion, or education for sustainable development.

Free Offerings for Lecturers

In order to support the lecturers in the TUD's teacher education programs in this task, numerous courses will be offered again in the summer semester of 2022 that can enrich and supplement courses. The “Enrich

your lesson!” program brings together teaching units, materials, and support services from various third-party funding projects that are dedicated to current topics in teacher education. Lecturers from the TUD, but also teachers in other contexts, can integrate these offerings into their teaching free of charge.

A Wide Range of Topics

The topics range from teaching with and about digital media, to inclusion and dealing with heterogeneity, to interdisciplinary teaching or the methods of empirical education research. The variety of formats includes the design of individual seminar sessions and compact workshops by project staff, advising and support services for lecturers, and online resources for independent learning.

Steadily Growing Online Catalog

The offerings are from ZLSB projects as well as from various faculties at the TUD. They are collected by the ZLSB on the Enrich your lesson! website.

In the summer semester 2022, the catalog continued to grow. For example, new courses offered by the Chair of Didactics of Computer Science were added to IT education at the primary school level.



Photo: Steffen Schreiber

Focus on Generational Change in Saxony's Staffrooms

Teacher staffrooms in Saxony and other eastern German states are currently undergoing a generational change. On the basis of data from a representative survey of teachers, the ZLSB investigated whether the older teachers, who had been trained in the GDR, differ from the younger teachers. The results were presented at a conference in Rostock, among other places.



Photo: Crispin-Iven Mokry

The generation of teachers who had been socialized in the GDR and have more than 30 years of professional experience was compared to teachers hired over the past 14 years. The older generations differ from the younger teachers in their theoretical beliefs when it comes to teaching and learning and in their teaching styles. Structure-oriented teaching methods are widely used by older teachers, while younger teachers are a little more likely to use student-centered methods. There is little difference in the experience of stress and the perception of collegiality at school. Even the assessment of their own professional competences is similar for younger teachers and for highly experienced teachers. The experts were astonished by how few differences there were overall. With this in mind, the change of generations should not be too full of conflict.

On October 13, 2022, educational researchers from the eastern German states met in Rostock with representatives from the field of educational administration to discuss current findings from empirical research. In addition to presenting the findings on the generational comparison of East German teachers, the ZLSB was also represented by a keynote from Prof. Gehrman on educational history and a presentation on the second career qualification of teachers.

Liaison Office Teacher Education: TUD-wide Network for Further Education for Teachers

On September 9, 2022, the TUD held a networking day on the subject of teacher training for the first time. This

project was initiated by the vice-rector of academic affairs and organized by the ZLSB. It brought together around 50 researchers and teachers from different faculties, as well as the ZLSB, to exchange information on activities, experiences, and plans in the field of continuing education for teachers and to jointly develop perspectives for strengthening this area of activity.

In a poster exhibition, at workshops, and in fringe discussions, it became clear how varied the field of further education for teachers at the TUD already is. The potential and the need to strengthen the TUD's activities in the field of further education for teachers became clear several times during this first day of networking.



Photo: Crispin-Iven Mokry

Against the background of his many years of experience with what is known as the third phase of teacher education, Dr. Peter Daschner (Hamburg), in a keynote speech, placed the initial situation at the TUD within the national context. He then concluded with encouraging recommendations. In a subsequent panel discussion, Dr. Peter Arnold from the State Office for Schooling and Education, Vice-Rector Michael Kobel, and Prof. Axel Gehrman, Director of the ZLSB, continued the discussion. There was agreement that teacher education is a field of development in which universities that provide teacher education should become more involved than they were in the past, and in a more systematic way. Finally, knowledge transfer to society, a so-called "third mission" for universities, is becoming increasingly important. However, both the school system and universities need to create the structural framework for this. There was talk both of making continuing education more binding for teachers and of a more active staff development in schools. In addition, there was discussion about the need to provide better compensation for further education activities by university staff than has been the case to date. The idea of a teacher academy which is to take on a coordinating and supporting role within the TUD and can develop into an umbrella brand for continuing education for teachers at the TUD, received a lot of support. In workshops on quality standards and quality assurance, areas of work were identified, ideas and wishes were collected, and perspectives

for development were discussed. The contributions and discussions provide important starting points and are the inspiration for further work.

TUD-Sylber Project Coordinator

Rolf Puderbach

➤ [More information on the TUD-SYLBER project](#)

“Future Learning Location Upper Lusatia” Takes Learning Locations outside of School into Consideration

The Federal Ministry of Education and Research-funded research project “Future Learning Location Upper Lusatia: An Analysis and Development of Extracurricular STEM Education” (ZukLOS) was carried out by the ZLSB in cooperation with the Zittau/Görlitz University of Applied Sciences from October 2021 to September 2022. The aim of the project was to create the foundations for the further development of the extracurricular education landscape of Upper Lusatia (the districts of Bautzen and Görlitz) in order not only to contribute to the individual STEM education of children and young people, but also to support the future specialist staff in the region.

Survey of Extracurricular Players

As part of the project, the ZLSB conducted interviews with ten actors from six extracurricular learning locations in the region (e.g., clubs, museums, makerspaces) in order to identify the challenges and potential of the region-specific extracurricular STEM education from the respondents’ points of view. For example, the actors see a strength in the good networking and cooperation between regional learning locations. One of the areas where they see potential is the strengthening of networking and cooperation with companies in the region, which could also benefit the companies themselves in terms of recruiting young talent.

In contrast, the interviewees do not always succeed in cooperating with regional schools like they had hoped. The COVID-19 pandemic made access to schools even more difficult and also posed a major challenge for the learning locations. As a result, educational opportunities could not take place in person for a long time and satisfactory digital alternatives were not available.

In addition to the survey, the project focused on piloting innovative teaching-learning settings together with regional education providers in order to develop new offerings on current topics and modern technologies and on testing new participatory formats for young people. The “Station for Technology, Natural Sciences,

Art - White Water Association” founded a youth advisory board to test whether and in what way young people can be better involved in design processes at the learning location through formats like this.

Transfer Conference

In order to share some of the research findings with the educational players in the region, a transfer conference was held at the Zittau/Görlitz University of Applied Sciences on July 14, 2022, in which around 65 interested people from extracurricular learning locations, schools, and regional companies took part. In a diverse array of lectures, workshops, and a gallery walk, the extracurricular (STEM) education of Upper Lusatia and the preliminary project results were discussed and an intensive exchange of ideas between participants, especially between extracurricular actors and teachers, was encouraged.



Participants at the transfer conference in the ZLSB workshop, photo: Zittau/Görlitz University of Applied Sciences

Outlook

The ZukLOS project will be continued by the Zittau/Görlitz University of Applied Sciences in the coming years. The project results will be used to set up further learning locations in the region by 2030 and to develop new offerings in the STEM sector.

Research Assistant

Anna Noémie Verheggen

➤ [More information on the Future Learning Location Upper Lusatia project](#)

➤ [Background information on the Future Learning Location Upper Lusatia project](#)

Education on Sustainable Development in Teacher Education in Saxony

In the face of multiple global crises and challenges, sustainable education is a focal point at schools now more than ever. Education on sustainable development aims to provide learners with the awareness and skills needed to build a sustainable society. Education on sustainable development has long been part of school curricula, including in Saxony. On November 5, 2022, more than 100 participants and experts from Saxony discussed how to implement sustainability education in everyday life at school and what qualifications teachers need for this purpose at an online conference sponsored by the TUD entitled Teacher Education on Sustainable Education. The annual conference format is organized by the TUD-Sylber project and promotes networking and cooperation between universities, schools, and other actors in teacher education in Saxony.

Intensive Discussions on the Implementation of Education on Sustainable Development in Teacher Education in Saxony

Education on sustainable development is not only something taught in class, but also touches on all aspects of school life and, as a result, also questions relating to school development. How can education on sustainable development best be implemented as an interdisciplinary topic in university studies and preparatory services? Discussions among participants from universities, teacher training facilities, schools, and the Ministry of Education and Culture focused on the aim of ensuring that future teachers acquire the competence to address sustainability aspects in all areas of school activity and teaching subjects.

Joint Commitment to Holistic Education: Cooperation in Teacher Education in Saxony

School education is intended to help students to recognize global connections, learn critical thinking, and practice participation. This belief united all of the speakers, especially State Minister for Education and Culture Christian Piwarz. In his welcome speech, the minister emphasized the importance of cooperation between the various institutions for teacher education in Saxony, a notion which TUD Vice-Rector Michael Kobel and Vice President Burkhardt Heinze of the State Office for Schooling and Education acknowledged and supported.

Conference on the Breadth of Education on Sustainable Development in Saxony: Exchange of Ideas about Interdisciplinary and Extracurricular Approaches

The breadth of the concept of education on sustainable development was also reflected in the conference program. While some workshops focused on the role of sustainable development in teacher education in individual types of schools or disciplines, others discussed the potential of interdisciplinary, extracurricular, or playful learning in sustainability education.

At the end of the intensive digital exchange, it was acknowledged that many parts of the Saxon education system are already working on concepts for education on sustainable development with a great deal of dedication. "The potential of networking these activities and expertise must be used even more in the future, even beyond Saxony and Germany," says Dr. Rachel Bowden, who heads the Teacher Academy Project – Teaching Sustainability (TAP-TS) international cooperation project on sustainability education at the TUD's ZLSB.

TUD-Sylber Project Coordinator

Rolf Puderbach

Photo: Crispin-Iven Mokry



PraxisdigitaliS: Designing Digital Practice in Saxony

Project to Sustainably Strengthen Digital Skills in Saxony's Teachers

The objectives of the PraxisdigitaliS: Designing Digital Practice in Saxony collaborative project between Leipzig University and the TU Dresden University of Technology, funded by the Federal Ministry of Education and Research, are to sustainably establish and improve the digitalization-related competences of (future) teachers. To this end, PraxisdigitaliS is working on a corresponding concept as well as on the development and implementation of teaching/learning scenarios in numerous locations. At the TUD, PraxisdigitaliS can be found in two locations: at the Chair of Didactics of Computer Science, with the subproject Digital Lehr@mt Lab, where computer science skills can be put to the test in the teaching lab; and at the ZLSB, where it is integrated into the ZLSB's digital team.



Photo: PantherMedia / Artur Verkhovetskiy

The PraxisdigitaliS Collaborative Project's Teaching Award

Digital teaching in teacher education serves as a model for the students, who develop a positive attitude towards digitalization as well opportunities for digitizing teaching learning processes, and later transfer them to schools. Therefore, the awarding of the prize for outstanding digital teaching in Saxon teacher training in 2022 was one of the central measures initiated by the collaborative project for the anchoring of digitization- and digitalization-related competencies in teacher training. For the first time, the teacher training centers from the three major Saxon universities – Leipzig University, the TUD, and Chemnitz University of Technology – jointly awarded the teaching prize, which included a pecuniary endowment of 6,000 euros, and was divided

among three prizewinners: First place: Anja Neubert, second place: Dr. Clara Finke, and third place: Dr. Sandra Dietrich, together with Dr. Katrin Gottlebe and Prof. Brigitte Latzko.

Ceremonial Honors for Outstanding University Instructors

After university instructors from all over Saxony applied, the jury of external experts assessed the diverse entries from an extremely wide variety of subject areas. The winners were presented with the teaching award at a ceremony on September 28, 2022. The jury's congratulations were followed by congratulations from representatives from all three of the participating universities who were present at the ceremony. Afterwards, the guests from the ministries, sponsors, project

The winners with representatives from the universities awarding the prize, photo: Christian Hüller





Photo: PantherMedia / alphaspirit

employees, university instructors, and others who were present also got an opportunity to congratulate the winners.

Cooperation and Networking

In the PraxisdigitaliS collaborative project, the TUD is cooperating with Leipzig University in taking various measures to develop and improve the digitization and digitalization-related competences of (future) teachers. In the process, the project participants regularly hold (virtual) meetings for the joint project and the working groups to discuss the results of their research and develop research results together.

Expert Conference on Digitalization in Teacher Education: Challenges, Solutions, and Perspective Options for Control

The multi-faceted topic of digitalization in teacher education has also brought the project contributors together with players 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. An example of this is the network conference Shaping Future Perspectives through Transfer and Sustainability, sponsored by the Teacher Education Quality Campaign. This conference took place in Leipzig on October 19-20, 2022 and PraxisdigitaliS actively participated with a forum. Forum 7, Sustainability by Embedding it in the Curriculum: Competences Related to Teacher Education was organized by Leipzig University, the TUD, Chemnitz University of Technology and the Saxon State Ministry of Education and Culture.

Discussion Forum on the Integration of Digital Competences in Teacher Education

The aim was to discuss challenges and conditions for success in integrating digitalization-related competences in teacher education, as well as appropriate

solutions and procedural ways to manage them. For this purpose, the educational policy framework (Saxon State Ministry of Education and Culture) as well as the university concepts within the context of the Saxon Teacher Education Quality Campaign projects PraxisdigitaliS, TUD-Sylber, and DigiLeG were outlined in keynote speeches. Then, the participants critically reflected upon and considered the ideas in the context of national education quality campaign projects in the subsequent brainstorming session. Within the ZLSB, PraxisdigitaliS complements and expands upon the TUD-Sylber project's Coordination Office 'Digitalization,' which offers free advising services available to TUD lecturers and teacher education students. Accordingly, employees from the Coordination Office 'Digitalization,' BQL.Digital, and PraxisdigitaliS were represented at the Digital Team's open house at the ZLSB in June 2022.

Digital Media at School

The lecture class on "Digital Media At School", with a focus on computer science, was already offered to TUD's teacher education students in winter semester 2021/22. It may be offered again as a supplemental course in winter semester 2022/23. Within the framework 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. The objective of the course is to communicate to the students which computer science-related competences will be required in their future work as teachers and how they can also teach them to their students.

Project Coordinator

Dr. Nicole Zabel

➤ [More information on the PraxisdigitaliS collaborative project](#)

Successful Educational Research at the ZLSB

In the summer of 2022, eight teachers were seconded to the TUD by the Ministry of Education and Culture. In their time working at the university, they are taking on tasks at the interface between theory and practice. They support the placement of students in schools for obtaining practical experiences; further education for teachers, including the qualification of mentors; and enrich the course offerings. In addition, an academic qualification, usually a doctorate, is planned.

Support and Training for Doctoral Students in Empirical Education Research

The ZLSB's Graduate Forum Teacher Education supports teachers throughout the entire doctoral process. In the first year of secondment, the focus is on offerings on the introduction to the methods of empirical education research. Since September 2022, nine workshops have been held, including an introduction to qualitative research, design-based research, empirical data collection procedures, questionnaire design and sampling, statistical data analysis, and qualitative content analysis.

Research Colloquia Strengthen Teacher Education at TUD

In the further course of their research projects, seconded teachers will have the opportunity to discuss the various intermediate stages of their work and challenges in the research process with colleagues in regularly held research colloquia and research workshops. As a result, a place for interdisciplinary exchange among teachers working on their doctorates has emerged in recent years.

Experienced Teachers Strengthen Teacher Education and Research at the TUD

"Thanks to their many years of professional experience, the teachers have a high level of expertise that not only improves the support of teacher education students, but can also have a lasting influence on empirical education research at the TUD," emphasizes Dr. Frank Beier, who heads the Graduate Forum Teacher Education. The eight successful dissertations completed by seconded teachers of the ZLSB since 2019 also testify to this.

The offerings of the Graduate Forum Teacher Education are not just open to teachers – they are also open to all other people who are active and interested in the field of empirical research in school, teaching, or teacher education at the TUD.

Graduate Forum

Dr. Frank Beier

➤ [More information on the Graduate Forum](#)

We Congratulate the Following Students on Earning Doctorates in 2022:

Georg Ronny Müller

Time - School - Innovation. An empirical study on the innovation of school time structures

Peggy Schmidt

Individual beliefs about the presentation of new vocabulary in English teacher education

Erik Heine

Scientific controversies in physics education. Exploratory study on how physics teachers and physics undergraduate students deal with a scientific controversy using the example of mass in special relativity

Peggy Germer

Learning in tandem in teacher education: Initiating, supporting, and exploring autonomous learning processes

Photo: PantherMedia / Gaius-Images

Synergetic Teacher Education for Future Vocational School Teachers (TUD-SYLBER-BBS)

In 2022, the TUD-Sylber-BBS project, which is aimed specifically at teacher education for vocational schools and is funded by the federal government and the states as part of a quality campaign for teacher education, was able to take important steps towards achieving the project's objectives.

Focus on the Recruitment of Students

The measures for student recruitment implemented in the project aim to ensure the supply of teaching staff for Saxony and beyond in the following years. Based on the empirical findings on the recruitment potential of different target groups, two professional image films for vocational teacher education were completed in 2022 and integrated into the student marketing for the TUD. The analyses carried out within this framework made an immediately measurable contribution to optimizing recruitment measures on social media.

In 2022, the dual study model for non-traditional students (schoolAQ), which was piloted as part of the project, also proved to be very successful. Originally, only two trials were planned, but 2022 already saw a fourth trial being set up. The necessary cooperation with the partner schools involved, the Saxon State Ministry of Education and Culture, and the State Office for School and Education was further intensified and the discussions held during the project give rise to the expectation that this will continue after the end of the project.



Photo: PantherMedia / Phovoi R.

A Focus on Quality and Structural Development

The second focus is on the fields of action of coherence and practical relevance, two central challenges in the design of a profession-oriented teacher training program.

The complex teaching-learning arrangements, which were designed in previous years with the aim of more closely interlinking academic and subject-specific

specialist content for use in specific courses, were successfully revised and further developed in the year under review. Through the close cooperation with specialists, the culture of academic discourse has been further strengthened across disciplinary and departmental boundaries.

The university's didactic concept for professional field analysis in the service-related disciplines has yet again been implemented very successfully. In addition, the empirical work of identifying core professional tasks was intensively continued and the establishment of an online archive of didactically prepared professional situations, which began in 2021, was continued. This will make the project results usable for teacher education and vocational school instruction. The efforts in the area of domain-specific quality assurance for vocational teacher education programs were also continued. Regular cohort discussions are used as a tool to discuss existing problems and initiate concrete measures for improvement. In 2022, the offer, which was very well received by students, focused primarily on the coherence of the program and the design of the practical phases. In addition, a concept for the integration of the cohort discussions into the quality management of the professional disciplines was developed in order to consolidate them and ensure their continuance beyond the duration of the project.

Various formats for cooperation with the second and third phases of teacher education, as well as students, helped to ensure the transfer of the didactic approaches and results gained in the project. They also helped to further develop the cross-phase networking between the university, preparatory service, and agencies responsible for further and continuing education.

In addition, the work and results from the sub-projects were made available to a broad specialist public through numerous conference presentations and publications in order for their effectiveness to continue beyond the limits of the project and TUD.

Project Coordinator

Dr. Holger Sachse

➤ [More information on the TUD-SYLBER-BBS project](#)

Teaching



Photo: Adobe Firefly

Education on Sustainable Development in Teacher Education: A Future Project for Saxony

The state initiative SDG 4 - "Sustainable Development Goal 4: Education on Sustainable Development in University Teacher Education in Saxony" has one objective: education on sustainable development is to be mainstreamed in teacher education. The project is funded by the Saxon State Ministry of Culture and covers a period of three years (June 1, 2022 to October 31, 2025). Our cooperation partners are the centers for teacher education in Leipzig and Dresden.

Broad-scale Project to Integrate Education on Sustainable Development into Higher Education

With the recent update of the Lehramtsprüfungsordnung I [Teacher Education Examination Regulations I] in January 2022, the Free State of Saxony created the framework conditions for systematically embedding education on sustainable development into the curricula and practices of universities.

Structural Measures and Expanded Teaching Offerings

Within the project, the ZLSB is focusing on structural measures that promote discourse within the university about the integration of lessons on sustainable development into the curricula of various subjects and disciplines. Among other things, this includes training courses for multipliers which are being developed and implemented by a central coordinator. The ZLSB intends to use as multipliers the 17 teachers seconded by the Saxon State Ministry of Education and Culture, who are also active in the faculties. In addition, concepts for the implementation and application of lessons

on sustainable education in the educational sciences, specialist science, and subject didactics are being developed. The best examples of new good practices will be published in a handout for lecturers.

Another focus of the project is the expansion of teaching and learning opportunities for teacher education students. Non-governmental organizations will also be included in order to provide students with an insight into the practical implementation of education on sustainable development. Through cooperation with civil society organizations working in the field of development cooperation and education on sustainable development, the transfer between theory and practice is also being promoted. Networks of mutual exchange are thus emerging, and future teachers are introduced to potential partners who can be involved in their future lessons.

By integrating education on sustainable development into future teachers' own studies, they also become important players in creating a sustainable future. With this project, Saxony is taking an important step towards education that addresses the challenges of the 21st century and provides future generations with the necessary tools for sustainable development.

Consultant on Education on Sustainable Development

Dr. Rachel Bowden

➤ [More information on the states' initiative on education on sustainable development](#)

Ambassadors for the Future: A Supplementary Offer for Future Teachers

Implementing education on sustainable development in one's own teaching is one of the central tasks of team of school teachers, which is a direct result of the ZLSB projects on teaching sustainability as well as the states' initiative on education for sustainable development. In addition, in 2022, numerous new opportunities for networking developed from the current initiatives at the TUD (Green Office, a working group on education on sustainable development, a working group on education on sustainable development in schools, etc.). The result of this is that Ines Röhrborn and Volker Kreß actively participate in a smaller working group on sustainable development as well as a more concrete offer for future teachers.

Openness to Change as a Learning Objective

In the joint planning process by the two school teachers in the higher education service with ties to two different types of schools (primary school and secondary/vocational school), two main questions emerged: How much time should be spent on sustainable development, especially due to the thematization of the 17 sustainable development goals in the course, and how can the offering differ from typical modules in higher education? The result is a construct that focuses on the future teacher's openness to change and their willingness or ability to actively take part in it. Because school is a place of work and has to respond much more quickly to current challenges and the resulting change processes in society, teachers in particular should have special competences regarding change.

Reflecting on One's Habits as a Daily Challenge

The supplementary course relies on action- and experience-oriented methods throughout, which are first experienced, then reflected upon (additionally guided by theory), and in the third step, explored with a view

to the possibilities/limits of transfer to other areas. Here, everyday challenges are the key tool. These are self-selected tasks aimed at correcting one's own habits, assuming that a need for change has already been identified. For example, the efficient use of one's own time or ways to reduce packaging waste or meat consumption are specifically targeted and replaced with other behaviors. The individual experience: Successes as well as failures offer numerous opportunities for reflection in later seminars, while shedding light on the enormous challenges in the context of school development and sustainable societal transformations.

Successful Pilot Project Continues

By now, on the basis of their portfolios, the first 12 future ambassadors (all four teacher education programs were represented) have successfully completed the program. The almost unanimous conclusion of the first set of graduates is that there was initial skepticism about the constant demand for self-reflection and the rather atypical methodological setting, but that this skepticism changed over the course of the semester. For the team of two school teachers, this was reason enough to rework the total of seven double lessons methodically and in terms of content and to offer the course again in the summer semester of 2023.

Team of School Teachers in Higher Education Service

Volker Kreß, Ines Röhrborn

➤ [Team of school teachers in higher education service](#)

Photo: Volker Kreß



Students and Lecturers Cook Together with Ukrainian Children

As part of the TUD's various aid and support programs for refugees from Ukraine, lecturers from the Faculty of Education and the ZLSB offered a lunchtime support program in the faculty's training kitchen.



Photo: Volker Kreß

Ukrainian Children and Students Create an Extraordinary Learning Environment

Every Wednesday, around 15 Ukrainian children and young people were invited to cook together in the kitchen, which is otherwise used for training prospective vocational school teachers. They were aided and supported by teachers and students from the professional fields of food, nutrition, and household sciences as well as economics, technology, and household/social affairs. An interpreter as well as a student of Ukrainian origin helped to communicate with the Ukrainian children. Cooking and having lunch together gave the children and young people structure to their day and something to do. After several run-throughs in March, the event is now offered regularly as part of a practice seminar on food preparation in teacher education. The participating students therefore have the opportunity to help and, at the same time, gain educational experience in a very unusual setting.

Member of the Team of School Teacher in Higher Education Service

Volker Kreß

Engaging with Each Other, Benefiting Together: The Cooperation between the ZLSB and the Bürgerstiftung Civic Trust

War and peace, poverty and wealth, and generational conflicts are all topics that are more significant now than ever in view of current developments. They do not just demand personal positioning; they also demand

joint discussion in a pluralistic society. This discursive challenge must also be faced by any university that is committed to the goal of demanding and supporting student autonomy.

The connection between academic and social learning began at the AG Intersozial working group, initiated by Dr. Kristian Raum, a former school teacher in the ZLSB's higher education service and now principal at the Schiller-Gymnasium Pirna grammar school. The cooperation with non-university thought partners was a fundamental goal in the development process of the AG Intersozial and, thanks to the Bürgerstiftung Dresden civic trust, it has now been successfully achieved for several semesters.

The Generationendialog Projekt: Students Promote Intercultural and Intergenerational Exchange between Schools and Senior Citizens

Within the framework of the "Generational Dialog" project, students, in cooperation with the civic foundation and Dresden schools, volunteer as moderators in the intercultural and intergenerational dialog between students and seniors. In these dialogs, young and old learn about each other's different worlds, views, and experiences and can question their own values at the same time. Within the framework of the previous generation dialogs, commonalities regarding the value of family, friendship, and respectful treatment of persons who hold different opinions emerged frequently. Differences emerged as well, such as with regard to questions of justice.



Logo: © ZLSB

Intergenerational Dialog Strengthens Openness, Interest and Appreciation

Nevertheless, all the participants gave a very positive feedback regarding the exchange of ideas in the intergenerational dialog, since it promotes openness and interest in each other, as well as mutual respect and appreciation. By participating, the students not only expand upon their own competence to act, but also work for the good of others and the community, thus embodying the maxim of this cooperation: engaging with each other – benefiting together.

Member of the team of School Teacher in Higher Education Service

Stefanie Pagel

➤ [Bürgerstiftung Dresden civic trust - intergenerational dialog](#)

Focus on: Team of School Teachers in Higher Education Service

We are happy to welcome eight new school teachers to the team in higher education service at the start of the 2022/2023 school year:

Marlen Beilig

"Accompanying the students in their first experiences as a teacher and also gaining professional teaching insights in health and nursing care is a great pleasure for me. I consider it a privilege to have the opportunity to exchange the BSZ Ruth-Pfau-Schule in Leipzig for the position as a school teacher in higher education service at the ZLSB in order to work on my own research projects, such as on medical assistant training, within the framework of my professional pedagogical activities."

Kristin Einhorn

"Since August 2022, I have been working in the team of school teachers in higher education service at the ZLSB as well as in the team of the Chair of General Didactics and Instructional Research. I value being able to shed light on the many challenges of the teaching profession as well as teacher education from different perspectives. In addition, I am gradually becoming familiar with the multifaceted world of research and noticing how the following quote always seems to come true in my work: 'Education begins with curiosity' (P. Bieri)."

Katrin Günther

"After many years as a teacher of English, Russian, ethics, philosophy and as a department chair for the languages at Hans-Erlwein-Gymnasium grammar school in Dresden, I have been working in the team of school teachers in higher education service in English subject didactics since August 1, 2022, and am pleased to pass my experiences on to students. My research focuses on non-school learning sites."

Denise Hornig

"Since the summer of 2022, I have been working in the team of school teachers in the higher education service at the ZLSB and I also work at the Institute of German Studies and Media Cultures in German subject didactics. In courses at the university, but also through the practical experience courses at Dresden grammar schools, I am preparing students for the multi-faceted work as a German school teacher with heart and soul and practical tips from everyday school life. My research focuses on language teaching in migration societies."

Juliane Hoyer

"As a teacher for social studies/legal education/economics, I too have been a member of the team of school teachers in higher education service since August 1, 2022 and I am very pleased to work together with the others on topics such as education on sustainable development and further education for teachers. I have already found working with students in the context of practical experience courses to be a great enrichment



From left to right: Mr. Spalteholz, Ms. Lange, Ms. Hornig, Ms. Günther, Ms. Beilig, Ms. Einhorn, Ms. Hoyer, Mr. Schröder, Photo: Ante Beslic

to being a schoolteacher, and I am very pleased to now be able to get students ready and support them on the university side of things."

Katrin Lange

"After I having worked abroad for several years, in 2016, I finally ended up at the 'Konrad Zuse' Vocational School Center in Hoyerswerda. Since August 1, 2022, I have been a seconded teacher at the ZLSB and I am happy to have the opportunity to participate in international projects as well as education for sustainable development projects, among others."

Michael Schröder

"Since August 1, 2022, I have been part of the team of school teachers in the higher education service at the ZLSB and I am very grateful for being included in the circle of these committed and creative colleagues. What I appreciate most about my work at the ZLSB are the opportunities for a change of perspective; the collaboration in the training of prospective mathematics teachers, where I can now put my professional and didactic expertise at the service of university education; and the possibility to pursue my own research questions."

Wolf Spalteholz

"As a former teacher, consultant and lateral entry coordinator for the subject of computer science, I am very pleased to again have the opportunity to look at the teacher's desk from another side. I am particularly looking forward to the exchange of ideas regarding research – a topic that not been a part of many of my tasks so far. I have known and appreciated the collaboration with students for many years and I am looking forward to accompanying future computer science teachers on their path to beginning their careers in a school."

➤ [Team of school teachers in higher education service](#)



Photo: Crispin-Iven Mokry

DIAlogisch!: A Successful Example of Interphase and Research-based Exchanges in Teacher Education for Vocational Schools

The cross-institutional dialog on teacher training for the subject of social pedagogy at vocational schools was the focus of the symposium “DIAlogisch!” (a portmanteau of the German words for “dialog” and “logical”), which took place for the first time on March 25, 2022 in Dresden. Teachers, specialist advisers, subject and main training directors, consultants for schools of social work in Saxony, as well as researchers and lecturers from the TUD accepted the invitation to discuss current research results from the TUD and to determine their relevance for schools.

Conference on Teacher Education Discussion of Research Results and Practical Challenges

The focus of the conference was on the discussion of the significance of the research findings and the discourse on practical challenges in school practice, based on state examination theses as well as ongoing or completed dissertations. Prof. Stephan Abele (Chair of Vocational Education) and Prof. Hans Gängler (Chair of Social Education and Didactics of Social Education) opened the day by emphasizing the necessities and potentials of cross-institutional exchange for successful teacher education.

An inspiring keynote on the possibilities of and the opportunities afforded by the design based research approach for vocational education, Dr. Holger Küls, the author of several textbooks on learning area didactics in social pedagogy, trainer, and teacher for vocational

schools in the field of social pedagogy, served as a transition to a gallery walk with a poster slam.

Discussion of Current Development Processes in Specialist Schools for Social Services

With short poster presentations on research projects at the TUD serving as the starting point, current developments in the field of vocational schools for social work were discussed: from gender-competent teaching and learning, to the implementation of the learning area concept, to capturing the interaction quality in childcare providers’ practical training, to the use of operators in written learning outcome assessments, all the way to the challenges of written final examinations in relation to subjective theories of practically active teachers in the field of social pedagogy.

The DIAlogisch! symposium was initiated by Carolin Stirner and Peter Schulze, both members of the team of school teachers in the higher education service at the TUD. They successfully tested a new format for exchanging ideas, which, due to the extremely positive feedback from the participants, will certainly be continued.

Team of School Teachers in Higher Education Service

Carolin Stirner, Peter Schulze

➤ [More information on the Graduate Forum](#)

Inclusion in Virtual Reality? New Approaches in the Teaching-Learning Room 'Inclusion'

New Learning Opportunities Through Further Funding

How can learning and teaching be made adaptive using innovative technology and digital tools? This was the question at the heart of the Teaching-Learning Room for Inclusion for the year 2022. Digital media offers lots of potential for differentiation that make personalized and cooperative teaching-learning processes possible, making knowledge and authentic learning experiences available in a variety of ways. With the support of the TUD's Digital Teaching and Learning Fund and the Inclusion 2022 special funds, the technical equipment of the Teaching-Learning Room for Inclusion has been expanded to offer low-barrier, experience-based learning opportunities.



Photo: Rolaine Gatmaitan

Inclusive Digital and Digitalized Inclusive Teaching in the Teaching-Learning Room

Within the framework of the seminar "Escape from Your Classroom! Teaching and Learning in a Digitally Inclusive Way", students could learn about using the flexibility of the room for themselves. Within the context of the seminar, an educational Escape Room was created on the topic of migration and displacement. It has already been successfully tested and is ready to be played by school classes in the future. The goal is to provide, in a cooperative learning scenario, authentic insights into the causes of displacement in order to create a basis for interdisciplinary, reflective further work on current topics, such as climate change, sexual orientation, educational opportunities, religious freedom, etc. In the game, these educationally relevant topics are opened up by using digital media, such as VR technology, to immerse the students/players in real, existing worlds outside the classroom. For example, the relief of the Marshall Islands can be viewed in 360° perspective, QR codes lead to videos explaining the Kenyan education system, and the Anybook reader is used to make optional vocabulary aids available.

➤ Escape room teaser: [to the video](#)



Photo: Dr. Frank Beier

Focus on Gender Competence: Teacher Education Students Explore Discrimination by Artificial Intelligence in the Digital World

When examining aspects related to digitalization, the topic of gender competence was increasingly considered when looking at discrimination mechanisms in artificial intelligence. Thanks to the continuation of funding from the federal and state governments' "Professorinnenprogramm III" program for the implementation of gender and diversity competences in teacher training, teacher education students were able to attend cooperation seminars on the topic of (digital) gender competence. Organized by Dr. Frank Beier and Tina Czaja, various experts were invited to explain gender stereotypes and discrimination in the digital world in workshops and lectures.

The Teaching-Learning Room for Inclusion as a Port of Call for Schools and Cooperation Partners

The Teaching-Learning Room for Inclusion is known far beyond the limits of the university and is increasingly becoming a meeting place to exchange ideas on the subject of inclusion in various ways. Within the framework of the "All People Are Different" project day with a first-grade class from the 139th Primary School, the students were able to test their senses and perspectives on the individuality of people at various stations. The team was also on site and discussed new ways of looking at space and inclusion with interested players in the field of education at the Friedrich-Schiller-Gymnasium Pirna grammar school's school festival, the teacher education festival TEACHERMANIA, the network meeting for Schule.evangelisch.inclusiv [School.Protestant.Inclusive]. A 360-degree video room tour recorded in the Teaching-Learning Room for Inclusion was made accessible at the events with virtual reality glasses, so that interested individuals could tour the room virtually, even outside of the ZLSB.

In addition to the resulting tour of the room, the acquisition of the 360-degree camera from the funding of the TUD Digital Learning and Teaching Fund in 2022 has already started the recording of 360-degree videos in schools. This approach to experience-based learning will become an even stronger point of focus in 2023. The idea is to record inclusive teaching-learning settings in schools and follow and reflect upon them in seminars at the university using VR technology. This can provide teacher education students with a realistic insight into practice that serves as a basis for analyzing inclusive teaching.

In 2022, cooperation with the Saxon State Ministry of Education and Culture was also strengthened by discussing initial concepts on the implementation of model spaces in schools. This cooperation will be continued.



Photo: Rolaine Gatmaitan

September 2022: Teaching-Learning Room for Inclusion Officially Opened

Although the space has been used for several years, due to the ongoing pandemic situation, the official opening could only first be celebrated in 2022. On September 1 and 2, 2022, the opening ceremony was linked to the “Thinking Together about Inclusion and Digitalization” specialist days, in order to give interested parties an insight into the project. To this end, Dr. Frank Beier and Tina Czaja presented inclusion theory ideas on the concept of space and outlined usage scenarios.



Photo: Rolaine Gatmaitan

Awards

In 2022, the Teaching-Learning Room for Inclusion was awarded the “Higher Education Pearl” (Hochschulperle) for the Month of March by the Stifterverband foundation and the Dieter Schwarz Foundation. Under the title “Future-Oriented Learning Architecture”, the associations selected projects at German universities that pursue innovative concepts on the use of space.

➤ [The press release from the Stifterverband on the award](#)



Photo: Dr. Frank Beier

In addition, participants had the opportunity to learn about and try various inclusive and digital media available in the room. In particular, digital media such as iPads, merge cubes, VR and AR glasses, and much more were tested for their innovation potential.

The symposium was co-financed by tax revenue on the basis of the budget decided by the members of the Saxon State Parliament, funds from the federal and state governments' Professorinnenprogramm III, and the TUD's Digital Learning and Teaching Fund.

Research Assistant

Tina Czaja

➤ [Catalog of offerings, inclusive teaching/learning materials](#)

Countering False Assumptions about Teaching-Learning Processes in Teacher Education

Many students start their teacher education studies with false assumptions about psychological or neurological processes related to learning. These widespread misconceptions are addressed and countered by the TUD's Chair of Vocational Education early on in students' courses of study.

Design of Vocational Training Teaching-Learning Processes: Outdated Learning Type Theory in Focus

In the winter semester, the Chair of Vocational Education offers courses on the design of vocational teaching-learning processes. Students in their third semester deal with lesson planning for an entire semester before their block internship A. Right at the beginning, subjective theories of effective instruction are addressed. Students post their assumptions on a digital message board and can rate each other's contributions positively or comment on them. Comments on the importance of different learning types are a fairly common example of false assumptions. This time, it was interesting to see that the six new international students in the master's program for vocational education (Venezuela, Indonesia, Mexico, Colombia, Costa Rica, Uzbekistan) were also familiar with this learning type theory and considered it relevant. According to the theory, people differ in the senses they prefer to use when learning (auditive, visual, haptic, and learning through the intellect). The theory was developed in the 1970s by Frederik Vester and continues to maintain its prominence today. From the point of view of psychological and educational research, however, it has been refuted and is considered outdated. Among others, Kirschner (2017) critically examines this pedagogical construct.



Photo: PantherMedia / Andrew Lozovyi

Teaching and Neuroscience: The Need to Educate on Neuromyths

According to Krammer et al. (2019), neurological misconceptions are widespread in teacher training worldwide. In their study, they confronted 582 teacher education students with 20 neurological myths and 20 neurological facts related to learning and memory processes. Interestingly, the results showed that the knowledge of facts led to more myths being identified as false ($r=0.22$, $p<0.001$). At the same time, however, the opposite was also evident: Namely, the more facts a student knew, the more myths were believed ($r=0.31$, $p<0.001$). This leads to the conclusion that "neurofacts and neuromyths are largely independent of one another" [translated] (p. 236) and it is therefore important to present not only neuroscientific knowledge in teacher training, but also to deliberately discuss

Photo: PantherMedia / matej kastelic





Photo: PantherMedia / matej kastelic

the neuromyths. This seems particularly important for myths that can have an unfavorable effect on teaching. For example, "Learning difficulties associated with developmental differences in brain function cannot be corrected by education" [translated] (Krammer et al., 2019, p. 224).

Teacher Education and Empirical Research: Problems with Using Specialized Databases

The fact that such myths persist for so long is, of course, also due to the fact that they are repeatedly perpetuated. Searching for the keywords "learning types" online immediately brings up a multitude of references and offers that fall victim to misconception. If, on the other hand, one uses the specialist database FIS for the search, the publication by Krammer et al. appears second. (2019). Jennifer Fischer (University of Mainz) recently presented study results in a talk at the German Educational Research Association's annual conference that show that teacher education students do not use the existing databases enough. This emphasizes the importance of empirical research in teacher education.

How Teacher Education Profits from Empirical Research

"In 2011, I myself had an entire event at my training school on the subject of learning types, the contents of which I later disseminated in the classroom in a child-care apprenticeship. By now, through the vocational education working group, among other things, we are well networked in the second phase of teacher education. We point out to the main training directors what we consider to be important research findings," says Peter Schulze, who works as a member of the team of

school teacher in higher education service at the Chair of Vocational Education. This sort of insights can also be brought to the team of school teachers and, therefore, addressed in all types of schools. It will be interesting to see if, little by little, the myth of learning types will itself become a myth among student teachers.

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Member of the Team of School Teachers in Higher Education Service

Peter Schulze

The Second Career Qualification of Teachers for Schools in Saxony (BQL)



Photo: PantherMedia / Benis Arapovic

ZLSB Presents Research Findings on Lateral Entry at the German Educational Research Association Meeting in Oldenburg

The topic of this year's German Educational Research Association meeting for the commission of professional research and teacher education was Teacher Education in a Demand Crisis. The meeting took place at the University of Oldenburg on September 29-30, 2022. The TUD, and the ZLSB in particular, showed a strong presence at the meeting. A total of six contributions from Dresden were represented in various panels.

Cross and Lateral Entry to the Teaching Profession in an International Comparison: Keynote by Prof. Axel Gehrmann

In his keynote speech, Axel Gehrmann gave a historical

overview of the phenomenon of lateral entry into the teaching profession and provided an overview of the current debate. He drew particular attention to the international comparison of teacher training. By doing so, he was able to show that the phenomenon of teacher shortages is global. Using a few selected examples, he outlined various training systems and measures for addressing the need for replacement teachers around the world. He compared the training systems in Japan, Israel, and the USA with the training system in the Federal Republic of Germany and called for a broader discussion about paths leading into the teaching profession.

Successful Second Career Qualification for Lateral-entry Newcomers in Saxony: The BQL Program at the TUD

Thomas Bárány and Julian Hoischen presented how lateral entry is practiced in Saxony and in particular, TUD's program for lateral entry for second career qualifications for teachers and presented their initial empirical findings from their accompanying research. Six hundred sixty-two lateral entrants have successfully completed the program thus far. Among these, 330 primary school teachers; 136 teachers in economics, technology, and household/social affairs; 82 mathematics teachers; 56 German teachers; 47 computer science teachers; and 11 physics teachers could be trained. The drop-out rate in the lateral entry program is around 15%. Compared to the situation in basic teacher training, this is a low drop-out rate.



Photo: Prof. Axel Gehrmann

The number of participants in the lateral entry program is growing continuously. Two hundred thirty-one lateral entrants are currently being qualified in the program. With 72 individuals, the largest group of participants in the lateral entry program is being further qualified in Grundschule didactics. Fifty-six lateral entrants are completing the further training in economics, technology, and household/social affairs; 44 in German; 34 in computer science; 14 in mathematics; and the smallest group, with 11 teachers, in physics.

Commonalities in Career Choice and the Understanding of the Profession: Studies Comparing Teacher Education Students with Lateral Entrants

There are only a few differences with regard to career choice motivation and understanding of the teaching profession between teacher education students at the TUD and those participating in the lateral entry program. For both regular teacher education students and lateral entrants, the findings show that career choices are largely shaped by subject-specific and pedagogical motivations. Job security is also an important factor in the choice of profession for both groups. Personal learning experiences from their school years as well as encouragement from their social environment are important decision-making factors for teacher education students. In contrast, the two factors mentioned above are significantly less important in the career choice for lateral entrants. This suggests greater autonomy in the choice of their careers.

Like the teacher education students, the lateral entrants consider practical experience and plans of action as important conditions for success in their work as teachers. The results of the studies show that both lateral entrants and teacher education students are skeptical about university education because of a lack of practical relevance and concrete conceptualization for teaching. Furthermore, there are great similarities between lateral entrants and teacher education students with regard to career choice and the understanding of the profession.



Photo: PantherMedia / siraanamwong

Challenges and Self-perceptions of Lateral Entrants in the Teaching Profession

The lateral entry team for economics, technology, and household/social affairs, headed by Kerstin Döllmann and Karen Wittig, reported on the challenges posed by the parallel academic studies and professional socialization in school service. Using interview data, they provided insights into the beliefs and expectations of the lateral entrants. Nadin Grützner focused on the process of professional socialization and the professional self-image of lateral entrants. She presented findings from a narrative interview study, which she conducted as part of her doctorate as a member of the team of school teachers in higher education service at the ZLSB.

Perception and Evaluation of Lateral Entrants in the Saxon School Service: Insights from Research Studies

Anna Schwalbe and Rolf Puderbach from the ZLSB's TUD-Sylber project reported on a representative survey on how Saxon teachers perceive and evaluate lateral entrants in the school service. The results show that lateral entrants are evaluated differently when other lateral entrants are already part of the teaching staff and when traditionally trained teachers work together with the lateral entrants. Nevertheless, Saxon teachers are rather skeptical about entering the teaching profession as a second career.

In addition to these research activities at the ZLSB, the TUD was represented by Dirk Wohlrabe, who presented the TUD-Sylber-BBS project's measures to attract new target groups (e.g., technicians, master craftspersons) to teach at vocational schools in the industrial and technical fields. The papers presented provided the national audience of experts an insight into the breadth of the ZLSB's scholarly investigation into the conflicting "old and new" paths into the teaching profession.

Academic Support for Lateral Entrants

Julian Hoischen

➤ [More information on the second career qualification of teachers](#)



Photo: Dr. Peggy Germer

The Meeting Center: A Place for Ukrainian Refugees to Arrive and Find Help

In March and April 2022, a classroom at the Dresden International University (DIU) was transformed into a meeting center for students from Ukraine by ZLSB staff, lecturers from the lateral entry program, and other volunteers. Every day, children aged five to 16 could construct, knead, paint, craft, or write something. While the little ones occupied themselves with learning games and enjoying pedagogical offerings in art or sports, there was the opportunity for the adults to talk over a coffee or to be advised by volunteer translators on questions about registration; German courses; pre-school, school, or visiting the doctor, etc.

Anyone who wanted to could get a taste of first encounters with the German language for shopping, for orientation in Dresden, or for dealing with government agencies with Professor Sylvia Mebus. Sports and concentration games in the DIU's premises and outdoors was one special offer. The Tower of Power promoted understanding and skills without any need for bilingualism.

Art Therapy and Volunteer Support

The Ukrainian art therapist Olena Mykhalina was recruited for creative exercises and psychological support. She actively guided the children's artistic work and talked to them about their pictures, for example.

The meeting center closed its doors again when regular classes started. Many Ukrainian children, parents, and relatives are now still being supported on a volunteer basis by Dresden locals in a private setting. Many thanks to the entire support team for their dedicated volunteer work!

Lateral Entry Project Manager

Dr. Peggy Germer



Photo: PantherMedia / tarik_vision

International Cooperation in Professional Further Training for Teachers

Saxony - Czech Republic Border Region: Successful Cooperation between the UJEP and ZLSB

Research-based developments in teaching-learning formats between the ZLSB at the TUD and the Univerzita Jana Evangelisty Purkyně (UJEP) in the city of Ústí nad Labem (Czech Republic) have existed for several years. Regular exchanges take place in the context of visits, conferences, and workshops (e.g., in the German language, for Digital German Studies, Online German Classes), which focus especially on digital teaching-learning formats in the academic and school educational landscapes. The main topics of the cooperation are the shortage of teachers and alternative pathways into the teaching profession. Dr. Petra Fuková and Dr. habil. Hana Bergerová (Institute for German Studies, UJEP) attended some sessions on second career qualification at primary schools in Saxony and learned about academic training in Dresden.



Photo: Judith Schulze

Second Career in German as a Foreign Language Studies in the Czech Republic: Challenges and A High Level of Effort

During their visit to Dresden, the two scholars reported that the shortage of teachers is also a challenge at UJEP. Dr. Petra Fuková explains: "Unqualified German as a foreign language teachers came under pressure at Czech schools after the German reunification, because they lacked the full qualification to be allowed to teach at schools permanently. Therefore, as early as 2005, we could see an increased interest in teacher education studies in German as a foreign language studies in what was called a 'combined form' [note: lateral entry]." She describes the great effort that participants often have to make to receive the qualification: "In the combined form of study, teaching takes place in person every 14

days, on Fridays starting at 2:00 p.m. and on Saturdays starting at 9:00 a.m., and ends at 9:00 p.m. on both days. At the same time, the small number of in-person phases must be supplemented with intensive autonomous study. It's very hard because, of course, many students already have families in addition to their jobs."

Podcasts in the German as a Foreign Language Class: Experiences from an Erasmus Project

Aurica Borszik, a lecturer who works in the second career qualification of teachers at the primary school level, presented an Erasmus project on how podcasts can be used in German as a foreign language lessons and also reported on the joint production of podcasts with teachers completing academic training as part of the German Lessons Online (DUO) project. She notes:

"Through the podcast productions, participants can automatically learn which competences are taught by the digital processing of texts for listening. At the same time, they learn first-hand how they can implement podcast projects on a wide variety of topics with their students."

The DUO project and its product Practical and Methodological Handbook for Teaching German Online were presented in hybrid form in Ústí nad Labem at the end of January 2023.

Strengthening the Cooperation between the ZLSB and UJEP: Student Exchange and an International Publication Are Planned

The successful relations between the ZLSB and UJEP are to be further expanded upon in the future. In the near future, the international-oriented IMPRESS project is planning to promote student mobility with schools in Ústí nad Labem.

Dr. Petra Fuková will be contributing an article on combined studies to a joint international publication with the ZLSB on international perspectives on teacher shortages which will be published in 2023.

Lateral Entry Project Manager

Dr. Peggy Germer

➤ [More information on the second career qualification of teachers](#)

Preparing a Collaboration with the School of Education of Nkumba University Entebbe, Uganda

Since mid-2021, the ZLSB has been in contact with the School of Education at the private Nkumba University in Entebbe, Uganda, to explore prospects for collaboration. The very young population of Uganda is resulting in a high demand for teachers, which led Uganda to develop various strategies to qualify individuals at different stages of life for the teaching profession. An exchange would allow the participants in Saxony and Uganda to learn from each other.

For this reason, Dr. Melanie Wohlfahrt (BQL GS subject coordinator), Aurica Borszik (BQL GS staff member) and Elisabeth Nabanja Mukumbi (representative of the TUD Alumni Uganda e.V.) traveled to Entebbe from June 21-27, 2022 to exchange information about the structures of teacher education in Uganda and in Germany and to work out common fields of action. In the first forum, current developments, such as the Common Higher Education Area in East Africa, were presented by Prof. Wilson Muyinda Mande, for example. This is a university network which is intended to make study and research across international borders possible. The Ministry of Education and Sports was represented by Annet Kajura Mugisha, who discussed current developments in teacher education and the challenges of lateral entry qualifications for teachers, similar to the second career program in Dresden. Their expertise on the lateral entry qualification for teachers was of great interest to the colleagues at Nkumba University, especially the Vice-Chancellor, Prof. Jude Lubega.

Digitalization and Inclusion: Nkumba University Focuses on E-learning and Internships for Teacher Qualification

At Nkumba University, more attention is currently being paid to the issues of digitization and the inclusion of students who are unable to regularly attend class in person at the university due to having to travel long distances or other circumstances. It is especially in rural regions that there is a high demand for teachers and universities. The responsible ministries are also working together on programs to qualify teachers over long distances. Nkumba University's e-learning officer,



Photo: Dr. Melanie Wohlfahrt



Photo: Dr. Melanie Wohlfahrt

Joseph Lwevuze Kisaakye, presented an app specially developed by the university, which allows students to edit content from the Moodle learning platform on their smartphones. The exchange on the integration of blended learning formats into conventional teaching concepts will become a part of professional dialog in the future.

Another goal of the visit was to discuss perspectives for student exchange during practical study phases. In the future, the affiliated Nkumba School, a primary and secondary school, could accept students from the TUD for internships. A tour of the premises and a conversation with the principal, Mr. Kisekka, painted an impressive picture of the everyday organization of the school and the teaching.

The Dean of the School of Education, Dr. Esther Namugumya Lugolobi, also facilitated a variety of exchanges with students and prospective graduates, as well as insights into the practical design of the university's pedagogical courses, such as during a tour of a collection of didactic materials similar to the Faculty of Education's learning workshop. The short, very intensive visit provided deep insights into teacher education and its current challenges in Uganda. It was a successful starting point for closer exchange, which could be deepened within the context of staff mobility via the ErasmusPlus program.

Second career qualification at Primary Schools

Dr. Melanie Wohlfahrt

Department of Primary School Didactics

Aurica E. Borszik

➤ [More information on the second career qualification of teachers](#)

International Affairs



Photo: Unsplash/Kyle Glenn

Teacher Academies

Funding in the Amount of EUR 1.5 million from the EU for the Teacher Academy Project – Teaching Sustainability (TAP-TS)

The ZLSB at the TUD, together with the international partner institutions involved, was awarded the Teacher Academy Project – Teaching Sustainability (TAP-TS) grant by the European Commission, with EUR 1.5 million in funding.

Erasmus+ Teacher Academies: European Partnerships to Strengthen Teacher Education and Training

TAP-TS is one of eleven European projects supported by the EU Commission under the new Erasmus+ Teacher Academies funding line. Originally, 56 projects

from 18 countries applied. What all Teacher Academies have in common is that they make an important contribution to the European partnerships in the field of teacher education and further and continuing education for teachers. By doing so, they strengthen the European and international perspective of teacher education and contribute to increasing the attractiveness of the teaching profession.

The eleven EU-funded Teacher Academies bring together pedagogical professionals from all three phases of teacher education with ministries and teachers' associations to strengthen their structural cooperation and jointly develop new strategies for occupational learning. The strategies resulting from the cooperation are intended to support teachers in teaching important topics such as sustainability, digitalization, and inclusion.



Photo: PantherMedia / paulgrecaud

ZLSB Coordinates a European Teacher Education Project with International Partners

The ZLSB will assume the role of project coordination and project management in the new project. In addition, on the basis of previous ZLSB projects, such as TUD Sylber, the second career qualification of teachers, IMPRESS, or work in the context of inclusion, subject-specific and subject-didactic expertise and teaching content can be drawn upon. It will also be part of the event and module content. To implement the project, the ZLSB has joined forces with renowned partner institutions from Belgium, Ireland, Austria, Portugal, Sweden, Cyprus, and Germany. The project consortium is



Photo: Crispin-Iven Mokry

geographically and culturally diverse, bringing together three preeminent teacher education institutions, two leading national teacher professional development institutions, three schools, a leading educational technology company, and a nonprofit civil society organization working in the context of sustainability.

This exemplary EU-wide structural collaboration among actors in teacher education and further education is guided by the common goal of developing high-quality teaching and learning resources or learning modules and supportive pedagogical approaches for teachers that are in line with the 17 United Nations Sustainable Development Goals that further promote the implementation of the 2030 Agenda in European schools.

Teachers who are interested will then have the opportunity to participate in events and workshops and thereby contribute their expertise to the development and redesign of teaching modules and to exchange ideas across national borders. As a partner school for the TUD, a school from the region is also an integral part of the project work. Dr. Kristian Raum, principal of the Friedrich Schiller Gymnasium Pirna grammar school, will work together with his colleagues to test and evaluate the teaching materials in order to ensure that the materials and learning modules that were developed can be applied in practice.

TAP-TS Project Coordinator

Dr. Rachel Bowden

➤ [More information on the TAP-TS project](#)

KICK-OFF EVENT FOR THE EU TAP-TS PROJECT

On June 1, 2022, the EU Teacher Academy Project – Teaching Sustainability (TAP-TS) project was launched at the ZLSB under the leadership of Prof. Axel Gehrmann as one of eleven Erasmus-plus teacher academies funded by the EU Commission in the period from June 2022 to May 2025. TAP-TS aims to strengthen the competencies of primary and secondary teachers in order to teach sustainability. The focus here is on environmental sustainability, social inclusion, digitalization, entrepreneurship, and pedagogical approaches that thematically relate to the European Union's priorities in educational policy. To achieve these goals, the project consortium will design, pilot, and validate learning-teaching packages (LTPs) and build professional networks and communities to ensure their widespread dissemination and use.

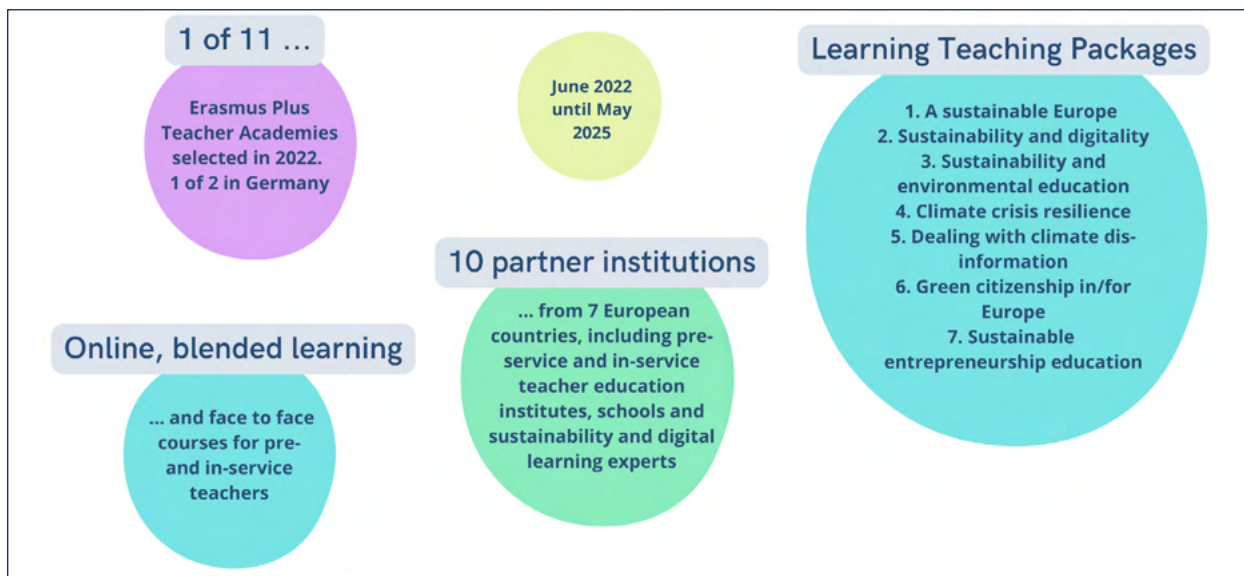


Logo: © TAP-TS

As a lead partner, the ZLSB is taking on the role of project coordination and project management and is working together with ten outstanding international partners. The project consortium is comprised of three teacher education institutions, two leading national teacher professional development institutions, three schools, a leading educational technology company, and a nonprofit civil society organization. It is made up of representatives from initial and continuing education for teachers, teachers themselves, schools, experts in digital learning, experts on education on sustainability, and experts on quality assurance in education. Altogether, it comprises ten partners from seven EU countries:

- TUD Dresden University of Technology, Germany
- University College Dublin, Ireland (UCD)
- Pedagogical Institute Santarem, Portugal (IPS)
- Cyprus Pedagogical Institute, Greece (CPI)
- University College of Teacher Education, Vienna, Austria (PHW)
- CorEdu, Leipzig, Germany (CorEdu)
- Eummena, Belgium (EUMMENA)
- Kings Hospital School, Dublin, Ireland (KHS)
- Friedrich-Schiller-Gymnasium Pirna grammar school, Germany
- (FSGP) K and R Education, Sweden (KRE)

From June 7-9, 2022, the partners met for the TAP-TS kick-off, the first online event that marks the beginning of the first year of the project. This phase will be



Key data from the TAP-TS project, © TAP-TS

dedicated to the conceptualization, provision of human and material resources, and development of the seven teaching-learning packages. These teaching-learning packages are intended to provide innovative pedagogical approaches and materials to primary and secondary school teachers, as well as to lecturers in institutions of higher education, primary and specialized trainers, and in-service trainers. Their working titles are: "A Sustainable Europe (Secondary Teachers)," "Sustainability & Digitality (Primary Teachers)," "Sustainability & Environmental Education (Primary Teachers)," "Climate Crisis Resilience (Secondary Teachers)," "Green Citizenship in/for Europe (Primary and Lower-Secondary Teachers)," and "Sustainable Entrepreneurship Education (Primary and Secondary Teachers)."

The kick-off event consisted of five individual workshops, each focusing on one of the five work packages. As project manager and project coordinator, Prof. Axel Gehrmann and Dr. Rachel Bowden opened the three-day event and presented the tasks, milestones, and results of the project. The sessions included presentations and discussions on the four work packages other than Project Management and Coordination: Teacher

Education Materials and Approaches (Work Package 2, responsible institution: University College of Teacher Education Vienna), Online Workshops, Active Learning Events and Summer Schools (Work Package 3, responsible institution: EUMMENA), Quality Assurance and Evaluation (Work Package 4, responsible institution: K and R Education), and Communication, Dissemination, Exploitation and Legacy (Work Package 5, responsible institution: University College Dublin).

Participants discussed the framework conditions, their concerns and expectations regarding project management, and exchanged ideas about possible forms of communication within the consortium. They discussed the design and content of LTPs and how to involve teachers in their development and testing. The workshops collected initial ideas regarding the design of the online workshops, active learning events and summer schools. The partners also learned about the TAP-TS Moodle platform, where the LTPs and course activities are to be developed, and through which it is possible to contact teachers and teacher educators directly. They developed a theory of change as a guideline for the external evaluation of the project. Another important point of discussion during the meetings was how teachers and teacher trainers can be involved in their institutions, regions, and Europe-wide, both during and after the project period.

On October 5, 6, and 7, 2022, the partners met in Dresden to discuss the framework conditions for project management and coordination, the preparation of teaching-learning materials, the planning of quality assurance, as well as online courses, active learning events, and summer schools. A subsequent workshop offered the external experts who were invited the opportunity to give constructive feedback on the quality assurance of the project. By February 2023, teaching and learning packages were completed, providing



Photo: PantherMedia / AntonMatyukha

innovative, engaging, and pedagogically sound learning and teaching resources.

TAP-TS Project Coordinator

Dr. Rachel Bowden

➤ [More information on the TAP-TS project](#)

The DAAD IMPRESS Project Receives Funding for Another Two Years

The ZLSB will also receive funding of around €300,000 for 2023 and 2024 for the successful IMPRESS (Internationality via Mobility Projects, Research and Educational Synergies) internationalization project as part of the DAAD Lehramt International program. The project, which has been in existence since 2019, has the strategic goal of increasingly developing internationality as a fixed and essential component of teacher training at the TUD, supporting students in developing their intercultural competences, and preparing aspiring teachers for work in culturally heterogeneous classes.

The ZLSB's International Network

The cooperation models developed so far focus on regional networking with universities and educational institutions in close geographic proximity to Dresden (universities in Poland and the Czech Republic), as well as a global network with partners in the USA, Japan, Hong Kong, Vietnam, Indonesia, Israel, Jordan, and South Africa. With more than 50 international partner

universities and schools, a resource-rich network has developed in recent years, which opens up numerous options for international experience and cooperation for students and staff. (Prospective) teachers are supported in this by a comprehensive range of advisory services aimed at developing international mobility into a visible component of teacher education. In the first funding phase, for example, the ZLSB succeeded in establishing an international school network which enables teacher education students to find both universities for study periods abroad and schools for school internships abroad.

From Virtual Learning to International Mobility: New Phase of the ZLSB Project Focuses on Extended Course Offerings

The first funding phase, which was heavily influenced by the pandemic, was particularly characterized by efforts to test virtual teaching and learning formats in international settings that simultaneously enable collaborative learning in bi-, tri- or multinational student work groups. The virtual activities have greatly enriched the cooperation with the ZLSB's international partners. In the next two years of the project, more of the focus will now be on promoting student mobility and additional courses. The implementation and further development of virtual formats remains an integral part of this.

IMPRESS

Maria Richter-Babekoff

➤ [More information on the IMPRESS project](#)

Photo: PantherMedia / Rawpixel



Students Report on their International Experiences During the Pandemic



Photo: Pixabay

International Internships during the Pandemic

What if your long-awaited school internship in the country you always dreamed of going to has to be postponed indefinitely? What do you do if a pandemic suddenly breaks out in Ireland during the academic year? And what should you do if the internship you had planned in the region is canceled and you are offered a digital alternative at a school in Prague instead?

The outbreak of the pandemic in the spring of 2020 changed our lives in an instant and forced us cancel our plans, or at least postpone them. The impact on many students' mobility projects was massive. Moreover, it was difficult to predict when and how the global situation would change. Nevertheless, many students were not deterred from sticking to their plans to study abroad and were willing to explore new and unknown paths.

School Internship in Singapore: Journey to the City of the Lion

"Both privately and professionally, my time in Singapore allowed me to further develop myself and broaden my horizons. I was able to immerse myself in another culture and significantly improve my English language skills, as English is one of Singapore's national languages. I was also able to gain a lot of practical teaching experience through my work as school assistant and learn how a German school abroad works."

School Internship in South Africa - Unforgettable Experiences in Cape Town

"It really wasn't easy for me to say goodbye, especially when the children then had lovingly made farewell cards as a surprise. And I have to say, they all really grew on me. My time there enriched me personally. I gained a lot of hands-on experience and feedback, because I was so well integrated into the school."

In the new series on International Experiences During the Pandemic, produced at the ZLSB, teacher education students report how they planned and were able to carry out their stays abroad despite many inconveniences related to the pandemic. Whether virtually or in person, as a study semester abroad or as a school internship, the reports are as diverse as the students' experiences themselves.

In spite of all the obstacles, the students agree that their stays abroad were unforgettable and were worth it!

Student Mobility Coordinator

Dr. Yi Li

➤ [More experiences abroad](#)

Continuation of the International Lecture Series “Educational Systems in (trans)formation - Facing the Global Challenges” in the Summer Semester 2022



Photo: PantherMedia / Brock Jones

Challenges and Commonalities in Teacher Training Worldwide

What are the main challenges for teacher education in different countries? What are the similarities and specificities of school and teacher education in international comparison and how do schools and universities deal with the current challenges in the field of education on sustainability? These questions and more were asked and discussed during the summer semester 2022 as part of the international and virtual lecture series “Educational Systems in (Trans)formation - Facing the Global Challenges.” The lecture series was redesigned under the direction of Prof. Axel Gehrmann and Dr. Yi Li and ties in with the content of a course with the same name that was taught in the winter semester 2020/21.

An International Perspective on Teacher Education

The course offered students from participating universities – Tokyo Gakugei University, Pennsylvania State University, and the TUD – the opportunity to explore education systems abroad, gain an international perspective on teacher education and educational research, and gain practical insights into school life in different countries. By working in multicultural teams, the participants were able to develop intercultural sensitivity and competences in addition to their specialist knowledge. Students from all teacher education

programs were able to take part in the course as an educational science module or in supplementary studies.

Academic Support

Prof. Axel Gehrmann

IMPRESS

Dr. Yi Li

➤ [More information on the lecture series](#)

Art, Literature and Global Weirding

In the winter semester 2021/22, the international, English-language seminar “Global Weirding: Human-Environment Estrangement in Literature, Theory and Art,” under the direction of the co-teaching team of Jun.-Prof. Moritz Ingwersen (North American Studies/Future Studies, TUD) and Dr. Alison Sperling (Cultural Studies/Science Theory, Technical University of Berlin). The course was sponsored by the ZLSB IMPRESS project, within the framework of virtual exchange formats, in which the TUD’s international exchange within the field of teacher education will be strengthened.



Photo: Selina Munning

Culture and Climate Change: Seminar Focuses on Global Weirding and the Environmental Humanities

In terms of content, the seminar explored the cultural negotiations of the climate crisis and the Anthropocene, with Thomas L. Friedman's coined term "global weirding" being the central starting point of the seminar. The course emphasized social awareness of the ecosystem's links to climate change. This was done through various literary and artistic media, such as on topics like alienation, speculation, the uncanny or via the strategies of the surreal.

International Expertise and Creative Reflection: Students Explore Environmental Humanities

Students were able to attend various guest lectures and seminars by leading international experts in the environmental humanities, as well as interact directly with renowned North American scholars and authors. Their texts also provided the basis for the course, so that students could simultaneously experience the topicality and academic relevance of their readings. Examples include the publishers of the first literature research volume on the topic of global weirding, Andrew Hageman (Luther College, Miami) and Gerry Canavan (Marquette University, Wisconsin), as well as Professor Larissa Lai (University of Calgary), who wrote the novel *Salt Fish Girl*, which served as a course reading. Students were able to explore the topic in a variety of ways in their end of term project. In addition to a term paper, there was the opportunity to take advantage of creative, artistic and literary offerings and various products emerged that deal critically and aesthetically with the relationship between humans and the environment.

IMPRESS

Maria Richter-Babekoff

Intercultural INTERACT Course Offered Again in the Winter Semester 2022/23

In the winter semester 2021/22, the virtual course Intercultural Competence in Teaching (INTERACT), developed by the IMPRESS project, was held for the first time. The course was led by the experienced lecturers Jyotika Dalal and Dr. Martin Gerner. The teacher education students who participated in the course found it to be of great interest, which is why it was also held in the summer semester of 2022 for an expanded group of the TUD Dresden Technical University's international partner institutions, also with extremely positive feedback.

Teaching/Learning Format Brings Students from Different Countries Together: Focus on Intercultural Competence

The collaborative and virtual teaching/learning format brought together a total of 27 participants, including teacher education student from TUD, the Education University of Hong Kong, the University of Stellenbosch, the Kibbutzim College of Education, Technology and the Arts in Israel, and "in-practice teachers" from the International Leaders Academy in Jordan. The participants acquired knowledge about cultural models and cultural dimensions, reflected on their own cultural perspectives, analyzed intercultural interactions from the school context, and also trained their intercultural competence by working in international teams.

The cooperation with the partners developed out of the trustful networking and partnership work within the international IMPRESS network and the high commitment of the teachers and educational scientists belonging to the network. In particular, through the exchange of ideas in past event formats, such as the international teacher further education seminar in 2020-21, or the international workshop series "THE NEW NORMAL: CHALLENGES AND CHANCES FOR SCHOOLS, TEACHERS AND STUDENTS," there was the desire to also let teacher education students benefit from the close cooperation.

Due to the very positive feedback from the course participants and the constantly growing cooperation within the network, the course was offered for teaching students again in the following winter semester, in 2022/23.

Project IMPRESS

Maria Richter-Babekoff, Dr. Yi Li

➤ [Intercultural courses offered by the IMPRESS project](#)



Photo: PantherMedia / Camil Walter Zahner

Exploratory Trips

The ZLSB Prepares for International Cooperation with the College of Education at Pennsylvania State University (USA)

For several years, close ties have existed between the ZLSB and the College of Education at Pennsylvania State University in the context of changing teacher education, but also alternative pathways into the teaching profession.

The aim of the three-day visit to Pennsylvania State University from June 21-23, 2022 was to hold discussions with various actors on student and staff exchanges, but also on the initiation of cooperation within the framework of existing and new joint projects. In addition, Leila M. Bradaschia (Director of International Programs) presented possibilities for international cooperation with Pennsylvania State University.



Photo: ©ZLSB

Expert Exchange for the Interlinking of Theory and Practice in Teacher Education

At a reception, Dean Kimberley A. Lawless of the Pennsylvania State College of Education expressed a particularly high level of interest in the ZLSB's expertise regarding the close integration of theory and practice in teacher education through the model of having seconded teachers in higher education service.

In an exchange with Dr. Alica McDyre (Director and Associate Teaching Professor of Education), Gregor T. Mason (Director and Certification Coordinator), and Dr. Ryne A. Sperling (Associate Dean, Undergraduate & Graduate Studies (Professor of Education)), the reciprocal conditions for student mobility were discussed. This includes framework conditions for the time and content, the handling of credits, and ways to apply. This way, prospects for an exchange in the context of school internships, summer schools, and other stays at both universities could be identified. At the same time, special attention was paid to the high demand for qualified school principals on both sides. The collaboration on the topic planned for November 2022 also ties in with this: "Intercultural and Intersectional Competence for School Leaders" between the Pennsylvania State College of Education and TUD's ZLSB.

Lateral Entry Project Manager

Dr. Peggy Germer

The ZLSB's Exploratory Trip to University College Dublin (Ireland)

The TUD's ZLSB has maintained close relations with University College Dublin (UCD) for many years. Most recently, together with partners from other European countries, both institutions were able to acquire the EU Teacher Academy Project – Teaching Sustainability (TAP-TS) project, in which teaching and learning materials on the topic of sustainability will be developed starting in June 2022. In order to strengthen the relations with the School of Education of UCD and to identify starting points for further cooperation projects, a five-member delegation of the ZLSB traveled to Dublin from May 16-18, 2022.

During the three-day visit, the representatives of the ZLSB received a deep insight into the Irish school system and teacher education at UCD. School administrators in Dublin provided insights into forms of complex school administration. Colleagues from the UCD School of Education under the direction of Dr. Conor Galvin reported on specific study programs, such as the two-year Post Master of Education program (PME) or the Master of Science program (MSc).

Inclusive Education and Digitalization as the Focus of the Exchange

The topics of inclusive education and digitization were the focus of interest for the Dresden delegation, which included the director of the ZLSB, Prof. Axel Gehrmann and General Manager Martin Neumärker, as well as experts on inclusion, digital education, and lateral entry. The Dublin colleagues presented online-based teaching-learning concepts that were developed during the pandemic-related restrictions on educational operations and whose design principles are geared toward students with special needs. Here, link to the work of the ZLSB's Teaching-Learning Room for Inclusion, whose director, Tina Czaja, was part of the Dresden delegation, became apparent. In an intensive exchange with teachers from the Technological University of the Shannon, the focus was on the development of

computational thinking and computing skills in teachers. Their specially developed training program "Coding & Computational Thinking" for participants from primary and secondary education was of particular interest. Finally, the use of digital media and the teaching of digitization-related skills represent an important field of action for the ZLSB, which was represented in Dublin by the head of the ZLSB's digital team, Cindy Riebeck, and the lateral entry team, Dr. Peggy Germer.

The three-day exchange between the ZLSB and the School of Education of University College Dublin revealed a number of thematic commonalities and



Photo: Dr. Peggy Germer

promising starting points for future cooperation. There is a strong case for German-Irish cooperation beyond the joint EU project TAP-TS and opening up further areas of interest.

Lateral Entry Project Manager

Dr. Peggy Germer

Photo: Conor Galvin



Digitalization



Photo: PantherMedia / Mactrunk

What's New from the Digital Team

Restructuring: Pooling Resources in the Area of Digitalization in Education

In order to pool together the various activities in the field of digitization of schools and universities, five projects – [Schullogin](#), Saxon Server for Education, the Coordination Office 'Digitalization in Teacher Education' (TUD-Sylber), PraxisdigitaliS, and BQL.Digital, which are located in the ZLSB – were thematically interlinked.

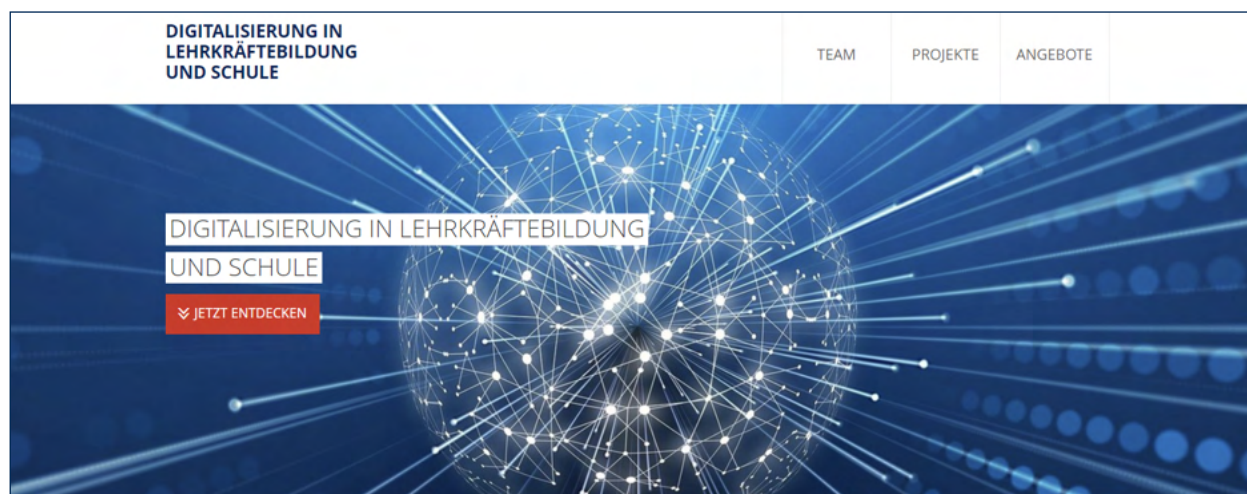
A wide range of support services for teaching and learning with and about digital media, such as the allocation of test access to the central digital services for Saxon schools, the provision of information materials on digital tools for teaching, and the organization of advising sessions and workshops, are now being made available to the various players in teacher education on an aggregated basis. The 17 employees share offices in Ludwig-Ermold-Strasse for this purpose and have

thus been brought together spatially to form a "digital team." The pooling of resources at the TUD's ZLSB allows the individual projects to learn and benefit from each other. For example, didactic scenarios that work well digitally are being investigated in both the Teacher Education Quality Campaign and Schullogin projects. On the other hand, information relating to digitization at Saxon schools can be collected on the SBS as well as Schullogin and passed on to teachers as one package.

Digitalization in Education: New Website and Open House Provide Insights and Opportunity for Exchange

As part of the reorganization, information on activities of and offerings from the digital team was published on the website. On June 1, 2022, the ZLSB digital team organized an open house. The project staff provided insights into and information about the variety of their activities. With the help of posters, video clips,

New website of the digital team at the ZLSB, ©ZLSB





Infographic, digital team at the ZLSB, ©ZLSB

demonstrations, and personal conversations, visitors were able to gain an idea about the ZLSB's digitalization-related activities, exchange experiences, discuss the challenges of digitalization in schools and universities, and forge plans for the future.



The ZLSB digital team's open house at Ludwig-Ermold-Str. 3, Photo: Sindy Riebeck

1. Station workshop on three to five digital media, based on media profiles
2. Supporting learning digitally (Schullogin)
3. Data protection and data security
4. Individual workshops on various digital media, such as BigBlueButton, H5P, Cryptpad, Taskcards, or OPAL Schule

In addition to conducting the workshops as part of the teacher training program, the offerings are also used by the Saxon schools as part of further education courses. In 2022, a total of 309 participants attended these workshops, more than 200 of whom were Saxon teachers. The participants also included 62 lateral entrants, six lecturers, eight teacher education students, and 17 employees from the State Office for Schooling and Education. This shows a significant shift towards more continuing education in the third phase of teacher education.

Learning Opportunities for Teacher Education Students and Teachers in Saxony

In 2022, lecturers were again able to enrich their courses in a targeted manner with digital field trips. The objective here was to provide teacher education students with competences in the use of digital media and prepare the students for the use of digital media in everyday school life. For this purpose, the following selection of offers was made available by the ZLSB's digital team, which are particularly suitable for inclusion in seminars in education sciences and subject didactics.

In cooperation with the colleagues from the Schullogin project, it is possible for teacher education students to receive test access to Schullogin as part of a course and test all of the digital services from the Free State of Saxony that are available to schools. In April 2022, a separate LernSax client for the TUD Dresden Institute of Technology was also established in cooperation with the State Office for Schooling and Education. It is also used to test out the central information and communication platform for Saxon schools as early as during the teacher qualification studies. The access data is managed by employees from the Schullogin team. In addition to the assignment of Schullogin access data to, for example, students of English didactics at the TUD or

computer science didactics at Leipzig university, 2022 was the first time that 42 students also received access data specifically for LernSax. An introduction to the central digital services in Saxony and the opportunity to test them out with test access is, for example, suitable for preparing students for internship placement at a school or for the preparatory service and later, working as regular school teachers.

ZLSB Working Group on Digitalization and Media Education (DigMed)

In 2022, a reorientation of the ZLSB working group took place within the framework of TUD-Sylber, together with the professorial leadership of Prof. Nadine Bergner and Prof. Thomas Köhler, as well as and the employees from the Coordination Office for Digitalization in Teacher Education. The initial focus was on reactivating the TU's internal exchange on digitalization-related topics in teacher education. External actors, such as those from the Saxon Ministry of Education and Culture or the State Office for Schooling and Education, are invited in a targeted manner as needed. The first meeting took place on November 10, 2022, and 26 representatives from subject didactics, subject sciences, and educational sciences, as well as the ZLSB, the Center for Open Digital Innovation and Participation (CODIP), and the student body participated. The focus of the working group meeting was on anchoring media education & digitalization in the teacher education program at the TUD. The following are examples of topics planned for the working group meetings in 2023: project presentation in the area of media education, such as UndiMeS and VISION; media literacy approaches in teacher education; and the status of the media literacy framework in the PraxisdigitaliS project.

Basically, the working group is concerned with expanding the digitization- and digitalization-related competencies of (future) teachers of different subjects and school types at the TUD. This is done by means of a regular exchange of ideas about activities, offers, and projects in the participants' respective areas of responsibility and their further development, especially with regard to:

- The targeted and wide-ranging use of media (learning with digital media):
- The teaching of digitalization-related skills to (future) teachers (learning about digital media); and
- The enhancement of (future) teachers' abilities to communicate digitization and digitalization-related topics to children and young people.

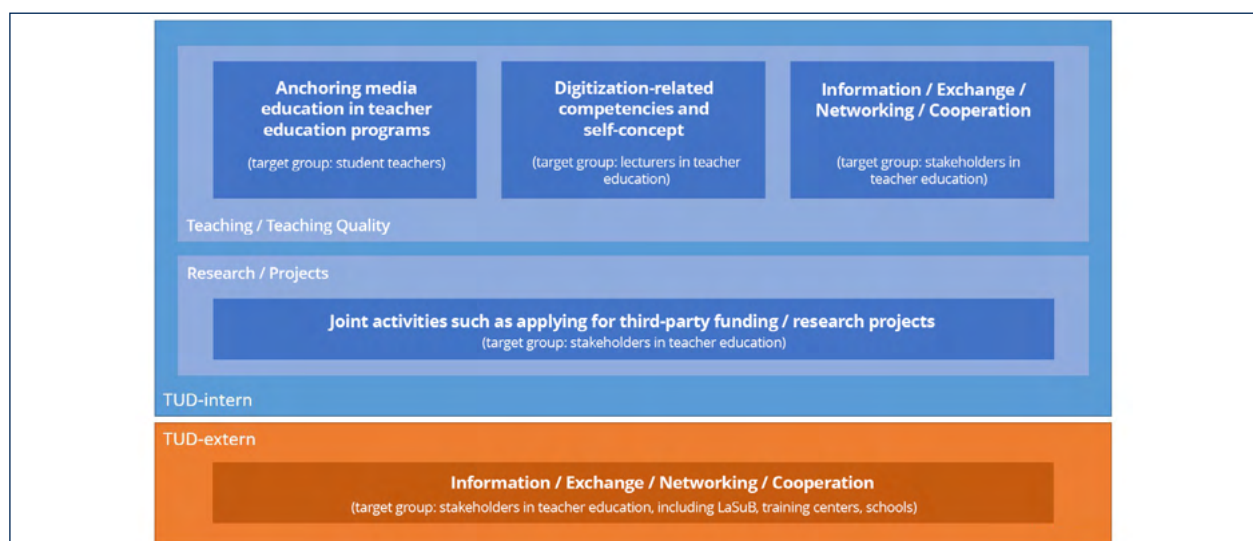
It is possible for interested trainers, consultants, mentors, and teachers, to participate in the working group's meetings.

Starting in 2023, the organization of the working group will be handed over to a member of the team of school teachers in the higher education service (LiH), so that the working group can continue to be run during the TUD-Sylber project period.

Coordination Office 'Digitalization'

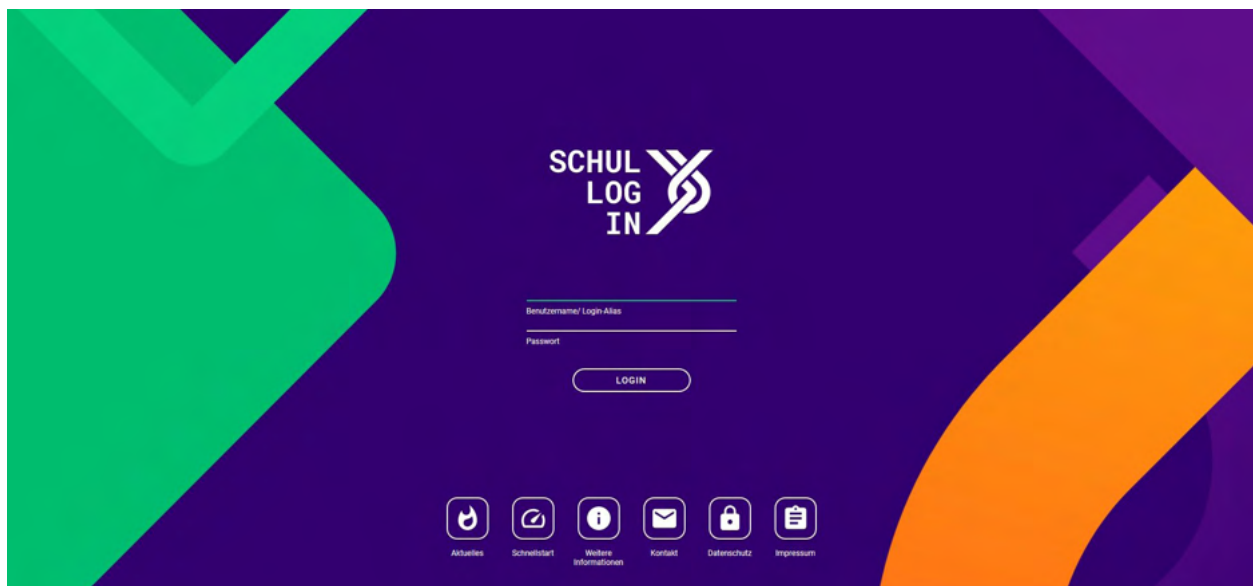
Sindy Riebeck, Fritz Hoffmann

➤ [Digitalization in teacher education and at schools](#)



Objectives of the ZLSB working group Digitalization and Media Education, ©ZLSB

Schullogin: The Entry Portal for the Central Digital Services in Saxon Schools



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

The Integration of Digital Media into Day-to-day Life at School

Digital applications are essential for daily life in schools today. For example, teachers in schools in Saxony use video conferencing solutions such as BigBlueButton (BBB) to digitally enable interactions in the classroom; platforms such as LernSax, OPAL Schule or Moodle to organize digital learning with students or to work in digital courses; online storage solutions such as the Nextcloud to exchange worksheets or learning videos with students; or cooperation tools such as EtherPad to enable collaborative work, even when students are in different places and cannot meet each other at the school building.

Simplified and Secure Access Management for Digital Learning at Saxon Schools

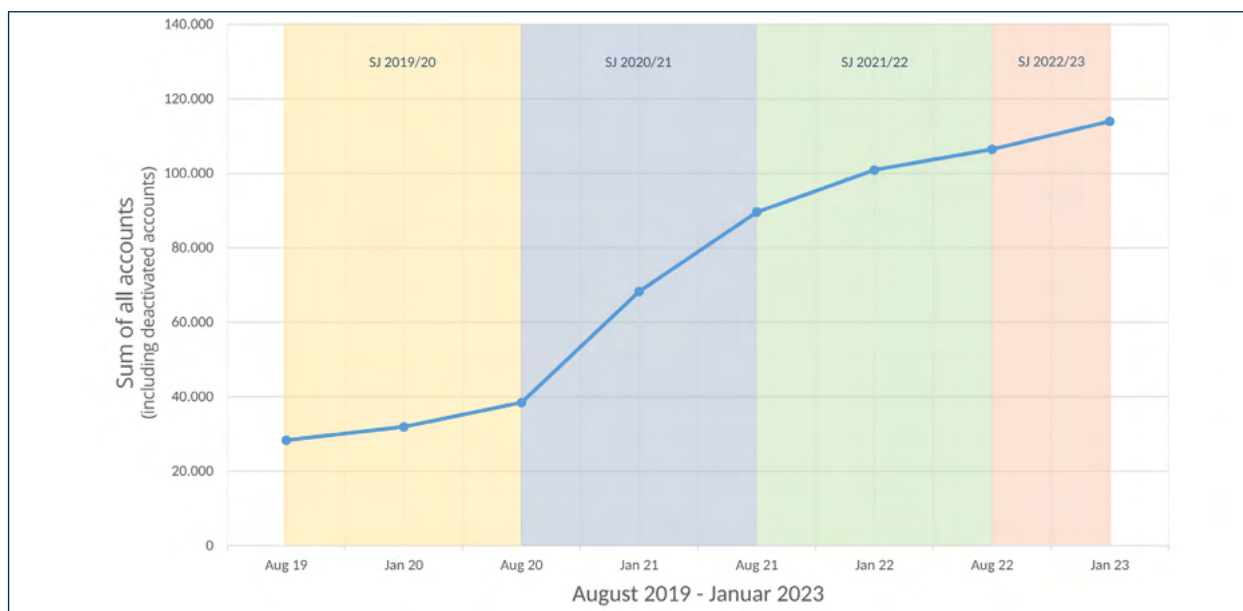
The identity management (IDM) Schullogin enables low-threshold, but also secure, access to the different applications. "It [the IDM] is therefore a key element in the secure and comfortable use of a learning-friendly IT infrastructure. Single Sign-On (SSO) is a technical procedure that enables a single login with access data in order to access all or as many components as possible belonging to the IT system landscape for which authorization exists."¹ The IDM Schullogin has thus set itself the task of simplifying the management of user access by means of uniform and centrally administered access, removing a burden from everyday school life, at least in terms of digital learning at Saxon schools. For this purpose, the IDM Schullogin cooperates both with the central Saxon school administration software SaxSVS and with the corresponding partners or also services at the federal level, in order to be able to provide as wide a range of services as possible both now and in the future.

¹ cf. Verwaltungsvorschrift Schuldatenschutz [Administrative provision on data protection in schools]

Digital Working Environment for Teachers and Students: Prospects for Their Expanded Use in Teacher Education

The use of Schullogin and especially the applications connected to it is explicitly tailored to teachers as well as students. Schullogin thus provides access to a closed digital working environment represented by various communicative and collaborative services. In addition, access to learning management systems is available via secure defined interfaces, which support teaching-learning processes in schools with different focuses. A expansion of its use for teacher education students at universities or in the preparatory service, as well as supervisors and selected individuals who work in administration, is planned or is already partially finished. It is only against this backdrop that the development of digitally supported networking and "permeability" along the entire teacher training chain for the cooperation and transfer between universities, training centers, and schools in Saxony is conceivable in the first place.

Since January 1, 2021, the continuous development of the state-wide Schullogin identity management system (IDM) and the support of its ongoing operations has been handled by the ZLSB on behalf of the Saxon State Ministry of Education and Culture. In cooperation with the Saxon Education Server, the participating institutions look back on a continued successful collaboration in 2022, providing central digital services for educational use in Saxon schools.



Increase in newly created SchullogIn accounts over the course of the year, © ZLSB

SchullogIn Has More Than 100,000 Users

As a state-wide identity management system, SchullogIn is provided free of charge to all Saxon schools. The number of users continues to grow steadily. By the end of 2022, more than 110,000 SchullogIn accounts had been created. This corresponds to an increase of approximately 15% compared with the same period a year earlier. This means that two thirds of teachers and about one in ten students in Saxony have a SchullogIn account and can use the centrally provided digital services of the Free State of Saxony.

The SchullogIn logo: protected since 2022!

Since March 11, 2022, the SchullogIn logo has been a word/image mark registered at the German Patent and Trademark Office. Saxon schools are allowed to use it in certain situations, such as on their school websites.

Up-to-date: Tech News

At the technical level, extensive further developments were made in SchullogIn in 2022.

- A significant addition is the integration of OnlyOffice into the file storage (NextCloud). This enables multiple people to work together on a text, presentation, or table.
- Major updates have further improved the way the BigBlueButton video conferencing service works.
- The new [status page](#) publicly displays the operating status of all digital services for schools in Saxony. Users can directly find information about planned maintenance work or existing malfunctions.
- In order to facilitate the administrative support for SchullogIn at schools, initial concepts for the role of school login manager(s) were developed which will be implemented in 2023.

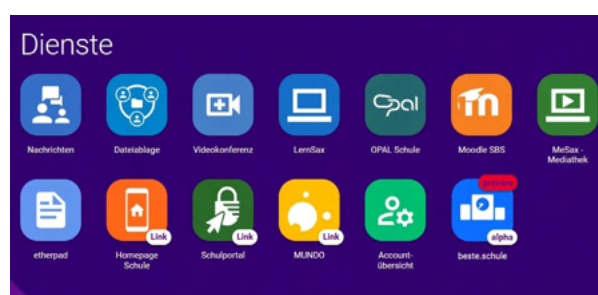
Preparation for the VIDIS Pilot Phase

VIDIS stands for Vermittlungsdienst für das digitale Identitätsmanagement in Schulen [Mediation Service for Digital Identity Management in Schools] and is a joint project of the federal states within the framework of the DigitalPakt Schule act. With VIDIS, the range of digital services for Saxon schools can be successively expanded by mediating between the providers of digital educational services and the identity services of the federal states – in Saxony via SchullogIn. The pilot phase with selected Saxon schools will start in the second half of the 2022/23 school year. The trial of the mediation process will initially be implemented exclusively with beste.schule's digital gradebook and class register.

Events with Lectures, Workshops and Exhibition Stands

Also in 2022, the SchullogIn team has increasingly dedicated itself to the exchange with experts, teachers, and the interested public.

The aim of the teacher further education courses is to give teachers an insight into the SchullogIn portal. The introductory session shows how the portal is used to access the centrally provided digital services for Saxon schools. In addition, insight is provided into the



Connection of the digital gradebook and class register from beste.schule on the SchullogIn overview, ©ZLSB

connected services. Finally, there is the possibility to ask and discuss questions about use and didactic implementation in in-person and distance learning.

Staff Training and Fall Academy

The training courses generally take place on behalf of the State Office for Schooling and Education. Last year, the Otto Lilienthal Vocational School in Freital-Dippoldiswalde and the Lößnitzgymnasium grammar school in Radebeul were supported within the framework of special days for education. At the vocational school center, the focus was on interactive workshops on the use of CryptPad as a collaborative work platform for hybrid/distance teaching and group work, as well as on the setup and use of the Schullogin file storage system in the school context. At the Lößnitzgymnasium grammar school in Radebeul, Dr. Gregor Damnik gave a keynote for all of the staff on the topic "What will the topic of digitalization change in schools?" Afterwards, the colleagues learned more in workshops on Schullogin,



Schullogin promotional materials, ©ZLSB

the central digital services of the Free State of Saxony in general, and, specifically, on the learning platform OPAL Schule. As in previous years, participation in the annual Fall Academy of the State Office for Schooling and Education in November is one of the most important events for the Schullogin team to inform teachers and other individuals with close ties to schools about the current status of Schullogin, as well as new and planned developments. With these teacher training courses, the Schullogin team was able to directly reach more than 220 Saxon teachers in 2022.

Workshops and Trade Fair Presentation Promote Schullogin Use in Saxony

In addition to the area for further education, it is also important to reach people in university teacher education and to draw the attention of both students and lecturers to the services that future teachers will use in their everyday school lives in Saxony. In this context, a workshop for lecturers working in teacher education was held at Leipzig University in May, organized by the project PraxisdigitaliS: Designing Digital Practice in Saxony, funded by the Federal Ministry of Education and

Research. In turn, Dresden student teachers were given an insight into how Schullogin works at the first TEACHERMANIA in June. In December, the Schullogin team was represented with a booth at the forum sachsen digital, sponsored by the Saxon State Ministry of Economics, Labor and Transport. Participation allowed for a variety of exchanges with actors from politics, educational administration, or the IT industry, among others. The new Schullogin promotional materials were used and distributed in large numbers to the participants at all of the aforementioned events.

Support for University Projects in Teacher Education

In addition to supporting Saxon schools, innovative projects in university teacher education are also being supported by providing project staff or participating teachers and teacher education students with access to digital services using a Schullogin account. In the Federal Ministry of Education and Research-funded project "UndiMeS" (Teaching with digital media in Saxony), a project to promote the media literacy in Saxon teachers, staff at the TUD and Leipzig University have access to Schullogin and OPAL Schule to create materials for a training course for teachers. The project BB 4.0 (Vocational Education 4.0 CNC Training) of the Chair of Educational Technology at the TUD is also being supported in a similar way. As part of the framework of this project, three Saxon vocational schools are experimenting with digital cooperation.

Project Coordinator

Sindy Riebeck

➤ [Schullogin homepage](#)

➤ [More information about the Schullogin project](#)

The Saxon Education Server



Website of the Saxon Education Server, © SBS

Joint Project between the Saxon State Ministry of Education and Culture and the TUD

In 1996, the Saxon Education Server, a joint project between the Saxon State Ministry of Education and Culture and the TUD, went online. It was one of the first school-specific internet services. Since then, the services have been expanded continuously, always oriented toward the requirements of the schools. Since 2021, the SBS has been based at the ZLSB.

The Development of Technical Infrastructure

In line with the growing requirements, in 2022, server performance was expanded and the existing technology was consolidated. This means that the services offered by SBS normally run reliably and almost without disruption.

Further Development of Services

Minimehl is an environment for practicing e-mailing with beginners who were not given a “real” e-mail address during their education, for whatever reason. This includes students in lower grades, special needs students, etc. The service’s software has now been updated and has been implemented and offered on the SBS since March 2022.

All students and teachers can register for **SBS-Moodle** and use their workspace via the central Saxon identity management system Schullogin, which is hosted at the SBS. Since September 2022, an automatic creation function has existed for course areas for teachers who log in with Schullogin. This means that teachers can now independently create courses and prepare all the functions of Moodle for their students. This reduces the administrative burden on the responsible managers at their schools. In addition, the automated activation and deactivation of user accounts was implemented to prevent continued use of the service after leaving the teaching profession.

Mailing lists are still very popular as a proven means of communication. Therefore, the SBS mailing list service was completely relaunched in mid-2022. The software for it was replaced and the lists migrated and updated.

Ticket systems are important tools for high-quality support. Since mid-2022, a common ticket system for the SBS educational services and other central digital services at the Saxon State Ministry of Education and Culture has been established and optimized. Support service for Schullogin is also being piloted here. After successful piloting, it will be phased in as a working system in 2023.

Through the SBS, an additional ticket system for support for non-education-related services and public relations at the Saxon State Ministry of Education and Culture was created and migrated from the previous system.

The **SBS homepage construction kit** is one of the most used services. In 2022, it was finally possible to once again offer in-person training courses, which are still in very high demand. Updating and migrating the basic TYPO3 software proved to be much more complicated and labor-intensive than anticipated and could therefore not be completed in 2022.

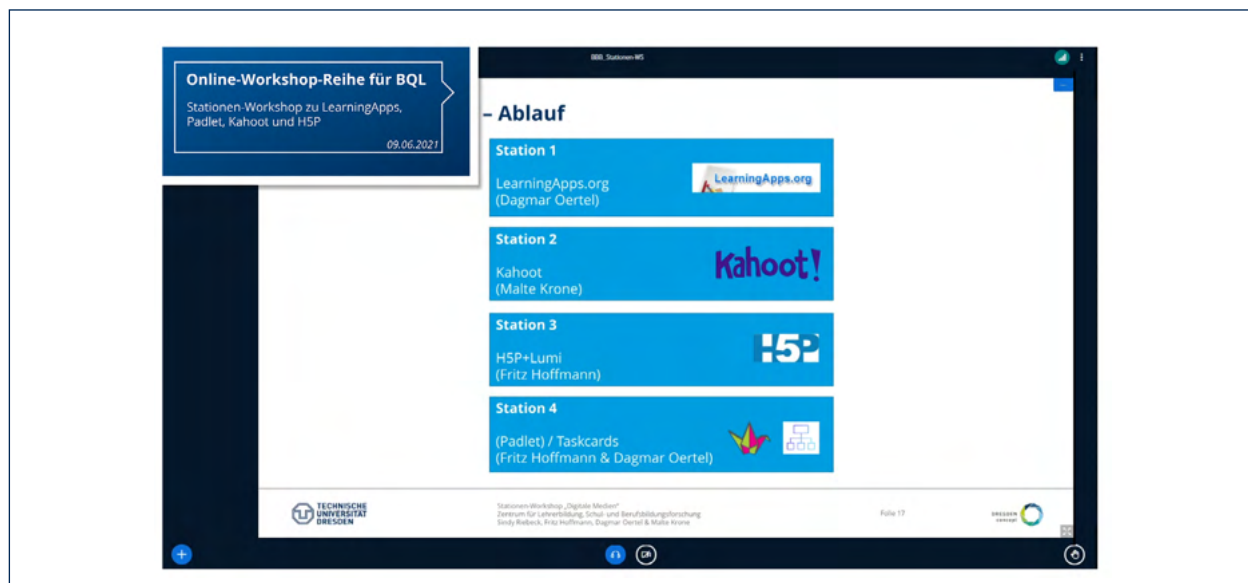
Contributors

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Further information about the Saxon Education Server and the services it offers is available at:

➤ [Website of the Saxon Education Server](#)

BQL.Digital: The New Media Lab is Taking Shape!



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

BQL.Digital is the central support structure on topics related to digitalization for the participants and lecturers in the second-career qualification of teachers (German: *berufsbegleitende Qualifizierung*, or BQL) at the ZLSB. BQL.Digital uses self-learning modules and workshops to provide further education on digital topics and tools. These include workshops on how to use conference services (BBB, Zoom), collaborative tools (CryptPad, TaskCards, Padlet), interactive tools (LearningSnacks, H5P, LearningApps, Kahoot!), and the creation of explanatory videos (screencasts, cutout animations, and stop motion technology). BQL.Digital also provides support on technical and media didactic matters within the scope of individual consultations or digital office hours. In 2022, a space was created with the media lab in which the digital tools from the BQL. Digital portfolio can be tested and used in practice.



Video technology from the new media laboratory, Photo: Malte Krone

The media lab aims to help harness the potential of digital media for university teaching and to introduce teacher education students to the production of their own educational media. This is where lecturers and teacher education students are supported in the

production of media for teacher education and school lessons, with access to a wide range of equipment and competent advising.



Podcast technology in the new media laboratory, photo: Malte Krone

The new lab provides high-quality equipment and software that can be used to produce films, podcasts, or digital learning resources. Employees, teachers, and students will be able to execute their own projects and events here in the future. "For example, at the ZLSB, we use the new technology to produce videos and podcasts for student communication," explains Malte Krone, who is also responsible for the technical equipment in the laboratory. "The media laboratory is also indispensable for the implementation of hybrid and online-based teaching formats in the qualification program for BQL participants. In addition, we are also happy to make the equipment available to colleagues and teacher education students and instruct them on the use of the equipment."

The media lab is coordinated by the projects Coordination Office 'Digitalization', Making Teachers Confident (MTC), and primarily by BQL.Digital.

➤ [More information on the Media Lab](#)

Lesson Design and the Organization of Studies and Teaching: New Learning Modules at BQL.Digital

The extensive portfolio of BQL.Digital self-learning modules was expanded in 2022 on TUD's own learning platform, OPAL. This includes new modules on the topics Skitch (for the annotation of images), Notion (for organizing one's own studies), Edkimo (a feedback tool for simple inquiries), and SIEVAS (a portal for internal evaluation of school and teaching quality). In addition, the BQL.Digital team offered many workshops. Among other things, it supported primary school workshop days digital applications, apps, and co. in non-elective subjects with digital tools. They also tried out workshops on the topic of creating explanatory videos.

➤ [More information on the new learning modules at BQL.digital](#)

BQL.Digital is Building National and International Networks

BQL.Digital presented its own online offerings for the second-career qualification of teachers at the TUD's E-Teaching Day, Teaching Digitally - Teaching about Digital Topics. Furthermore, there was an academic discussion about BQL.Digital's project activities at networking meetings in Dresden together with our international partners from Huddersfield, England (Prof. Hazel Brayn and Jayne Price, September 2022) and Japan (Prof. Mae-hara and Mr. Enomoto, December 2022). In particular,



BQL.Digital: Symbol for digitalization and media education within the framework of academic education at the TUD, Photo: PantherMedia/nd3000

the support structures of BQL.Digital and their integration into the further training program were presented.

➤ [BQL.Digital introduces itself at TUD's E-Teaching Day](#)

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Photo: PantherMedia / Artur Verkhovetskiy



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Photo: PantherMedia / stokkete

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