TEACHER EDUCATION AT THE UNIVERSITY OF COLOGNE
Dear reader,

Teaching is one of the oldest professions in the world. The act of passing on knowledge and experience already existed long before the term ‘teacher’ was introduced to denote this as a specific profession. Therefore, for many centuries, there were no rigid rules or concepts of teaching. This makes the teaching profession one of the most diverse and complex of our time. In addition to professional competence, which has to be continuously refined through lifelong learning, the teacher profession demands social skills, such as empathy, assertiveness and particularly the willingness to do more than just a job.

As one of the largest universities in Europe that provide teacher education programs, the University of Cologne offers a wide range of subjects with a focus on interdisciplinary approaches and a wide scope of opportunities to acquire practical experience while studying. The adoption of the Bachelor’s and Master’s degree programs not only served to extend learning past theory to emphasize the practical application of advanced studies, but also added to the development of a professional identity of students. In addition to their professional skills, students are asked to reflect on and discover the opportunities as well as challenges of the teaching profession at an early stage. To help them grow into the role of a teacher, students are offered professional assistance by the university.

The establishment of the Center for Teacher Education (in German: Zentrum für LehrerInnenbildung – ZfL) in 2011 marks an (important) milestone in the design of the teacher degree programs at the University of Cologne. In addition to continued academic support (both in their individual academic disciplines and in the fields of pedagogy and didactics), it serves as a central contact for students where they can pose questions concerning their studies and practical phases/internships – from all relevant issues (e.g. examinations) to individual career counseling. Coordinators and consultants at the Center for Teacher Education develop various offers for the practical phases of the teaching degree programs, maintain cooperation, and organize initiatives on the core issues of education policy, such as Inclusion, Digitalization, Internationalization and Educational Equity. Moreover, the students with the brightest prospects have the opportunity to attend postgraduate mentoring programs at a separate in-house Graduate School for Teacher Education, which secures the next generation of scholars.

This introduction is only a quick insight into the variety and scope of teacher education in Cologne. Four faculties, cooperations with another two universities in Cologne as well as numerous interdisciplinary projects make the University of Cologne one of the most research-oriented and at the same time practice-focused higher education institutions in Germany. On the following pages, we would like to present an overview of our spectrum of programs and projects. You are invited to learn more about our teacher education. Enjoy an interesting and inspiring read.

Professor Dr. Stefan Herzig
Vice-Rector for Teaching and Studies at the University of Cologne

Myrle Dziak-Mahler
Executive Director of the Center for Teacher Education at the University of Cologne
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In Germany, the authority over schools and higher education lies with the federal states. The educational system is therefore not consistent throughout the country. However, there is a common basic structure of the educational system across all federal states: The system is based on different levels and comprises the educational sector (elementary school, lower secondary and upper secondary levels), the tertiary sector (higher education) and the quaternary educational sector (vocational education and training). The preschool sector (kindergarten, nursery school) is present in all federal states.

In the elementary sector, the primary school is the only choice of school, covering the first four years. Some states have introduced an extended elementary school up to sixth grade, but (the state of) North Rhine-Westphalia is not one of them. At the end of primary school, pupils receive a high school entrance qualification for their further schooling (types of secondary school) on the basis of their school grades.

In contrast to the primary level, the lower secondary level (Sekundarstufe I) is divided into different types of schools: General Secondary School (Hauptschule), Secondary School (Realschule), Comprehensive School (Gesamtschule) and High School (Gymnasium). In addition, there are so-called secondary schools (Sekundarschule) in the state of NRW. Pupils can obtain a vocational training as well as higher education entrance qualifications there. All types of schools have different curricula and aim at different school diplomas.

Compulsory schooling usually begins at the age of six and comprises nine years of attendance (in some states ten years, e.g. also in NRW) at a general school (primary school and lower secondary school). Schools in the German educational system are predominantly publicly funded, and the number of private or independent schools is rather low compared to other countries.

At the end of lower secondary school, pupils are awarded with the general school diploma that allows them to attend various educational institutions in the upper secondary levels. These include the upper secondary school of higher education, various higher secondary vocational schools (e.g. higher vocational schools or specialized secondary schools) or vocational colleges (within the framework of dual vocational training). Having successfully completed the upper level students attain either a vocational qualification that enables them to take up a certain occupation, or the higher, subject-related education entrance qualification (Abitur) that licenses the admission to university, vocational academies or schools.

The German educational system is strongly influenced by special needs schools (schools for children with special educational needs) in which pupils with different individual needs of support (e.g. hearing or visual impairment, learning difficulties) are taught outside the regular school system. According to the UN Convention of Rights of Persons with Disabilities (2008), some changes have already been realized and are to be expected in the coming years. In NRW, the expansion of inclusive schools is promoted by the educational policy: The classrooms (disregarding the type of school) are expected to be transformed into inclusive/joint classrooms for all pupils with and without special educational needs. This development is anticipated to be implemented nationwide.
The School System in North Rhine-Westphalia

The Legend:
Q2: Qualification phase 2
Q1: Qualification phase 1
IP.: Introductory phase

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Primary School
Grundschule

Special Needs School
Förderschule
The University of Cologne is the largest university in Europe providing teacher education. In Cologne about 14,000 future teachers are currently trained at four faculties, the German Sport University and the University of Music and Dance. The Center for Teacher Education at the University of Cologne coordinates, modifies and develops teacher education programs, acting as a central academic institution connecting faculties and schools. As one of the beneficiaries of Germany’s Universities of Excellence Initiative, we aim to provide future teachers with the best environment and infrastructure, accompanying and counseling them during all phases of their studies.

Teacher education at the University of Cologne allows students to gain practical experience during their studies, to obtain orientation and to create networks for their future field of work. By providing an excellent quality of teaching experiences and research possibilities, we want to anticipate the social reality of the future and create structures for the best possible programs. The practical part of the teacher education programs is realized at approx. 850 schools and numerous pedagogical institutions in and around Cologne. One main goal is indeed the development of future teachers’ personalities: We want teachers to do excellent work in schools for the future of our society. This is why we are constantly striving to improve teacher education in Cologne by co-creating impulses and innovations in the educational field.
The University of Cologne, established in 1388, is one of the oldest and largest universities in Europe. Its mission is to create, preserve and mediate knowledge, to provide top education and scientific teaching and training to its students, young scholars and researchers as well as to encourage cutting-edge research and practice. Almost 50,000 students are currently being educated and trained in more than 200 study programs offered by University of Cologne. The students are spread over six faculties:

In the winter term of 2016/17, approximately 28% of all students were pursuing a degree in teacher education. The four cooperating faculties (the Faculty of Human Sciences, the Faculty of Arts and Humanities, the Faculty of Mathematics and Natural Science and the Faculty of Management, Economics and Social Sciences) as well as the two cooperating universities (the German Sport University and the University of Music and Dance) are currently training students in more than 1,000 subject combinations.

http://ukoeln.de/HFUB6
FACULTY OF HUMAN SCIENCES

The faculty is divided into the four research groups/departments: (I) Educational and Social Sciences, (II) Psychology, (III) Therapeutic Education and Rehabilitation as well as (IV) Art. The linking element of the respective subjects is the representation of the human being in his/her various facets. Questions concerning education, the development and behavior of the human being and its embedding in various forms within the social context present the central framework for the varied content in research and teaching. The major focus of the faculty is teacher education. The faculty teaches a large proportion of the educational and social sciences as well as artistic subjects for all teacher training courses and types of school, except for vocational schools. Another focus are the research-oriented Bachelor’s and Master’s programs offered in education, psychology and social and rehabilitation sciences. Its Department of Special Education and Rehabilitation is one of the largest centers of its kind in Europe. The faculty’s Center for Diversity Studies analyzes causes and consequences of increasing diversity in contemporary societies, aiming to develop strategies of dealing with diversity in organizations as well as in society productively.

http://ukoeln.de/BUJWA

FACULTY OF ARTS AND HUMANITIES

The Faculty of Arts and Humanities provides deepened and theory-based knowledge of languages and literature, culture, history and philosophy throughout the world. In 27 institutes and various departments, the development and dissemination of values and ideas, theories and models is analyzed. In addition to innovative interdisciplinary studies (e.g. Media Studies, European Legal Linguistics), the faculty has already established numerous international-oriented special research areas and collaborative projects (e.g. Morphomata Research Fund) and research centers (e.g. Global South Studies Center Cologne). The Faculty of Arts and Humanities offers 25 Bachelor’s and 30 Master’s Programs. Teacher education plays a pivotal part at the faculty.

http://ukoeln.de/9FE9T
FACULTY OF MATHEMATICS AND NATURAL SCIENCES

The Faculty of Mathematics and Natural Sciences comprises the departments of Biology, Chemistry, Geoscience, Mathematics, Computer Sciences, Physics as well as Didactics of Mathematics and Natural Science. With its six departments and 22 institutes, the faculty is among the largest in Germany. Its diversified supply of modern courses coupled with high-quality research activities cover a broad spectrum of research topics. The close collaboration with the Faculty of Medicine, the Max-Planck-Institute and the Research Center Juelich supports research structures and enriches the scope of lectures substantially. The focal points of research in teacher education are the analysis, planning, design, reflection and evaluation of teaching and learning processes in Mathematics and in Natural Sciences. Research interests are interdisciplinary and can be divided into two main clusters: (I) argumentation and communication in Mathematics and Natural Sciences, (II) nature of Science in Mathematics and Natural Sciences.

http://ukoeln.de/MFNVE

DEPARTMENT OF MANAGEMENT, ECONOMICS AND SOCIAL SCIENCES

The disciplines of the Faculty of Management, Economics and Social Sciences combine theoretical groundwork of business management, economics and social sciences with the applied, practice-oriented research of fundamental and practical concerns of society. The teacher training programs are available at the Department of Economic Education and they allow to choose between two profiles of the faculty: the economic education (school-based) and the commercial profile (company-based). While the school-based economic education profile enables a traineeship at vocational schools, the company profile prepares for vocational training in companies. Moreover, the school profile of the faculty offers majors in Educational Sciences and Vocational Pedagogy as well as Economic Sciences and Business Informatics for vocational schools.

http://ukoeln.de/SVNW4
THE CENTER FOR TEACHER EDUCATION
Zentrum für LehrerInnenbildung (ZfL)

The Center for Teacher Education at the University of Cologne coordinates, modifies and develops the teacher education programs, acting as a central academic institution connecting faculties and schools. The Center counsels and accompanies prospective teachers from the beginning of their orientation placement in the first semester until their graduation and even further on, if they decide to obtain a doctoral degree. The Center consolidates the Examination Office, the Graduate School for Teacher Education, the Information Center and various institutions for future-oriented projects concerning teacher education and training. Moreover, the Center for Teacher Education participates actively in developing and structuring conceptional and organizational frameworks by maintaining a constant dialogue with various institutions of the university, practical teacher trainers and the responsible state ministries, thereby being a central player in the “Education Region Cologne”. The Center deliberately and actively cultivates the engagement with advanced topics around school and education. In various projects, the Center is addressing current challenges and developments such as inclusion, internationalization, diversity and digitalization in society, school and education, as well as possible prospects for the future development. With a broad range of publications and various event formats, the Center is making these perspectives visible to the public.

http://ukoeln.de/2PF7B
FUTURE STRATEGY TEACHER EDUCATION
Zukunftsstrategie LehrerInnenbildung (ZUS)

„Shaping Heterogeneity and Inclusion — Future Strategy for Teacher Education“ is a pioneering project of the University of Cologne, facilitated by the Federal Ministry for Education and Research within the framework of the joint „Quality Initiative in Teacher Training“ (Qualitätsoffensive Lehrerbildung) of the Federal Government and the states. In cooperation with the Center for Teacher Education, the four main subprojects, supervised by eight academics, deal with challenging topics within the contexts of teacher education. These subprojects aim to research the concrete measures and activity domains to build a sustainable basis in teacher training programs.

The aim of the first subproject, the Competence Labs, is to combine and strengthen theory and practice of teaching and learning in university education. Situated in innovative learning and teaching settings, students are given the opportunity to explore their own teaching performance as well as that of others. In order to prepare the students for the heterogeneity of the pupils, inclusion-oriented study parts are developed in the education sciences as well as in the subjects, coordinated by the second subproject (Inclusive Teaching Study Program). The framework condition here is the innovation of the teacher training regulations towards a professional approach to diversity and to an inclusive school system. The Support for Young Researchers, the third subproject, develops offers for young researchers in subject didactics and educational sciences, e.g. research classes for M.Ed.-students or a networking and qualification program for delegated teachers working at the university. All central measures are accompanied by the Quality Management, the fourth subproject. This includes a university-wide educational monitoring, analyses of the learning effectiveness of specific teaching innovations, the development of innovative test instruments and extensive dissemination and exploitation of results.

http://ukoeln.de/FNZ5D
GRADUATE SCHOOL OF EDUCATION
Graduiertenschule LehrerInnenbildung (ZfL)

The Graduate School of Education focuses on inter-faculty collaboration. It addresses particular concerns of the candidates who aspire to write a doctoral thesis in educational sciences. The aim of the Graduate School is to foster a bundling of didactic projects and the interdisciplinary field of didactics, educational sciences and special needs education, whereby the cross-faculty synergies are established and stimulated. The Graduate School for Teacher Education is a suitable platform supporting scholars and researchers and promoting a network of all participants.

The program is quite unique in Germany, targeting “teacher educators” in particular and offering various programs like individual soft skills courses as well as consulting and coaching courses. The heterogeneous group of doctoral students in teacher education differs from other doctoral students. They usually experience several subject cultures and build on different scientific prerequisites. The comprehensive program of the Graduate School offers – apart from the professional and decision-making counseling – accompaniment and support at all stages of the doctoral program, and displays requirements and conditions for a successful dissertation with subsequent perspectives of an academic career. Formats such as Blended Learning and the use of an e-portfolio (Cologne Career Portfolio) enable participants to work in “peer groups”, regardless of space and time.

http://ukoeln.de/XH6C9

INCLUSIVE UNIVERSITY SCHOOL COLOGNE
Inklusive Universitätsschule Köln (IUS)

“A school for all” is the slogan of the school start-up project, in which the university and the municipality of Cologne work together to build an inclusive university school. This school is supported by the educational project “school is open” which engages innovative and self-activating forms of teaching and learning at universities and schools. The university school will be the first inclusive school that implements the guidelines of the UN Convention. It is guided by a comprehensive scientific approach. The school concept addresses social imbalance, gender inequality and diversity. Due to the direct connection to the University of Cologne, the inclusive school fosters an exchange of knowledge and information between different institutions in the university.

http://ukoeln.de/UT7P3
COLOGNE GRADUATE PROGRAM SUBJECT DIDACTICS (MATHEMATICS, INFORMATICS, NATURAL SCIENCES AND TECHNICS – MINT)

Kölner Graduiertenkolleg der MINT Fachdidaktiken (KoM)

The program promotes scientific research in the field of MINT-disciplines with a particular focus on special needs education. This is a structure-forming measure of the Cologne MINT-Didactics. This initiative aims at raising the number of excellent young scholars in this field. The focus of the program is mainly the diagnosis and promotion of learning processes. PhD students are supervised by two academic mentors, one focusing on “theory-based diagnosis and individual support”, the other concentrating on “special needs education”. The aim is to promote young scholars in the field of special disciplines of MINT-subjects with particular reference to special educational needs. The two basic ideas of the program “theory-based diagnosis” and “individual support” are incorporated into the projects with varying emphasis: from the theory-based research of learning processes to design-research-experiments with its core of using and constantly developing specific learning environments.

http://ukoeln.de/5SVG4

INTERDISCIPLINARY CENTER FOR EMPIRICAL RESEARCH ON TEACHERS AND TEACHING

Interdisziplinäres Zentrum für empirische LehrerInnen- und Unterrichtsforschung (IZeF)

The Interdisciplinary Center for Empirical Research on Teachers and Teaching is a research unit in the Faculty of Human Sciences at the University of Cologne. Working in close collaboration with members of different faculties at the University of Cologne (research units and faculty members in education, educational psychology, social science and subject-specific education, Center for Teacher Education) as well as with other universities and research centers on a national and international level, this team coordinates and conducts empirical research projects in the areas of teacher knowledge, teacher education and teaching-learning-processes. It is intended to render the research results valuable for advances in interdisciplinary research, thereby helping to improve the quality and effectiveness of teacher education. The Interdisciplinary Center for Empirical Research on Teachers and Teaching provides a forum for the implementation of interdisciplinary projects.

http://ukoeln.de/5SVG4
INTERDISCIPLINARY RESEARCH CENTER FOR DIDACTICS OF HUMANITIES

Interdisziplinäres Forschungszentrum für Didaktiken der Geisteswissenschaft (IFDG)

The Interdisciplinary Research Center for Didactics of the Humanities initiates, promotes and consolidates the cooperation between disciplines of the Faculty of Arts and Humanities at the University of Cologne (German Didactics, Didactics of Modern Foreign Languages, English Didactics, History Didactics, Japanese Didactics, Philosophy Didactics, Protestant and Catholic Religious Instruction Didactics). As a research and teaching center, it focuses on didactic perspectives, in particular on teaching, competency and professionalization research. The center also formulates cross-sectional topics and forms a platform for profiling the work of subject disciplines in terms of content and methodology. The projects are conducted interdisciplinarily and in cooperation with other institutes of the university to strengthen the educational profile of the faculty.

http://ukoeln.de/IL8WG

CENTER FOR EMPIRICAL RESEARCH ON INCLUSION

Zentrum für empirische Inklusionsforschung (ZEIF)

The Center for Empirical Research on Inclusion is an institution with different centers at eight universities in Germany (Dortmund, Flensburg, Cologne, Oldenburg, Potsdam, Siegen, Wuppertal, Wuerzburg). The network of scholars researches the field of pedagogy with regard to learning and behavioral impairment. Its goal is to advance an empirically oriented research on integration and inclusion within the area of learning and development barriers. This can serve as a basis for decision-making in school and extracurricular areas. The execution and coordination of relevant projects is maintained by internal exchange and external discussion. The projects are communicated through various publications, conferences and colloquia.

http://ukoeln.de/QX4VQ
The continuous documentation and reflection of practical phases/internships

**Bachelor’s Degree**
6 Semesters

**Master’s Degree**
4 Semesters

- **Aptitude and Orientation Internship**
- **Vocational Field Internship**
- **Internship Semester**
- **Traineeship at a school**

**PORTFOLIO**
The continuous documentation and reflection of practical phases/internships
Teacher education programs in the state of NRW were converted to the Bachelor- and Master-degree-system in the winter term 2011/12. After completing their Master of Education degree, graduates enter the final phase of their education which comprises 18 months of practical teacher training. During this time, the student teachers are supervised by Centers for Practical Teacher Training. The core idea of the final teaching practice stage is to implement skills in the fields of teaching, education, learning and counseling as well as developing and innovating the school as a system.

The central innovation of the Bachelor- and Master-programs is the integration of mandatory practical phases into the study program. In total, students complete three practical phases during that time: the Aptitude and Orientation Internship (5 weeks – Eignungs- und Orientierungspraktikum) and the Vocational Field Internship (4 weeks – Berufsfeld-praktikum) as part of the Bachelor’s program, and the Internship Semester at school (5 months – Praxissemester) as part of the Master’s program.

An essential goal of the new program structure is to highlight the close connection between theory and practice, hence applying the academic theoretical knowledge to the practical, day-to-day work. All internships are assembled thoroughly and monitored by the university. The aim is to train research-oriented teachers who can continually reflect on their own profession and who are able to adjust their professional approach flexibly to the requirements of their specific school. Teacher education at the University of Cologne systematically links the acquisition of extensive expert knowledge with professional, theory-based self-reflection. The aim is to help future teachers to reflect upon their experiences. The Center for Teacher Education is responsible for all mandatory practical phases in the course of the University of Cologne’s teacher education programs. The Center coordinates, moderates and organizes all processes related to teacher education within the university and with their cooperating partners. Through regular evaluations, the Center monitors internships and ensures the quality of their development. The two practical phases in the course of the Bachelor’s program are particularly suited for the verification of professional qualifications as well as for the development of interdisciplinary competences. In addition, they focus on the method of research-based, explorative learning. During these practical phases the University of Cologne cooperates with the German Sport University and the University of Music and Dance, five centers for school-based practical teacher training and approximately 850 schools of the region. Together they form the “Educational Region Cologne”. Hence, more than 3.000 participants are involved in the realization of internships. The central cooperation units are the so-called “professional associations” (Fachverbünde), in which university professors in teacher education programs, teacher trainers of the centers for practical teacher training and teachers work together. Since 2012, twenty different cooperating units – each of them dedicated to a specific subject field as well as to certain school forms – have been working intensively on the design and implementation of the common curricular as well as content-based and organizational concepts into the internship semesters.

The binding element of all phases is the portfolio. At the University of Cologne, the students are required to document and reflect on their experiences during the practical phases in a cross-phased e-portfolio. With the introduction of the electronically supported portfolio, Cologne has become a pioneer in the field of teacher education. Overall, the portfolio is embedded in a didactic concept. This concept ties together the various practical phases and deepens the students’ ability for self-reflection with every new practical phase. To achieve that goal the tasks include a peer learning concept as well as an individualized mentoring and counseling program that accompanies students’ successive competence building in the various competence fields defined by legal framework requirements.
PRACTICAL PHASES DURING TEACHER EDUCATION
The development from being a pupil to being a university student to being a teacher is the first and at the same time biggest challenge during the course of teacher education. The Aptitude and Orientation Internship allows the students to have a first glance at what it means to be a teacher including basic knowledge of rights and obligations that come with such a position. The internship has to be completed during the second or third semester. It consists of 100 hours which are to be completed on at least 25 internship days within 5 weeks. The main focus during the internship lies on the observation of teaching sessions, the realization of monitoring and explorative tasks and experiencing the first pedagogical activities.

The internship is accompanied by training and evaluation seminars preparing students for the school lessons and supporting reflection of their experiences afterwards. The main focus of the seminar is practice-specific content, such as understanding and appreciating the aspired profession and individual self-images, discovering the requirements of the teaching profession, and learning about teaching concepts and learning methods. During the seminars, students are asked to question their personal motivations critically, review career choices and reflect on their own qualifications for and perspectives on this profession.
“Leaving school to look beyond the boundaries” is the goal of the Vocational Field Internship. Students acquire knowledge and experience inside and outside of school, which helps to make them aware of the diverse professional specializations within the pedagogical field, and of job opportunities. The internship has to be completed between the third and sixth semester of the Bachelor’s program. It comprises a workload of at least 80 hours distributed over 20 workdays. It can be completed during the semester or during the winter or summer breaks in between terms.

The Center for Teacher Education offers students special projects that combine seminars and internship placements. These projects cover a wide range of exciting topics, such as internships in theater or museum pedagogy, in teaching German as a second language, in doing laboratory projects with primary school children, or in helping refugee children to learn German and to get ready for regular school attendance. These projects enable students to act as supporters, mentors and project managers. In working with often heterogeneous groups, they are pioneers.

The Vocational Field Internship is also very well suited for a stay abroad. These varied experiences are intended to invite students to reflect on their own personality, role and goals.
IN SCHOOL FOR HALF A YEAR: THE INTERNSHIP SEMESTER

The longest practical phase of the education degree programs is the Internship Semester. It is supposed to be completed early in the M.Ed. program, usually during the second semester. During this internship, students are able to experience the professional life of a teacher without the pressure of being assessed. Students perform their first teaching project and transfer their theoretical knowledge into practical experience.

In the Master of Education program, students are ideally prepared for their internship semester during their first semester, which allows them to do the five-month placement at a school in their second semester. During the internship, they are supervised by school teachers, and seminar instructors from centers for practical teacher training and university. The “Education Region Cologne” comprises the University of Cologne and its two cooperating universities as well as the Centers for school-based teacher trainings in Engelskirchen, Cologne, Leverkusen, Siegburg and Juelich. Approximately 700 schools in this region are available for students to complete an internship semester. Due to the size of the region, distances can be a challenge. In order to alleviate this situation, the University of Cologne works with innovative e-learning formats, thereby reducing the number of courses with compulsory attendance.
THE DIVERSITY OF SUBJECTS IN TEACHER EDUCATION
AT THE UNIVERSITY OF COLOGNE

Faculty of Human Sciences

Educational Sciences
Arts
Aesthetic Education
Natural and Social Sciences
Music (Teacher Education Degree Programs)
Pedagogy
Special Needs Education Disciplines
  Communication Disorders and Hearing Impairment
  Cognitive Development
  Physical and Motoric Development
  Learning Disabilities
  Emotional and Social Development
  Language Disorders
Social Sciences

Faculty of Arts and Humanities

German
German as a Second Language
English
Theology
French
History
Greek
Italian
Japanese
Latin
Dutch
Philosophy/Practical Philosophy
Russian
Spanish
Natural and Social Sciences
Linguistics

Faculty of Management, Economics and Social Sciences

Finance and Accounting
Production (Manufacturing), Logistics and Sales
Sectoral Management
Information Systems
Economic Sciences
Politics

Faculty of Mathematics and Natural Sciences

Biology
Chemistry
Geography
Natural and Social Sciences
Mathematics
Mathematical Literacy
Physics

In Cooperation with the German Sport University Cologne

Educational Sciences
Sports

In Cooperation with the University of Music and Dance

Music
English Language

Continuous Writing

Sentences

box is
INTERNATIONAL TEACHER EDUCATION

GOING ABROAD – LEARNING HOW OTHERS TEACH

At the University of Cologne about a quarter of the students in teacher education programs decide to go abroad — often they decide to do an exchange semester or an internship abroad. To impose detailed data, the Center for Teacher Education has conducted a survey of more than 800 Bachelor graduates from April 2015 to April 2016. The survey results show that 25% of the students had completed a study-related stay abroad during their undergraduate studies. Out of this group 41% of the interviewees had studied abroad and 37% had completed a study-related internship. The remaining 22% did language school programs or engaged in volunteer work. Mentoring and monitoring of the students’ decision to study abroad is provided jointly by the Center for International Relations, the Faculty of Human Sciences, the Center for Teacher Education and the International Office.

Programs like Erasmus+ enable students to study at one of the European partner universities for one or two terms while receiving financial and organizational support. Students who study modern foreign languages often go abroad for an entire semester. They are expected to complete a three-month stay abroad as part of their studies. The Center for International Relations also supervises, assists and offers different events for incoming students who are in Cologne for the first time.

Students who opt for an internship in a foreign school can seek support offered by the Center for Teacher Education in cooperation with the International Office: More than 50 placements in schools around the globe are available every semester.

This program is constantly expanding and improving. In addition to advertising placements in schools, the Center for Teacher Education provides support in the form of preparatory and follow-up courses in order to discuss and reflect individual questions of students concerning their expectations and experiences. The study-at-home seminar „International Teacher Education Laboratory – Developing Inclusive Values Through E-portfolios“ combines inclusion and internationalization synergetically through reflexive units such as e-learning and e-portfolio. Through this project, students at various international locations have the opportunity to work together and reflect on the topic of inclusive values.

In order for students to be able to complete their stay abroad successfully and to reflect meaningfully on their intercultural experience, integration of placements/study abroad into the curriculum is necessary. In March 2017, the Center for Teacher Education, together with university partners from four European countries, submitted an Erasmus+ application to develop, implement and evaluate a comprehensive concept for supported international internships. During their internships abroad, students will focus on the topic of multi-ethnic, multilingual classes to be prepared for their future professional life in the best possible way. Institutions involved in this partnership are, amongst others, Hope University in Liverpool and the University of Education Salzburg. An exchange of students for school internships between the Center for Teacher Education and these universities has already been in place for some years now.

In addition to the development of language competences — the guiding principle of all measures and actions — the personal intercultural experience is the main focus, becoming increasingly important for the “classroom of tomorrow”. In order to achieve the overarching objectives, some new projects are carried out: the significant expansion of internships at schools abroad, the pilot project “Internship Semester Abroad“ (Praxissemester im Ausland – PiA), as well as innovative projects in the practical phases, e.g. students designing workshops for teachers in Ghana.

http://ukoeln.de/H4NP1
http://ukoeln.de/ISCJN
Our society is heavily influenced by globalization. Schools and classrooms are also characterized by diversity. Future teachers are encouraged to support and embrace these developments in their own country as well as in other countries.

Think global - act local: Internationalization is more than just an internship abroad. It is a general question of personal preference in our society which is characterized by diversity. Programs of teacher education at the University of Cologne provide numerous ways and possibilities to study abroad. One of the ways to go abroad is during one of the practice phases. Both the Aptitude and Orientation Internship as well as the Vocational Field Internship can be done abroad. The internship in a foreign country offers new exciting challenges and interesting impressions. The Center for Teacher Training cooperates with various international schools and projects on almost every continent. Students can also get assistance with preparation and follow-up of the stay abroad. In addition, the Center facilitates contact with alumni from the respective countries. Here are some examples of internship schools abroad:

GHANA (AKIM ODA)
In cooperation with the Elite School Complex, a school in Akim Oda in Ghana’s Eastern Region, the Center offers students the opportunity to complete a vocational field internship in Ghana. Students can reside free of charge on school premises, receive free meals and teach various subjects such as Mathematics, English, Integrated Science, Religious and Moral Education, Physical Education, Arts or Music.

UGANDA (GULU)
The Center cooperates with four schools (Prison Primary School, Police Primary School, Sir Samuel Baker School and Pope John Paul Laliya School) in Gulu, in the Northern Region of Uganda. Students have the opportunity to complete a four to six-week internship in the winter or summer semester and teach Mathematics, English, Integrated Science, Physical Education, Arts or Music. Moreover, participation and commitment to project groups in subjects like in German, Theater or Physical Education, Singing and Dance Classes are explicitly welcome.

ARGENTINA (BUENOS AIRES)
At the Instituto Ballester – German School in Buenos Aires, Argentina, students of all school types can complete an internship. Students aspiring a degree
for vocational colleges have the opportunity to be assisted by the Vocational Training Center of the school. The teaching language at Instituto Ballester is German.

**CHINA (GUANGZHOU)**

Students can discover life at a university as well as at a school in China. They can gather experience in administrative procedures at the German Studies Department of the Sun Yat-Sen University or teach at the Huamei International School. At the Department of German Studies at the Sun Yat-Sen University in Guangzhou, interns have the opportunity to teach not only at the school, but at one of the best universities in China. Students are involved in teaching German to first-year students and obtain work experience at the university’s department of German Philology.

**INDIA (NEW DELHI)**

Students aspiring a teaching degree regardless of school types can teach German at the Carmel Convent School or at Bluebells School International. Both offer the German Language Diploma to their pupils.

**ENGLAND (LIVERPOOL)**

At Liverpool Hope University, students have the opportunity to do an internship. The university organizes internships at different schools and strives constantly to meet the individual needs and interests of interns. Students who complete a degree in special needs education can do their internships at the Millstead School. This internship is also suitable for future elementary and secondary school teachers who are interested in inclusive teaching methods.

http://ukoeln.de/ WUAQP
INNOVATIVE PROJECTS IN TEACHER EDUCATION
NATIONWIDE AND INTERNATIONALLY
At the University of Cologne, excellent teaching and research are combined with a close connection to the ‘practical sphere’ of teacher education. Linking both worlds, theory and practice, is essential to equip future teachers for a professional field which is subject to constant change. Teachers take on a variety of roles in different school settings, and the tasks they have to tackle are manifold. Therefore, enabling future teachers to adapt to these varied demands in a professional way is just as important as equipping them with solid content knowledge during their study programs. Ideally, teaching students experience the advantages and challenges of inclusion in a real-world setting as early as possible. The digital classroom is another ‘hot topic’ with the potential to open up new perspectives in teaching. At the University of Cologne, a variety of interdisciplinary projects allows students to gain deeper insights into both spheres – the theoretical and the practical – simultaneously. Experience and research findings resulting from these projects feed back into continuous efforts to further reform and improve teacher education. A selection of innovative projects in teacher education at the University of Cologne are presented in the following pages.
The understanding and appreciation of diversity in the school context is promoted at University of Cologne. These projects focus on heterogeneity and inclusion across disciplines and school forms. It is important to prepare teachers to deal with heterogeneity and inclusion in schools, to act as agents of change, and to value diversity as a normal condition in schools and society.
The so-called DaZ-module represents an obligatory module within the Master’s program. The main goal of the module is to prepare students — independently of their subject or school form — to deal with linguistic and cultural heterogeneity in the classroom. A central aspect addressed by the seminar is the importance of being aware of the pupils’ linguistic abilities and how they affect their educational success, and what this implies for the future teachers’ professional competences. The future teachers acquire basic skills in the analysis of linguistic requirements in school lessons, in the diagnosis and assessment of linguistic learning abilities and in awareness of language teaching in the context of multilingualism and sociocultural heterogeneity.


In projects carried out during the various school holidays, students are teaching primary or lower secondary school pupils in need of language assistance. The students encourage the younger pupils to deal creatively with language. There are various workshops on German as a Second Language. This is intended to facilitate the school experience of children/pupils who have only recently arrived in Germany. An individualized assistance through language-specific diagnostic concepts enables an intertwining of theory and practice. In “De:Math”-courses, mathematical topics are taught in a language-sensitive manner, also helping to improve the development of professional language skills. The students form interdisciplinary teams in which they work on the course materials. By doing so, they are growing on their professional expertise as well as their abilities to work in a team. For the pupils as well as the students these holiday schools with their complex field of activities are both challenging and profitable.

http://ukoeln.de/RYWFL
As part of their Vocational Field Internship, students offer language courses in refugee shelters. They attempt to facilitate the future enrollment of more than 400 children and adolescents between the ages of six and 18, who have not yet been placed in a school. Students benefit from a variety of aspects: They experience the work in a complex field of requirements in a realistic setting. The thorough preparation and reflection of the seminars through various advisory and supervisory programs, as well as the ability to assist in a child’s language learning process are of great importance for the project. The supervised project provides an up-to-date reference to the students’ reality, which is of great relevance for their future career as it expands the view on the complexity of diversity in the course of their education.

[Link to more information]

Since 2012 a group of students with and without immigration background has been committed to strengthen an intercultural openness of teacher education. The aim of the initiative is to raise awareness and appreciation of diversity at university and in school in order to counter any inequalities and discrimination. MICADOS demands an intercultural openness to ensure greater public awareness for diversity. The network cooperates with the project “Teachers with immigration history of NRW” and the Center for Teacher Education. The committee of the group is present at numerous university events.

[Link to more information]
The aim of the project is to significantly increase the proportion of graduates with an immigration history, which will increase the number of teachers with an immigration background in schools. Ment4You started as a mentoring program in Paderborn, Cologne, Bielefeld and Bonn in 2016 and is to be expanded to all universities in NRW. Despite the name, "Ment4You" is not a typical mentoring project. The focus lies on the general networking between people with immigration history, students, the Center for Teacher Education and other interested parties. The realization of the project involves individual and group mentoring sessions, training courses and freely arranged networking formats.

http://ukoeln.de/75MAT

The association supports motivated young people who wish to receive additional support but cannot afford private tutoring. The association was founded in 2009 by a group of students of the Universities of Cologne and Bonn and provides voluntary tutoring in subjects such as German, English and Maths. More than 80 students are involved. In cooperation with schools, students function as after school tutors for pupils. The association serves as a place of learning for both pupils and students. The tutorials are held after regular school classes and are attended by two to four pupils. The project provides an excellent opportunity for students to apply their knowledge and competences acquired at university in a practical way and to test themselves in the chosen profession while supporting pupils. In addition, since January 2016 the association has been involved in preparatory classes for refugees to support the school integration of newly arrived pupils.

The Center for Teacher Education and colleagues affiliated with the Faculty of Human Sciences address central questions concerning the implementation of inclusion in schools. This cooperative initiative forms an interface between science and practice by combining and exchanging already existing experiences in this field. Furthermore, in interactive workshops, students deal with the importance of the role of inclusive classrooms in Educational Sciences, Didactics and Special Needs Education.

The cooperation initiative for inclusion considers all phases of teacher education, allowing innovations for students, trainees and teachers to arise. The teacher educating departments of the University of Cologne, with their respective institutions, provide the scientific basis for the organization of this process. The collaboration aims at the implementation of new ideas supporting inclusive education in schools.

http://ukoeln.de/AEV4A
The project “TextMovement” develops teaching concepts for German classes with linguistically heterogeneous groups. The German teachers are understood as multipliers. TextMovement is based on the assumption that mind and body have equal relevance. Together they form a functional unity: If one assumes that cognition (mind) and senses, emotions and motor activity (body) are equally involved in speech production and speech reception (speech, writing, listening, reading), then mind and body should also build constitutive moments of didactic teaching concepts. The project combines challenging mental work with “relaxing” bodywork in form of a dance-theater, which expands competences in dealing with language. Different learning locations are also necessary components of the project and play an important role for work processes and results. By having made the aesthetic experience created within this project, its initiators hope to stimulate these future teachers to use similar approaches in teaching German.

http://bit.ly/2lXITxY
At the University of Cologne, the professional education of prospective teachers is enriched by various projects that encourage students to examine existing teaching and learning methods and to develop new ones. A central aspect of this is always the reflection of one’s own professional desire and path, as well as one’s own motivation. In national and international projects, initiatives and advisory services, the following questions are addressed: What do I need for my personal development and professionalization and how can I motivate my students/pupils to grow beyond themselves?
In student labs at the Faculty of Mathematics and Natural Sciences, students can try out teaching projects with pupils within a monitored and extracurricular framework. The labs offer students various interdisciplinary projects for school classes, training courses for teachers as well as the planning and implementation of peer projects. The students are encouraged to prepare teaching modules on scientific topics and to implement them in practical work with pupils. In these modules students can gain credit points and enhance their practical experience in their final thesis. With the Ecological Rhine Station, the largest German river-water-flow-system, a university-run houseboat turned into a research station offers students and pupils the opportunity to conduct limnological, ecological and physics research on a large area of water, using methodical concepts and didactical methods. Thus, the students can learn by teaching pupils, deepen their knowledge and combine theory and practice in real teaching situations. The “Pulheimer Bach”, a stream in the urban hinterland of Cologne, is an open-air and out-of-school learning place, consisting of the stream-section “Bachaue”, the external area of the laboratory and a working station for group activities. The technical equipment of the learning laboratory creates an opportunity to experiment with and to process water and soil samples. The so-called MINT children’s room offers such a framework for Mathematics at the University, aiming at the particular expansion of mathematical concepts for preschool children. These science labs offer students the opportunity to immerse themselves in a real teaching situation and, at the same time, to receive an intensive and direct feedback through videography. The participating primary school children are occupied with Lego-education, new media or the environment, for example.

http://ukoeln.de/JQS44

GLOBE aims to improve internationalization and interdisciplinary integration through practice-oriented courses in teacher education. The noticeable need for well-trained experts in MINT-subjects, particularly in secondary education, highlights the need for a stronger integration of current academic topics and their school-oriented implementation. In the school context, environmental research provides particularly viable, interdisciplinary approaches to MINT-subjects. GLOBE is an international project initiated by NASA, which offers excellent conditions to make a significant contribution to the achievement of the above-mentioned. It strengthens the national and international visibility of the learner training at the University of Cologne as well as substantially improves the practice-oriented teacher education. In addition to the direct effect of the improvement in teacher education, the international aspect of the project, which integrates the MINT-subjects and the practical orientation of the project, creates a special profile of the University of Cologne in the area of teacher education.

http://ukoeln.de/Q45ST
The project “Weichenstellung” is an initiative of the Zeit-Foundation “Ebelin and Gerd Bucerius”. Financially supported by the Dr. Harald Hack Foundation, it is implemented for the region of Cologne region by the Center for Teacher Education. The concept has been expanded and integrated into the practical phases of the teacher education program. The mentoring project has already started at 17 elementary schools in Cologne in 2016. “Weichenstellung” supports the transition from elementary to secondary school. The project is directed especially at disadvantaged pupils from an underprivileged socio-economic background, who have the potential to attend a “Gymnasium”, however receive little support in their family environment and therefore struggle in lessons. The mentors support their mentees throughout their final year at primary school and the first two years at the “Gymnasium”. External activities are also included in the program. While students work closely with teachers, gaining an insight into their future profession, pupils benefit from the individualized mentoring. Besides the mentoring program, the Center for Teacher Education offers the project participants numerous coaching sessions on topics such as time management, organization, relationship with the pupils or communication with parents.

http://ukoeln.de/RQH87
In the project “Veedel Explorers” (Veedel = historical districts in Cologne) students leave their lecture halls and classrooms in order to undertake a research expedition with pupils. The project develops various methodological approaches towards the aesthetic perception and experience of the pupils. Initially the students go on an exploratory tour through Cologne as learners themselves, while dealing with didactic aspects in a second and third session. Afterwards the students assume the role of the teachers and go on a city discovery expedition with primary school pupils. Therefore, the “Veedel Explorers” are those pupils who have a special relationship to their place of residence dealing with different topics and assignments. The methods strengthen the aesthetic perception of the pupils while the entire project enables the students to experience different creative and interdisciplinary methods.

The interdisciplinary career field “interConnected Worlds”, launched in 2015 as a pilot project, offers students of teacher education programs and of the Department of Ethnology the opportunity to organize a school project week concerned with products of the everyday world and their global contexts. Thus, the Institute of Ethnology and the Center for Teacher Education link the Vocational Field Internships of teacher education with project work in schools. The project draws students’ and pupils’ attention to the social and everyday dimensions of globalization. It deals with the perception of the advantages and disadvantages of globalization and the assessment of a “normal” life in a modern globalized society. The internship “interConnected Worlds” allows students to take a research-based, ethnological view on school by learning about existing teaching methods and various forms of schooling. The pupils can also become independent field researchers looking into the learning worlds outside school as part of an excursion. Professional coaching in a seminar prepares the future teachers for their week in school and contributes didactic, pedagogical concepts and ethnological methods, which encourage students as well as pupils to explore everyday contexts as researchers.

http://ukoeln.de/I793P
The professional path of a student depends on individual preferences, strengths and weaknesses as well as on his/her personal background. Reflecting on the personal resources and goals in an environment free from judgement is the perfect basis for coherent decisions. The Center for Teacher Education supports its students in their personal and professional development with an individual, biographical consultation. The consultation is focused on the exploration of personal goals, motivations, and experiences. Moreover, these sessions attempt to show personalised strategies and ways through a structurally restricted system and help students to actively involve in shaping teacher education as well as the educational system.

Developing Entrepreneurial Spirit through Experience and Reflection in Vocational Education (DESERVE) is a project within the Leonardo Da Vinci Partnership Program. Seven project partners from Austria, Estonia, Iceland, Germany, Romania and Scotland share their experiences on entrepreneurial education in the field of vocational education and training. Within the framework of the DESERVE-project there are three basic objectives: (I) exchanging experiences in the field of entrepreneurship education in different European vocational training systems, (II) focusing on experimental research with the intention to promote entrepreneurial mentality and the simultaneous practical implementation of knowledge drawn from “action-based-learning”, (III) and developing a common European approach to entrepreneurship education. The DESERVE partners meet personally in the context of five workshops to exchange their individual experiences. In various workshops held in Austria, Iceland, Romania, Scotland and Estonia, teams of international students focus on specific topics of entrepreneurship education, by working on and with game- and design-based methods of the project.

http://ukoeln.de/EYXSA
1 Problem Definition

Stakeholder
- Lehrer/innen
- Ausbilder
- Schüler/innen
- Kinder 3-6
- Eltern
- Externe Experten
- Grosseltern

Probleme
- Unterricht auf die Praxis?
- Knappe Unterrichtspersonal
- Sprache
- Kinder ab 6
- zu Gross.
- Peer Group
- Kinder werden nicht mehr gefragt
At the University of Cologne, lecturers and students actively contribute to the digital transformation of all areas of life. Digitalization offers opportunities for a radical change, especially in the fields of education and training. Learning becomes an act of self-instruction independent of place, time and instructors. The implementation of this new way of learning requires infrastructure, appropriate didactic concepts and new methods of personal interaction. Courses focusing on digital learning in teacher education programs enable students to use the technologies themselves during their studies and to create formats for their work routine in the educational system.
The project VIlla (videos in teacher training) is interdisciplinary and available to all students and lecturers of the teacher education programs. With the help of the VIlla-database it is possible to analyze and integrate authentic and complex situations of classes into university seminars. The project includes 90 video sequences of different school forms and subjects. On the one hand, the database provides self-learning modules, accompanied by material for self-study. On the other hand, videos are addressed in lectures. The VIlla-database is also used by the “Media Lab” within the “Competence Labs” of the Future Strategy Teacher Education. In these courses, students have the opportunity to record their performance in classes and to receive a comprehensive feedback on the development of their professional teacher education.

http://ukoeln.de/FYBUY

Individual, flexible learning in terms of time and location, that is at the same time supervised by lecturers and teachers is the aim of blended learning. This learning process is the integral part of the electronic support platform ILIAS, a joint digital workspace for lecturers and students, which has been successfully integrated at the University of Cologne. ILIAS facilitates self-study and allows students to share and exchange their digital learning content directly with fellow students, lecturers or even with external students. University lecturers provide learning materials via ILIAS and can be contacted through the platform as well. The supervision they provide online ranges from group chat to individual consultations on student study projects. Students can also create their own work spaces and use them independently of their learning groups. During the internships, training instructors at schools and seminar lecturers are added to the learning teams and operate as contact persons for students. Thus, ILIAS enables efficient and academic online support and facilitates contact within learning teams.
All students have the opportunity to complete an internship in the area of Digital Teaching. The Center for Teacher Education offers three internships in vocational training within the framework of the Open Educational Resources-Labs (OER-Labs): (I) Mobile Learning in School, (II) Program, Crafting and Teaching with Raspberry Pi and (III) Design and Production of Digital Learning Materials. Another benefit of such internships is the possibility of acquiring basic knowledge in media didactics, media design and copyright as well as learning about the possible application of digital contents in the context of school. Moreover, students have the opportunity to program, to create their own digital content or session by intertwining the digital materials with curricular requirements of school subjects and improve their soft skills drastically. This can be seen as the first step towards the school of the digital age.

The University of Cologne offers a wide range of subjects, an interdisciplinary study orientation and a wide scope of opportunities to acquire practical experience while studying. Its teacher education allows students to gain practical experience during their studies, to obtain orientation and to create networks for their future work field. By providing an excellent quality of teaching experiences and research possibilities, we want to anticipate the social reality of the future and create structures for the best possible programs. With the adoption of the Bachelor’s and Master’s degree programs, the practical relevance of studies was not only strengthened but also explicitly linked to the development of a professional identity of students. In addition to their professional competence, students are to reflect and discover the opportunities as well as challenges of the teaching profession at an early stage. The practical part of the teacher education programs is realized at 850 schools and numerous pedagogical institutions in and around Cologne. One main goal of the manifold options for teacher trainees is indeed the (further) development of their professional personalities: We want teachers to do excellent work in schools for the future of our society. This is why we are constantly striving to improve teacher education in Cologne by co-creating impulses and innovations in the educational field.