



**RESEARCHING** EDUCATIONAL PROCESSES

**UNDERSTANDING** EDUCATIONAL PROCESSES

**OPTIMIZING** EDUCATIONAL PROCESSES



**LEAD**

Graduate School & Research Network



In times of profound social changes, education is one of the most important resources for a sustainable society. Excellent research on education that provides answers to key questions is even more necessary now than ever: how can school students gain the knowledge and skills that they will need in the world of today and tomorrow? What does effective teaching look like and what capabilities do teachers have to have today?

In the past ten years, the LEAD Graduate School & Research Network at the University of Tübingen has generated important findings that support evidence-based decisions in education policy. It has also produced groundbreaking structures that improve communications between educational practice and science and contribute to mutual understanding.

Its successful proposal of LEAD within the framework of the Excellence Initiative in 2012 helped the University of Tübingen not only to lay the foundations for its inclusion among the German Universities of Excellence, but also to develop into a leading home for research on education that has since gained international eminence.

What was established as a Graduate School in 2012 as part of the Excellence Initiative is now a vibrant Research Network, distinguished for its excellent research, international exchange and innovative development of new talent. With its interdisciplinary approach, LEAD has brought together research areas to work on central questions in the educational context using new methods. LEAD also takes its responsibility for the training of our future educational experts seriously, and with its structured program for doctoral students has given vital impetus to the advancement of junior researchers.

The University is proud to have such a socially significant and renowned institution, and looks forward to future developments.

*Professor Dr. Karla Pollmann  
President of the University of Tübingen*

# FROM GRADUATE SCHOOL TO INTERNATIONALLY LEADING RESEARCH NETWORK

LEAD consists of over 100 scientists from twelve research fields and more than ten nations, driven by the desire to support sound, evidence-based decision-making in the education system. To do this we tackle our research questions in long-term projects and bring together scientists from various disciplines, who all contribute their different methods and study designs.



**LEAD stands for Learning, Educational Achievement, and Life Course Development.**

## TÜBINGEN – ONE OF THE WORLD’S MOST PRODUCTIVE LOCATIONS FOR EDUCATIONAL PSYCHOLOGY

The University of Tübingen has developed into one of the world’s most productive centers of Educational Psychology: in a recently-published analysis in the journal *Educational Psychology Review* it took fourth place in the world and was the only German research institute in the Top 20. The basis of this success is the LEAD Graduate School & Research Network and the close partnerships it maintains with the Leibniz-Institut für Wissensmedien (IWM).

In the analysis which looked at the productivity of individual scientists based on publications in the five leading journals in the field, LEAD co-director Ulrich Trautwein took second place in the world, and when six leading journals were included it was first place. Other Tübingen educational psychologists also made it into the charts. Benjamin Nagengast reached the Top 12 and LEAD International Distinguished Professor Tamara van Gog held seventh place. LEAD alumna Hanna Gaspard took fourth place in the analysis of the productivity of junior researchers; Eike Wille, another LEAD alumna, is also listed among the 25 most productive researchers.

**The LEAD Graduate School & Research Network** arose from the LEAD Graduate School, which was established at the University of Tübingen in 2012, funded as part of the Excellence Initiative of the federal and state governments. This rapidly grew into a vibrant internationally-oriented and interdisciplinary Research Network in the field of research on education.

The Leibniz-Institut für Wissensmedien (IWM) in Tübingen and the German Institute for Adult Education – Leibniz Centre for Lifelong Learning (DIE) in Bonn participate in LEAD. We work closely together with the Tübingen Center for Digital Education and the Tübingen School of Education, the central institution for teacher training at the University of Tübingen.

Our research results are published in world-leading scientific journals. By mid-2022 86 PhD students had completed their doctorates – in some cases also winning prizes. Our scientists’ advice is in demand, in Stuttgart, Berlin and worldwide.

Since financing from the Excellence Initiative ended, the network has received permanent funding from the University of Tübingen and the Baden-Württemberg Ministry of Science, Research and the Arts. LEAD has made a significant contribution to Tübingen becoming an internationally-leading home for educational research – and we’ve only just begun! The continued support will enable us to drive the Tübingen model of interdisciplinary research on education forward in the coming years.

## WHAT OUR RESEARCH COVERS

Among other things, research at LEAD is distinguished by three features:

**First, we draw together findings** previously acquired in different subjects; we also use a variety of methods, for example, LEAD researchers work in both neuropsychological laboratories and real-life classrooms.

**Second, we consider multiple factors** that are important to educational processes: aptitudes, motivation, social origin, but also the quality of teaching and digital tools, to name just a few. In this way we overcome the tendency to make excessively simple explanations based on isolated observation of single factors.

**Third, we keep our ear to the ground:** we study the conditions under which education is most successful in a digitalized world and how digital media can be deployed to benefit learning.

LEAD and the development of research on education in Tübingen

<b>2022</b>	Center for Digital Education at the University of Tübingen opens; Ulrike Cress and Kou Murayama become new co-directors alongside Ulrich Trautwein	Total number of doctorates <b>86</b>
<b>2021</b>	Tübingen becomes the home of the German Center for Mental Health	Total number of doctorates <b>84</b>
<b>2019</b>	LEAD becomes a University of Tübingen institution with permanent funding from the Ministry of Science, Research and the Arts Baden-Württemberg as well as the University	Total number of doctorates <b>48</b>
<b>2018</b>	LEAD is headed by co-directors Benjamin Nagengast, Katharina Scheiter and Ulrich Trautwein	Total number of doctorates <b>39</b>
<b>2017</b>	The network has 130 scientists from over 10 research fields	Total number of doctorates <b>26</b>
<b>2016</b>	Graduate School is expanded into a Research Network	Total number of doctorates <b>8</b>
<b>2015</b>	Tübingen School of Education (TüSE) is established	Total number of doctorates <b>5</b>
<b>2014</b>	Hector Research Institute of Education Sciences and Psychology and Tübingen Postdoctoral Academy for Research on Education (PACE) are established	
<b>2013</b>	21 professors from six fields of research supervise 22 PhD students	
<b>2012</b>	LEAD Graduate School, headed by Ulrich Trautwein and Benjamin Nagengast, is founded as part of the Excellence Initiative of the federal and state governments	



## IN FOCUS: THE LEAD DOCTORAL PROGRAM

LEAD offers its PhD students a **structured doctoral program** that incorporates a range of training elements. With systematic support and customized seminars the PhDs are guided and encouraged through their three-year doctoral period to become part of an international academic community as highly-qualified scientists. The program comprises five components: research funding, personal development, advice, supervision and international orientation. All seminars and training courses are held in English. Permanent components include the weekly colloquium and the retreat with international guests that takes place twice a year.

## STRUCTURED DEVELOPMENT OF NEW TALENT

Training highly-qualified educational experts for research and practical application was the goal of LEAD from the start. As a pure Graduate School in the beginning, LEAD set standards with its structured doctoral program and established targeted support for junior researchers early on. Over the years we have continually expanded the program, so it now includes new formats and also caters to postdocs. There is now an intensive cooperation between LEAD and the Graduate Academy, which provides numerous offers for all PhD students at the University of Tübingen; in the early days of LEAD these had to be offered directly by us.

After their doctorates, our PhD students have the option of becoming members of the Tübingen Postdoctoral Academy for Research on Education (PACE), which supports postdocs immediately after they gain their PhD. This involves preparing them with targeted mentoring and workshops, coaching and seminars for independent, interdisciplinary research in the field of research on education and potential employment as a professor or a leading position in education-related areas.

## FASTER DOCTORATES AND ACADEMIC SUCCESS

From 2012 to mid-2022 LEAD produced 86 successful doctoral students, who took an average 3.4 years on their theses. Seven graduates hold or have held a post as professor or assistant professor. At 75 percent, the ratio of alumni who remain in academia after their doctorate (at least for a while) is high. LEAD's PhD students publish comparatively early on in high-level journals, and many of them have been awarded prizes for their research.

## LEAD-ALUMNI IM PORTRÄT



**NICOLAS HÜBNER**

**Assistant professor**  
Doctorate 2017

**Took doctorate on effects of educational reforms,...  
...then worked as postdoc at Hector Research Institute of Education Sciences and Psychology...  
...and today is assistant professor at the Institute of Education, School Education department.**

*"The LEAD retreats especially were a brilliant way to network across disciplines and get to know a lot of great colleagues. How different disciplines work and where they see strengths and weaknesses in empirical research was an important experience. My doctorate has taught me that critical thinking, respectful collegial interaction, mutual respect, freedom of speech and plurality are the cornerstones of a healthy working environment and successful scientific projects."*



**SOWMYA VAJJALA**

**Senior research fellow**  
Doctorate 2015

**Took doctorate in computer linguistics on the analysis of text complexity and text simplification,...  
...then worked as assistant professor with tenure at Iowa State University, USA...  
...and today is assistant senior research officer at the National Research Council in Canada.**

*"The content of my doctoral thesis went far beyond my actual specialist field. LEAD offered the necessary interdisciplinary environment for this – together with financial support. This training was crucial to my first position after the doctorate at Iowa State University and played an important part there in starting new data science projects. I now have a permanent research position. I haven't completely lost touch with the subject of my doctorate, but my focus has shifted to other issues. I still use the capabilities that I gained doing the doctorate every day."*

**LAURA BRAUN**

**Project manager**  
Doctorate 2020

**Took doctorate on** the sense of self-worth of teenagers and young adults,...  
**...then worked as** research assistant at the Hector Research Institute of Education Sciences and Psychology and coordinated the development of the Master of Advanced Studies *Schulmanagement und Leadership*...  
**...and today is** project manager in the science unit of the *Wübben Stiftung*.

*"The exchange with other PhD students and with scientists, including from abroad, was valuable to me as it expanded my perspective and allowed us to discuss new ideas together. I'm also grateful for a training of the highest scientific and methodical standards and with an interdisciplinary insight into the variety of topics of educational research. Besides the scientific 'tool' the doctorate above all prepared me for the systematic processing and critical consideration of scientific findings. I can now use this knowledge to develop ideas and momentum for the education system. In my current job, the focus is on supporting schools and their management in challenging locations."*

**JAKOB SCHWERTER**

**Research assistant**  
Doctorate 2020



**Took doctorate on** the effects of educational decisions on labor market outcomes and on digital learning environments in higher education,...  
**...then worked as** postdoc at TU Dortmund, Center for Research on Education and School Development (IFS)...  
**...and today is** research assistant at TU Dortmund, Center for Research on Education and School Development and the Faculty of Statistics.

*"Through LEAD I have made friends who have helped me among other things to overcome difficult times during the doctorate. I also particularly treasure the excellent scientific exchange at the retreats. In addition I have realized three research projects in the field of digital higher education teaching through LEAD, which would never have come about without the Research Network and the financing through LEAD. The doctorate has helped me to discover what content interests me, to develop scientifically and cope better with stress. As well as the subject knowledge, the period of the doctorate also taught me to breathe deeply on stressful days. I now work in an exciting job as postdoc at the TU Dortmund and can pursue my research interests."*

**LUZIA LEIFHEIT**

**Assistant professor**  
Doctorate 2020

**Took doctorate on** the role of a self-concept and motivation in computer science courses for primary school children,...  
**...then worked as** postdoc at the Hector Research Institute of Education Sciences and Psychology at the University of Tübingen...  
**...and today is** assistant professor for digitalization with a focus on didactics of algorithmics and data science at the University of Education Schwäbisch Gmünd.

*"For my doctorate it was helpful that I had three supervisors at LEAD from different disciplines with correspondingly different perspectives and competences. Having already researched in an interdisciplinary context during the doctorate now helps me to cooperate with colleagues from other departments. Thanks to the exchange with other doctoral students I've never felt alone.*

*The fact that LEAD places great store by regular publication of research results from an early stage has helped me to establish myself as an early career researcher and to get to know other researchers from national and international computer science education early on."*

**EVELIN RUTH-HERBEIN**

**Unit head**  
Doctorate 2017



**Took doctorate on** promoting the ability of primary school children to give presentations,...  
**...then worked as** postdoc at the Hector Research Institute of Education Sciences and Psychology at the University of Tübingen...  
**...and today is** head of the Referat „Begleitforschung und Forschungskooperation“ at the Institut für Bildungsanalysen Baden-Württemberg (IBBW).

*"LEAD connected me with an interdisciplinary network which offered valuable feedback and a productive exchange of ideas along with structured support and guidance, for example from the many opportunities to network. During my doctorate I engaged with different themes and questions relating to research on education, worked closely with school-based practice and enhanced my capabilities such as methodical approaches and undertaking academic work. This all helps me in my current job."*

# RESEARCHING MAJOR QUESTIONS TOGETHER: INTERDISCIPLINARY

LEAD brings together scientists from different specialist fields to work jointly on major questions in research on education.



computer linguistics

pedagogy

teaching methodology

school psychology

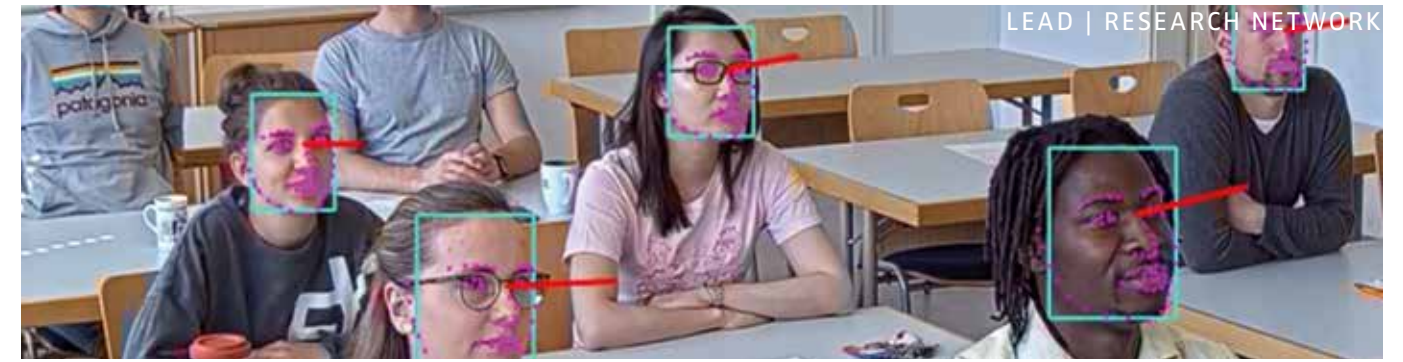
## INTELLIGENT FEEDBACK

How can digitalization be used for learning? LEAD has various tools that demonstrate this, in particular FeedBook, an interactive web-based workbook for English lessons that was developed by computational linguists. This is now being expanded within LEAD together with the research areas pedagogics, teaching methodology and school psychology. What makes FeedBook unusual is that it uses artificial intelligence to develop an image of the capabilities of the learner, selects individual instructive tasks and provides feedback while the tasks are being done, so that the subject matter can be practiced and understood gradually.

linguist Detmar Meurers, who was responsible for the development of FeedBook. The system does not make teachers surplus to requirements, however, but supports them. They can also use FeedBook to find out what are the strengths and weaknesses of their students and target their teaching more precisely to deal with this. We already know that FeedBook works: a study of 12 seventh grade classes has shown that their English skills were far better after the specific support provided by FeedBook.

<http://feedbook.website/>

“The system is a kind of personal trainer,” explains computational



computer science

cognitive psychology

educational psychology

## PAYING ATTENTION IN CLASS

Attention is essential to success in learning. However, young teachers find it particularly difficult to keep an eye on their school students' attention, and encourage and direct it appropriately. Classroom research devoted to this subject traditionally uses teaching videos, however until now they have required time-consuming manual coding and analysis. An interdisciplinary team from computer science, cognitive psychology and educational psychology has tackled this issue at LEAD. LEAD's researchers are jointly developing a computer-based approach that vastly simplifies analysis of lesson processes and thus produces valuable information for further research, as well as visual aids for trainee teachers.

and expression of learners in college seminars and summarizes this in an evaluation of attentiveness. These results fit with the learners' actual reports of their attentiveness. In addition, they have shown that the combination of an extremely wide range of information can improve the precision and reliability of the algorithm. By analyzing teaching videos from various subjects and grades it is now being studied whether this approach can also be applied to school lessons.

[www.wissenschaftscampus-tuebingen.de](http://www.wissenschaftscampus-tuebingen.de)

So far, the team has succeeded in training an algorithm that automatically records for example the line of sight, head posture

school education

psychology

empirical educational research

teaching methodology

## THE DIGITAL CLASSROOM

The IWM-based Tübingen Digital Teaching Lab (TüDiLab), a joint project of the Tübingen School of Education and the Leibniz-Institut für Wissensmedien (IWM), led until 2022 by long-time LEAD co-director and IWM professor Katharina Scheiter, simulates a classroom, which is equipped with interactive whiteboards, plus a classroom set of laptops and tablets, projector and camera. It was set up for two reasons: firstly, seminars on media-based teaching take place here as part of teacher training at the University of Tübingen. Secondly, TüDiLab and its technical equipment in particular make it very easy to research the use of digital media in the classroom.

supplemented with suitable videos and worksheets. This finding is relevant to distance learning when it is not possible to experiment in the school, but it can also be important in face-to-face teaching, if teachers wish to set experiments for homework after the school lesson and school students have to do them as online experiments.

[www.tuedilab-tuebingen.de](http://www.tuedilab-tuebingen.de)

Example – the physics lesson: one study showed that simulation and video experiments are a suitable alternative to classical experiments in the classroom, provided that the experimentation is



## RESEARCHING MAJOR QUESTIONS TOGETHER: **INSTITUTIONAL**

With its interdisciplinary approach, LEAD has strengthened scientific cooperation in Tübingen, as it has networked scientists who previously seldom encountered one another. LEAD's work has also contributed to raising the profile of Tübingen's research on education nationally and internationally. This has made LEAD an important factor in the foundation of several central research institutes.

# 2014

### Hector Research Institute of Education Sciences and Psychology

In September 2014 the Federal State of Baden-Württemberg, the Hector Foundation II and the University of Tübingen founded the Hector Research Institute of Education Sciences and Psychology, headed by LEAD member Ulrich Trautwein. The Hector Foundation II initially gave the institution 7.5 million euros funding for ten years. Additional funding of up to 1.8 million euros was provided by the Federal State of Baden-Württemberg for an innovative postdoc program that is integrated in the Hector Research Institute. The goal of the Tübingen Postdoctoral Academy for Research on Education (PACE), tying in with the structured doctoral program of LEAD, is to support postdocs towards their qualification as well. In 2021, after extensive evaluation, the Hector Research Institute consented to providing funding of 19 million euros over a further ten years.



*Andreas Lachner  
at the opening of the  
Digital Education Center*

# 2021

### German Center for Mental Health

Creating optimal conditions for research in order to promote mental health and treat psychological disorders better is a key objective for the German Centre for Mental Health (DZPG), which since 2021 has also had a location in Tübingen. Its coordinator is LEAD member Andreas Fallgatter, medical director of the Tübingen University Hospital for Psychiatry and Psychotherapy. Over the course of a multi-stage application process, the scientists from the Center for Mental Health at the University of Tübingen Hospitals and Faculty of Medicine together with several cooperation partners, including LEAD, presented a convincing case. LEAD members who are involved in the center come from the fields of psychiatry and psychotherapy, school psychology, neuroscience, clinical psychology and educational psychology.

# 2022

### Tübingen Center for Digital Education

In 2022 the University of Tübingen opened the Tübingen Center for Digital Education. The center researches innovative forms of teaching and learning with educational technology, trials the practical application of these methods and – in cooperation with partner schools – prepares for their transfer into practice. The Vector Foundation is providing 1.35 million euros to fund it for five years. The head of the new center is LEAD member Andreas Lachner, professor of educational research with focus on teaching and learning with educational technology.

## RESEARCHING MAJOR QUESTIONS TOGETHER: **INTERNATIONAL**



"I have been associated with LEAD since its creation in 2012 – first as a visiting member, then as a co-chair of two international meetings of motivation scholars in Tübingen and California, and mostly as a recipient of an Honorary Degree and member of the 2022 Symposium on Motivation and Self-Regulation. I greatly value the collaboration with LEAD. LEAD plays an important role in bringing together researchers from different backgrounds working on the same questions."

**Jacquelynne Eccles, Ph.D.,**  
Distinguished Professor of Education, University of California, Irvine (USA)



## RESEARCHING MOTIVATION

A portrait of  
Humboldt Professor  
and LEAD co-director  
**Kou Murayama**

Researching human motivation from the neuronal level to the social dimension is what motivates LEAD co-director Kou Murayama. In his work, he draws on numerous aspects that are also highly important to educational research: among other things, he researches the influence of not only the family but also of intrinsic and extrinsic gratification on the motivation to learn. In studies published with colleagues he has discovered that the learning performance of children is measurably worse if parents have expectations of them that are too high or even unachievable; also that in the long term motivation is more important than intelligence when learning mathematics.

In 2020 Murayama was awarded the prestigious Humboldt professorship and appointed to the Chair for Educational Psychology at the Hector Research Institute of Education Sciences and Psychology. LEAD played a key part in his acquisition of the chair. "And with its research and international networking LEAD was one reason for me to come to Tübingen," says Murayama. Now he is taking LEAD further forward.

Since 2022 he has been co-director of LEAD. His studies receive a lot of attention internationally. Murayama is regarded as a leading light in the ongoing development of motivation research, which he bases on psychological experiments as well as on longitudinal and neuroimaging studies. His approach to research unites various disciplines such as pedagogy, social and developmental psychology and neuroscience. His aim is to combine all these perspectives and form a holistic view of human motivation. In this combination of differing perspectives and methods, Murayama embodies the central approach of LEAD in his research.

Kou Murayama was born in Japan, where he studied and took his doctorate. From 2013 to 2020 he researched at the University of Reading, UK, and headed the Motivation Science Lab that he established there. He has received numerous awards for his research work, including from the American Psychological Association and the Japanese Psychological Association. As co-director of LEAD, Murayama will continue at Tübingen to consolidate his approach through interdisciplinary cooperation and to network, and thus decisively help to shape the development of LEAD.

## 3 QUESTIONS FOR...

...**Ulrike Cress**, co-director of LEAD and director of the Leibniz-Institut für Wissensmedien (IWM)

**Why is a non-university research institute like LEAD important to the IWM?**

*"The fact that the network is interdisciplinary is extremely important to the Leibniz-Institut für Wissensmedien (IWM). Because LEAD – just like the IWM – is interested in the many aspects of education on numerous levels, and not tied to one specialist discipline. LEAD offers the IWM a variety of local cooperation partners who are each outstanding in their disciplines. The LEAD context has made it possible in the past ten years to launch and try out joint projects that have led to extremely exciting cooperations, such as projects involving AI in education, or the use of interactive tables in medicine."*

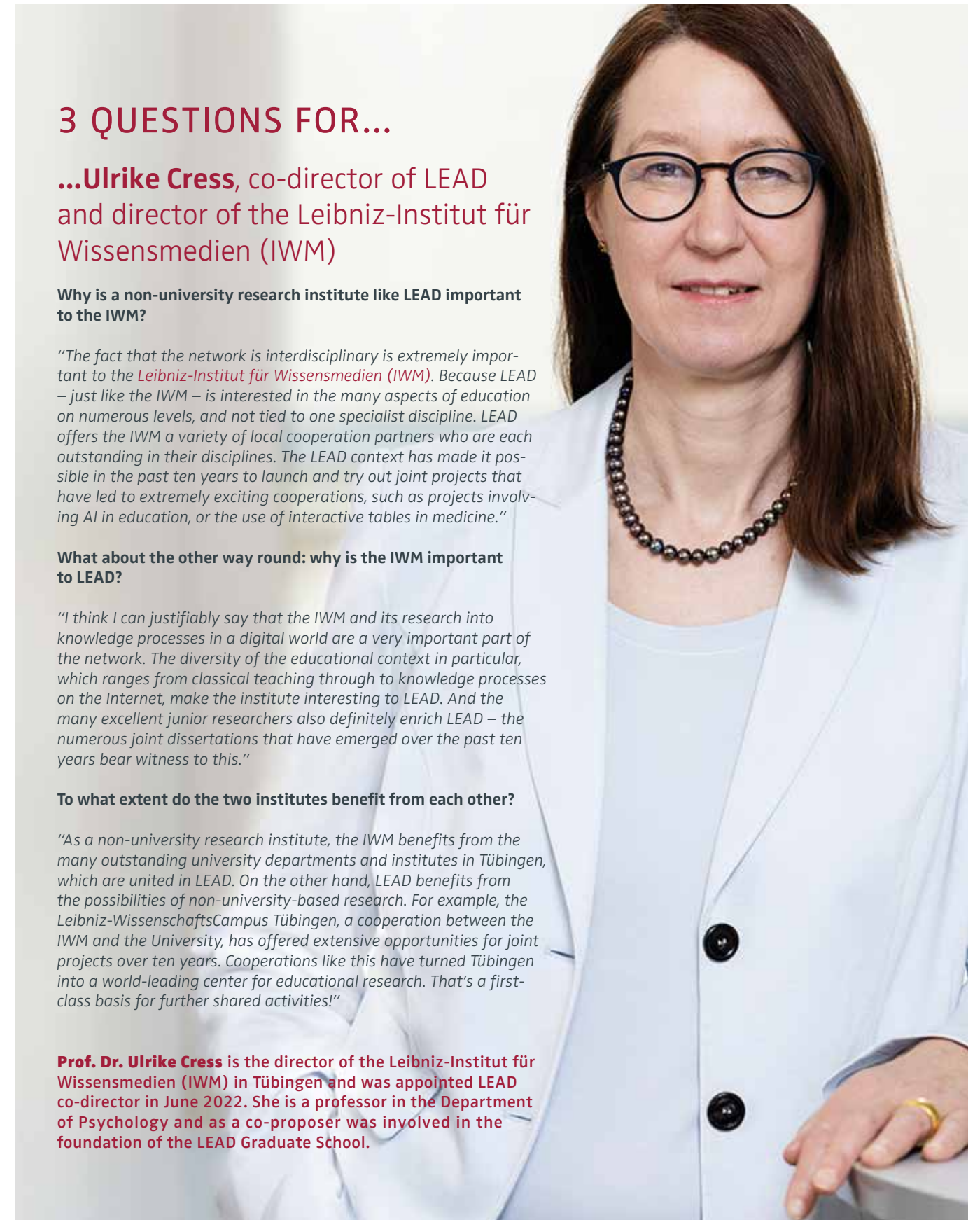
**What about the other way round: why is the IWM important to LEAD?**

*"I think I can justifiably say that the IWM and its research into knowledge processes in a digital world are a very important part of the network. The diversity of the educational context in particular, which ranges from classical teaching through to knowledge processes on the Internet, make the institute interesting to LEAD. And the many excellent junior researchers also definitely enrich LEAD – the numerous joint dissertations that have emerged over the past ten years bear witness to this."*

**To what extent do the two institutes benefit from each other?**

*"As a non-university research institute, the IWM benefits from the many outstanding university departments and institutes in Tübingen, which are united in LEAD. On the other hand, LEAD benefits from the possibilities of non-university-based research. For example, the Leibniz-WissenschaftsCampus Tübingen, a cooperation between the IWM and the University, has offered extensive opportunities for joint projects over ten years. Cooperations like this have turned Tübingen into a world-leading center for educational research. That's a first-class basis for further shared activities!"*

**Prof. Dr. Ulrike Cress is the director of the Leibniz-Institut für Wissensmedien (IWM) in Tübingen and was appointed LEAD co-director in June 2022. She is a professor in the Department of Psychology and as a co-proposer was involved in the foundation of the LEAD Graduate School.**







## COMMUNICATION, ADVICE, APPLICATION

As well as undertaking excellent research and developing new talent in innovative ways, LEAD's third key mission is in knowledge transfer. In 2012 LEAD established the LEADing Research Center (LRC) explicitly for this purpose, and it is now a mainstay, supporting the members with its *Schule & Wissenschaft* [School & Science] cooperation program and with focused science communications. LEAD's activities are wide ranging, covering the areas described by the German Science and Humanities Council as "communication, advice and application".

## COMMUNICATION: in dialogue with the target groups

### LEAD.schule – One portal for politics and practical application

The University of Tübingen's portal LEAD.schule aims to make findings from research on education comprehensible and accessible to all. Scientists from LEAD present their studies and latest results of their work here, sometimes as short blog features enabling a dialog – about self-regulation or quality of teaching through to learning difficulties and exceptional abilities.

[www.lead.schule](http://www.lead.schule)

### Lecture Series *Jenseits von Ideologie und Bauchgefühl*

On the University of Tübingen's *Studium Generale*, LEAD members introduced education from the perspective of various research disciplines such as neuroscience, biology, psychology, sports science and sociology. At the same time, they covered various levels: from that of individual school students through classes and schools to society as a whole. Around 1,500 listeners attended the eleven lectures in the series *Jenseits von Ideologie und Bauchgefühl: Empirische Bildungsforschung erforscht, wie Bildung gelingt* [Beyond Ideology and Gut Feeling: empirical educational research into successful education].

## Schule & Wissenschaft cooperation program

As a section of the LEADing Research Center *Schule & Wissenschaft* aims to promote the exchange between research on education and educational practice. The goal is to reduce the gulf between the two – or ideally overcome it – and expand areas where they overlap. So LEAD launched the *Schule & Wissenschaft* cooperation program back in 2013. Working with schools in the region it has built up a long-term, trusting network of partners, a unique form of research cooperation that benefits both sides: on the one hand, this benefits educational research by providing real-life issues and ideas from scholastic practice as well as schools that are fundamentally willing to take part in LEAD studies; on the other, it also benefits LEAD partner schools by contributing findings to be incorporated into everyday teaching; and the two together through the assurance that they are improving educational processes for everyone involved in education. The first LEAD partner school signed the cooperation agreement in 2013; by summer 2022 there were 27 partner schools.

## LEAD Day of Science and online lecture series

Since the early days, *Schule & Wissenschaft* has organized opportunities for exchange and knowledge transfer: initially these included school-related lectures and the annual LEAD Day of Science training event, later in 2017 these were joined by the LEAD.schule.News newsletter and in 2021 with "Insights into School Practice", a new format for LEAD's junior academics.

The online lecture series *LErnforschung Auf Distanz* reached several hundred people in winter 2020/21 and along with the annual LEAD Day of Science which took place in spring 2022 with 200 participants made a major contribution to the profile of LEAD and the schools cooperation program. It also boosted the LEAD.schule.News newsletter, which had 40 subscribers at the start of 2017 and which today reaches more than 900 people in educational practice, policy and research.



Since 2013, the LEAD Day of Science offers a platform for knowledge transfer and the exchange between research and practice.

## ADVICE: evidence as fundament

Members of LEAD contribute to debates at all levels of the political system. Based on the findings of their research they advise ministries and associations, among others, at national and international levels, and work closely with the *Institut für Bildungsanalysen Baden-Württemberg (IBBW)* and the *Zentrum für Schulqualität und Lehrerbildung (ZSL)*.

**LEAD co-director Ulrike Cress** was appointed in 2021 to the newly-established Scientific Standing Committee of the *Kultusministerkonferenz* [assembly of ministers of education], which has the task of advising the federal states on the development of education. Since 2018 she has been the deputy chair of the Deutsche Telekom Foundation, which campaigns for good education in the digital world.

**Ulrich Trautwein, also LEAD co-director**, has been the chair since 2017 of the scientific committee that assists with the restructuring of quality development in the Baden-Württemberg school system. In addition, from 2011 to 2018 he was a member of the scientific committee that advises the federal government and states on educational performance issues in international comparison. He also chaired this committee for four of those years.

## APPLICATION: from research straight into practice



The scientific collaboration with **the Hector Children's Academies**, an enrichment program for gifted primary school children, is a prime example of how results from research pass directly into practice. Working closely with colleagues from various disciplines and class leaders from the "chalk-face", LEAD scientists develop the Hector Core Courses – based on new findings from psychology and teaching quality research. Then the courses are held at the Hector Children's Academies, after which they are evaluated and their effect on development is examined.



**Jugend präsentiert**, an educational initiative of the Klaus Tschira Foundation in cooperation with *Wissenschaft im Dialog* [Science in Dialog] and the *Forschungsstelle Präsentationskompetenz* [Presentation Research Center], introduces scientific findings directly into practice. The project runs a national competition intended to promote the ability of school pupils to give presentations, especially in mathematics and science lessons. Participating school students are offered training courses that are developed and evaluated by LEAD members, who besides developing the teaching materials for these courses also offer group courses for teachers, as well as numerous advanced training opportunities. The teaching materials are available to all schools for free.



## 10 Years LEAD Graduate School & Research Network

October 2022

### Publisher

Prof. Dr. Ulrike Cress, Prof. Dr. Kou Murayama, Prof. Dr. Ulrich Trautwein

Eberhard Karls Universität Tübingen  
LEAD Graduate School & Research Network  
Europastraße 6  
72072 Tübingen

Telephone +49 7071 29-74121  
presse@lead.uni-tuebingen.de  
www.lead.uni-tuebingen.de

### Editorial

Ingrid Bildstein

### Translation

Alison H. O'Neill MCIL MITI

### Design

Gabriele Zumofen

### Printing

druckpunkt Tübingen

### Pictures

p. 3: University of Tübingen/Friedhelm Albrecht; p. 8 top: Peter Gwiazda;  
p. 10, 18 top: Berthold Steinhilber; p. 11 bottom: University of Tübingen/Christoph Jäckle;  
p. 12: University of Tübingen/Jörg Jäger; p. 13: Valentin Marquardt;  
p. 14: Alexander von Humboldt-Stiftung; p. 15: IWM/Berthold Steinhilber;  
p. 17: David Szubotics; p. 18 bottom: Gerhard Kopatz für Jugend präsentiert  
p. 2, 4, 7, 8, 9, 17: pexels

Financed by Baden-Württemberg Ministry of Science, Research and the Arts under the sustainability financing of Excellence Initiative II projects.



EBERHARD KARLS  
UNIVERSITÄT  
TÜBINGEN

