



Timely Teacher Education

An Approach to Internationalizing the Curricula

Prof. Dr. Angela Ittel | Vice-President for International Relations and Teacher Education TU Berlin | Konferenz "Internationalisierung der Curricula an Hochschulen: Konzepte, Initiativen, Maßnahmen" | 2. November 2016



The critical role of teachers in internationalizing P-12* education has never been clearer, yet today's educators rarely begin their careers with the deep knowledge and robust skills necessary to bring the world into their classrooms

(p. 3). Longview Foundation (2008).

^{*} P-12 education: A designation for the sum of primary and secondary education in Australia.



- 1. Teacher Education in Germany
- 2. Teacher Education @ TU Berlin
- 3. Internationalizing the Teachers' Curriculum
 - a. Objectives
 - b. Challenges
 - c. Methods
 - d. Best Practices
- 4. Summary

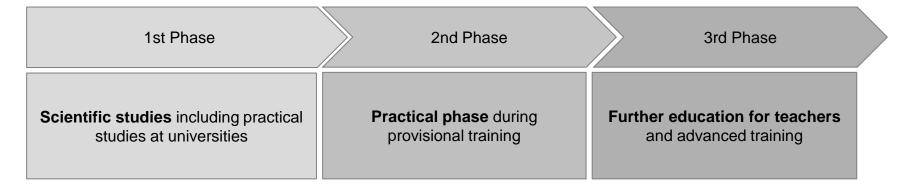


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Stages of Teacher Education



- → Teacher education in Germany always includes:
 - two different subject areas
 - didactics
 - educational science and pedagogics
- → To internationalize the overall curriculum, all of those aspects and phases need to be considered and adapted.
- → Internationalization of the curriculum requires the commitment of the entire university and all stakeholders of teacher education.



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Faculties @ TU Berlin

Faculty	Name	Institute
1	Humanities and Education	7
II	Mathematics and Natural Sciences	6
III	Process Sciences	6
IV	Electrical Engineering and Computer Science	6
V	Mechanical Engineering and Transport Systems	7
VI	Planning Building Environment	8
VII	Economics and Management	3
Central Institutes	El Gouna (Egypt) SETUB (School of Education TU Berlin)	



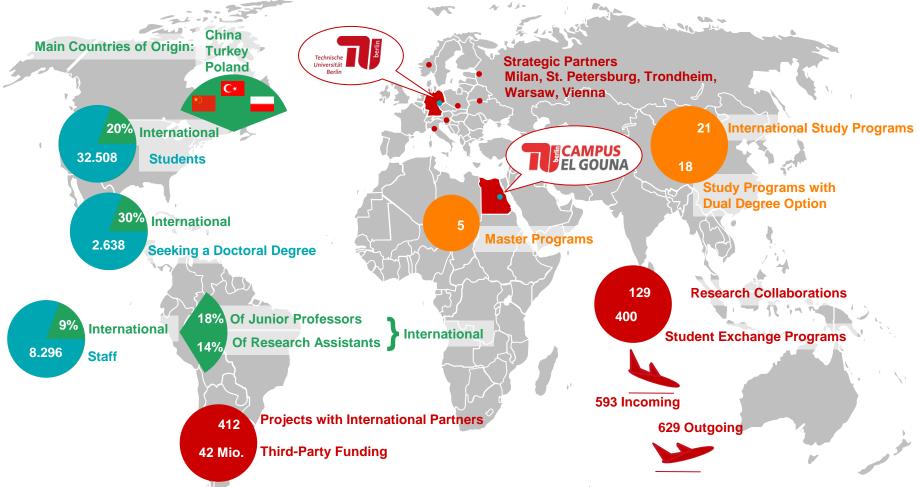
Teacher Education @ TU Berlin

Exemplary Structure of Teacher Education e.g. Master Electrical Engineering **Second University (HU/FU) TU Berlin** Faculty I Faculty IV Second Core Subject **Professional Science Core Subject** Chemistry **Pedagogics Electrical Engineering** - Didactics - Technical Science Technical Science German as a Foreign - Didactics Langugage (High/Porfessional) School **School of Education** - Projects **TU Berlin** Practical Semester - Provisional Teaching Administrative Home of all Students

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TU Berlin International





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Teacher Education @ TU Berlin – Figures

Subject Areas	Degrees	Students WS 2015/16	
Work Studies (Arbeitslehre)	Bachelor, Master and PhD	379	
German	Teching degree for Secondary Schools	8	
History	Teching degree for Secondary Schools	7	
Social Studies	Teching degree for Secondary Schools	2	
Nutritional Science	Bachelor, Master, Lecturer (Studienrat)	154	
Electrical Engineering	Bachelor, Master, Lecturer (Studienrat)	23	
Metallic Engineering (Metalltechnik)	Bachelor, Master, Lecturer (Studienrat)	47	
Cultivation and Horticulture (Land- und Gartenbau)	Bachelor, Master, Lecturer (Studienrat)	82	
Civil Engineering (Bautechnik)	Bachelor, Master, Lecturer (Studienrat)	36	
Total Number of Students in Teacher Education WS 15/16: 738			



Teacher Education @ TU Berlin - International Students

WS 2015/16	Students with foreign passport	Percentage	Foreign university entrance qualification (HZB)	Percentage
Faculty I	389	15,52%	334	13,5%
TU Berlin total	6.669	19,65%	5.774	17,2%
WS 2014/15				
Faculty I	409	16,1%	360	14,5%
TU Berlin total	6.165	18,8%	5.324	16,3%
WS 2013/14				
Faculty I	431	17,4%	388	15,8%
TU Berlin total	5.806	18,5%	5.110	16,1%



Teacher Education @ TU Berlin - Student Mobility

	Academic Year 2015/16	Outgoing	Incoming
Faculty I		67	53
TU Berlin total		629	593
	Academic Year 2014/15		
Faculty I		41	68
TU Berlin total		556	597
	Academic Year 2013/14		
Faculty I		29	61
TU Berlin total		488	656



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Objectives for the internationalization of the teachers' curriculum

Goals

- Prepare teachers for heterogonous class rooms
- Prepare teachers to educate their students to become global citizens
- Enhance students' intercultural sensitivity
- Enable teachers to enter the global job market (international schools, schools abroad)
- Growing cultural and ethnical heterogeneity of students in the class room
- Preparation of students for a globalized and intercultural world crucial for their overall education (fostering their understanding of "global citizenship")

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Challenges for the internationalization of the teachers' curriculum 1/2

- Mobility for teacher students more challenging due to the characteristics of the student body (age, family obligations, financial situation)
- National perspectives dominate the contents for teacher education
- Work studies and vocational education/training are very specific



Challenges for the internationalization of the teachers' curriculum 2/2

- Several institutions/stakeholders involved in education (stakeholders from two different subject areas, didactics, educational science and pedagogics)
 - High effort to change and adapt the overall curriculum
 - ➤ Little space for studies abroad within the curriculum
- State regulations and control limit the scientific freedom in teacher education
 - ➤ Difficult to fulfill state requirements for the recognition of exams or ECTS points from abroad due to the specificity of the teacher education



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Methods for the internationalization of the teachers' curriculum

- Use a global variety of methods, perspectives, information sources and scientific insights
- Due to little space for student mobility, methods needed that allow to gain intercultural competencies and international perspectives independent of global mobility. (Internationalization@Home)
- Contents of an international curriculum need to be closely matched with the subject areas
- Courses and Lectures in the pedagogical science can be taught in English to give students access to international sources, scientific papers, literature and case studies and to broaden their scientific horizon



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Practical Approaches for the internationalization of the teachers' curriculum

	Internationalisation at home	Internationalization abroad	Contents	
Classes/Seminars /Lectures/Tutorials	 Usage of Texts, Films, Videos in English Lectures/Classes in English International Summer and Winter Schools Invitation of international guest lecturers Virtual class rooms in cooperation with international partners 	 Excursions to partner institutions abroad International Summer and Winter Schools at partner institutions Integrated semester abroad at partner institution 	Working on questions and tasks about international content/ looking at studies/educati	
	 Cooperation projects with partner institutions and international visits of schools 		onal goals/persepcti	
Practical Phases	 Invitation of Teachers from schools from abroad during side- lectures (Begleitveranstaltungen) Internships/Vocational Training at international schools 	 Internships/Vocational Training abroad 	ves from all over the world	

Intercultural Module (currently developed at TU Berlin)



Intercultural Module TU Berlin

Block I

Basic course "Intercultural Competence" for all interested students from all study programs

- Wekend course from Friday to Sunday
- Starts before the first semester begins
- Examination and reporting tasks during first semester

3 ECTS-Points

Block II Options for further modules in addition to the basic course

Option I

- Participation in a "buddy program" "
- Report about experience and progress

3 additional ECTS-Points

Option II

 Participation in program of the "Center for Cultural Studies on Science and Technology in China"

3 additional ECTS-Points

Option III

Participation in program of the "Center for Interdisciplinary Women's and Gender Studies"

3 additional ECTS-Points



International Networking

- Memeberships in international networks for teacher education can help to establish new collaboration and cooperation with pertner institutions from abroad.
- The TU Berlin is a meber of the network "PERL"* and maintains close partnerships with institutions from e.g. Norway and Ireland. Currently new mobility agreements for teacher education are being established with those countries.



*PERL - The Partnership for Education and Research about Responsible Living – is a partnership of educators and researchers from over 120 institutions in more than 50 countries—working to empower citizens to live responsible and sustainable lifestyles.



Example for International Teacher Cooperation: "Bildungsbaustelle Tel Aviv" Green Pavillon 2015

The "Israeli-German-Pavilion" and IGSBE are projects by *zukunftsgeraeusche GbR*, an office for interdisciplinary building and educational projects, in cooperation with:

Bildungsverein Bautechnik e.V., Technische Universität Berlin, Tel Aviv University, Vocational
 Training Center Knobelsdorff-School Berlin, Tel Hai Rodman Practical College of Technology,
 Vocational Training Center of the Construction Industry Association Berlin-Brandenburg, Bauhaus-Archive / Museum for Design Berlin, and others ...









Example for International Teacher Cooperation: "Bildungsbaustelle Tel Aviv" Green Pavillon 2015

- Intercultural Exchange and Sustainable Construction: The "Israeli-German-Pavilion" in Tel Avivwill
 was practically build together by German and Israeli Apprentices and students in Sept and Oct
 2015.
- The project is a mutual intercultural and professional exchange at eye-level about sustainable building, vocational training and research, architecture and construction and the common heritage of modern architecture and Bauhaus ideas in Germany and Israel.
- The "Berlin-Workshop" for the joint design of the pavilion took place between 31st May and 07th June 2015.
- The "Israel Workshop" for the realization of the Pavilion on the Entin-Square, the central entrance plaza of the Tel Aviv University, will happen between 15th September and 11th October 2015.
- Furthermore it is the aim of all project partners to continue and broaden the exchange between
 Germany and Israel in vocational education and traing (VET) and higher education (HE) in crossover practice and research in sustainable building; also with perspective on the 100th anniversary
 of the Bauhaus in 2019.



TU Berlin Alumni Autumn School 2016

Topic: Future Tasks for Vocational Education and International Cooperation

Director: Prof. Dr. Johannes Meyser, Institut für Berufliche Bildung und Arbeitslehre, TU Berlin

Languages: Deutsch und Englisch

Participants: 40 International Alumnis of TU Berlin

Extract from the program:

- Visit of SHK-Ausbildungszentrum Berlin
- Visit of Landesstelle für gewerbliche Berufsbildung in Entwicklungsländern, Oberstufenzentrum Natur und Umwelt, Peter-Lenné-Schule Berlin
- Workshop about the analysis of the vocational education, planning of professional and further education on a global level



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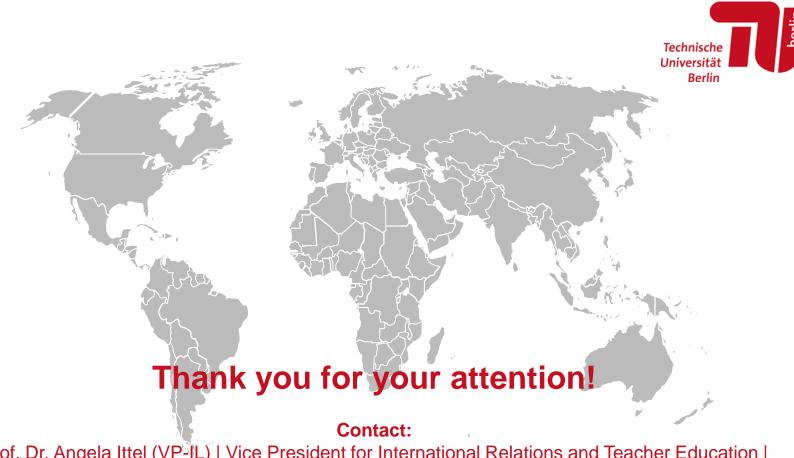


Summary

"Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world."

-Louis Pasteur-

- What could timely teacher education with regards to an international curriculum look like?
 - Mainly taught in German but incresing number also taught in English
 - Usage of a big variety of methods, foreign language media, diverse sources
 - Intercultural exchange@home: guest lecturers, guest teachers, summer schools
 - Increase of student mobility through flexible curriculum and flexible mobility offers but firm regualtions for the admission of credits from abroad
 - Increased flexibility of state regulations for teacher education



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