

# Several Female Support Activities Later – What have we learned?

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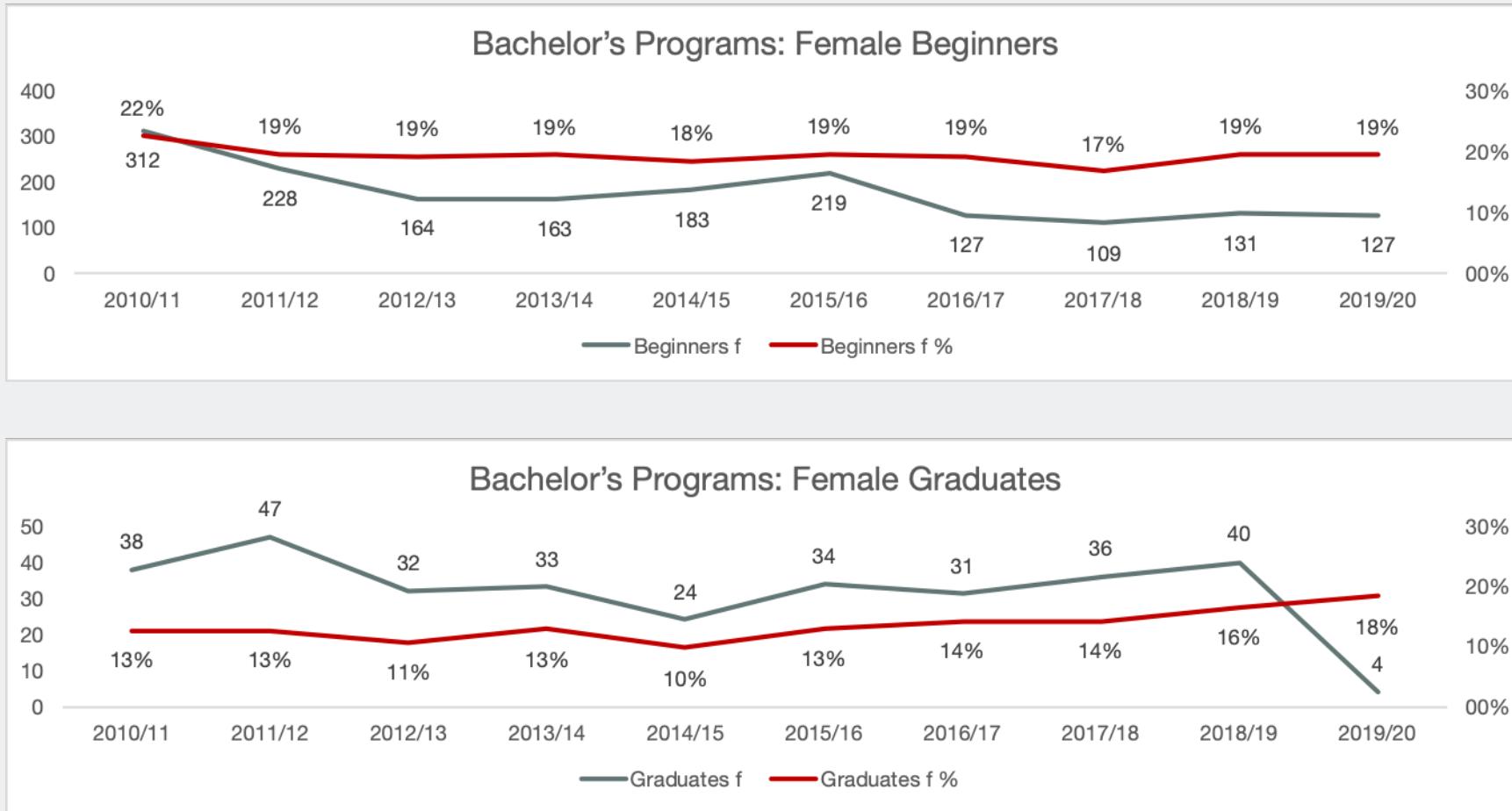
# Rechtliche Grundlagen für Frauenförderung an den Unis im UG 2002 ...

- **§ 19.** (1) Jede Universität erlässt durch Verordnung (Satzung) die erforderlichen Ordnungsvorschriften im Rahmen der Gesetze und Verordnungen selbst. (...)
  - 6. Frauenförderungsplan und Gleichstellungsplan (§ 20b);
  - 7. Einrichtung einer Organisationseinheit zur Koordination der Aufgaben der Gleichstellung, der Frauenförderung sowie der Geschlechterforschung;
- ....
- **§ 41.** Frauenfördergebot
- **§ 42.** Arbeitskreis für Gleichbehandlungsfragen
- **§ 43.** Schiedskommission
- **§ 44.** Anwendung des Bundes-Gleichbehandlungsgesetzes

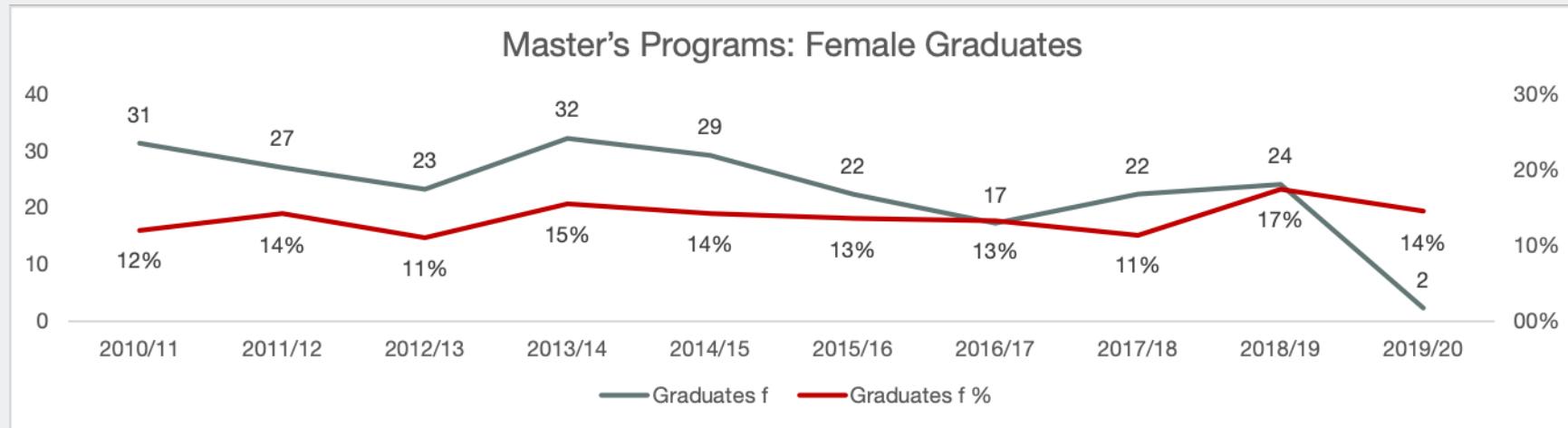
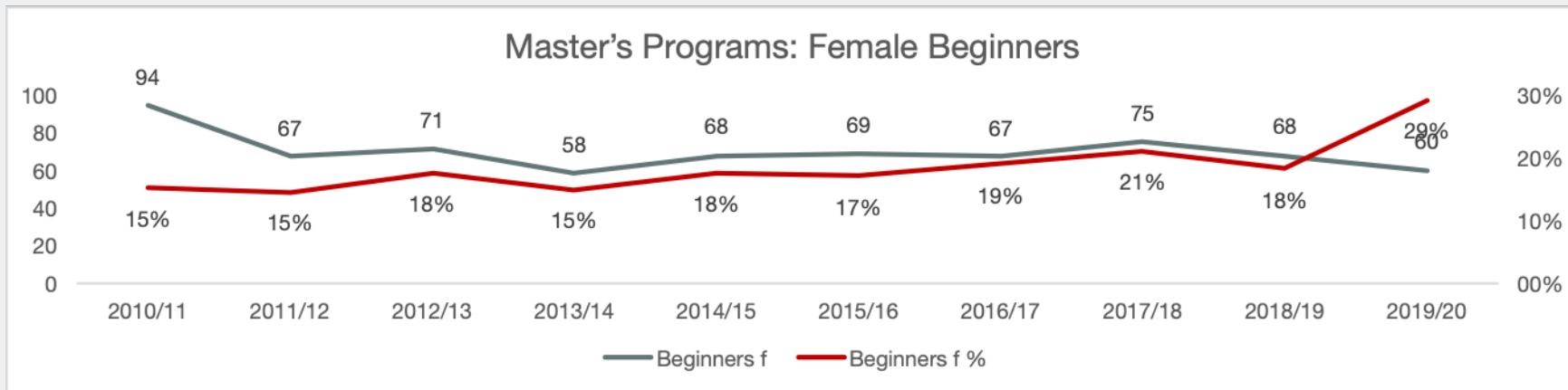
# Umsetzung...

- Frauenförderungsplan der TU Wien
- Teil G. Einrichtungen zur Frauenförderung und Gleichbehandlung
  - § 44 Der AKG und sein Büro
  - § 45 Abteilung Genderkompetenz
  - § 46 Vernetzung
- Strategiekonzept zur Frauenförderung an der Fakultät für Informatik
  - vom 31.1.2016
  - <https://informatics.tuwien.ac.at/women-in-informatics>

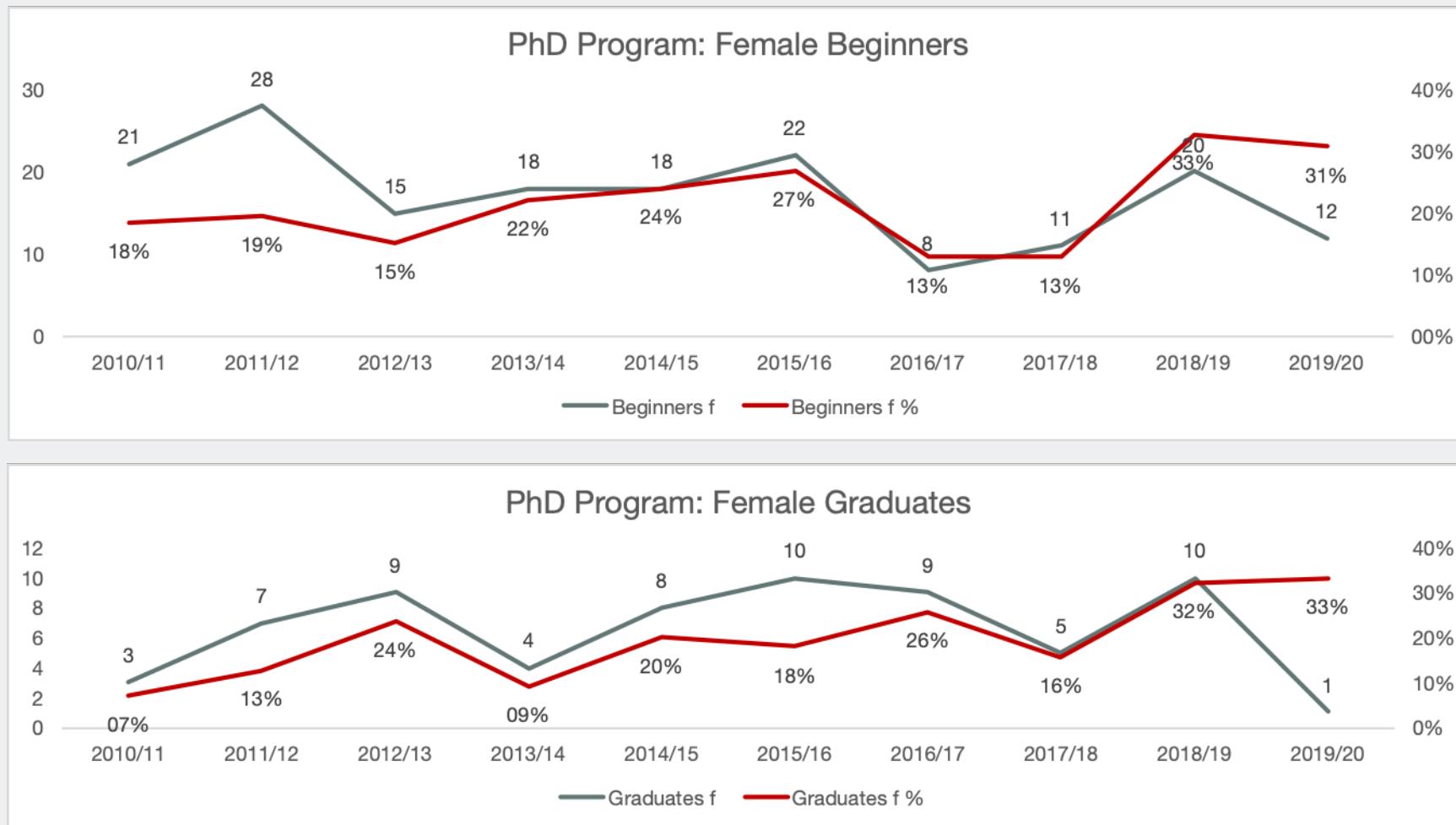
# Some Statistics – Bachelors



# Some Statistics – Masters



# Some Statistics – PhD Students



# Some more Statistics – Professor Level (as of Dec 1 2019)

- 6 women *out of* 24,25 Full Professors
- 4 women *out of* 36 Associate Professors
- 3 women *out of* 5 Assistant Professors
  - + 2 via excellence program from rectorate
  - + 1 via decision of the dean
  - + 1 via successful fulfillment of „Frauenförderkonzept“ from rectorate

# What happened so far at TUW and Informatics level (selected list)

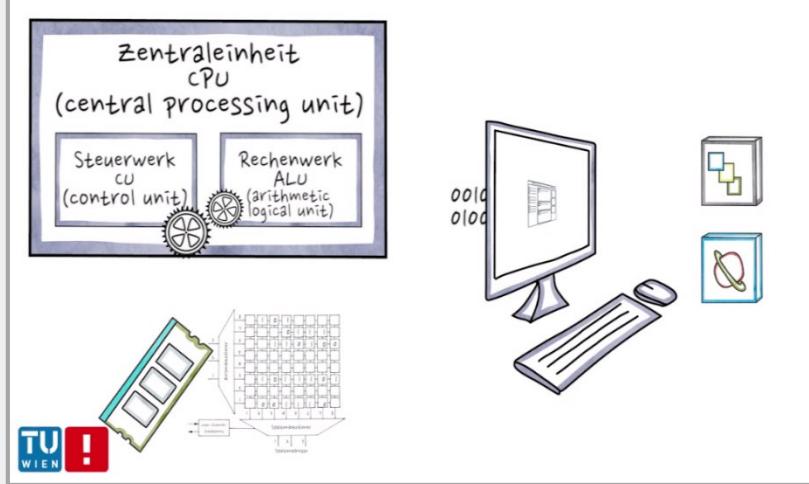
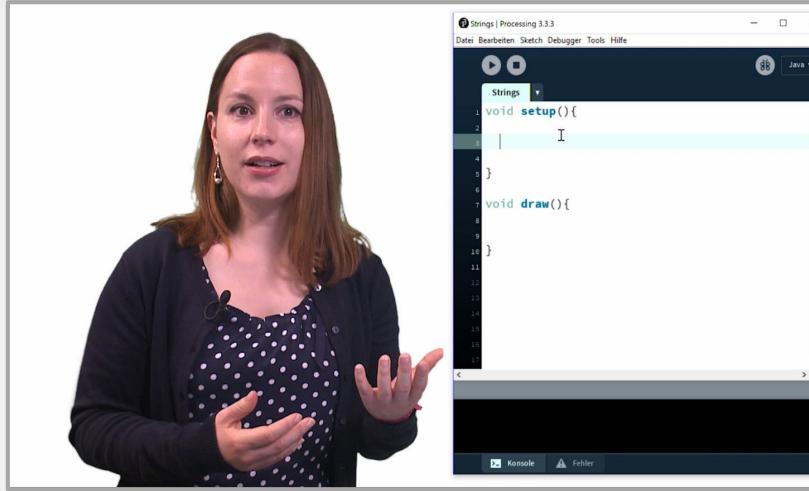
- Women's Postgraduate College for Internet Technologies (WIT, 2003-2007), Faculty of Informatics, [www.wit.at](http://www.wit.at)
- WIT 2, 4 Faculties of TU Wien (2008-2011)
- FIT Days („Frauen in die Technik“, since 1999)
- IT summer workshops for female pupils (since 2005)
- BLUE&MINT, Kooperation IBM / TU Wien (since 2012)
- Post-doc positions for female scientists
- Online mentoring for female students (beginners)
- Mentoring for female Master/PhD/Post-doc students

# Current female support activities (selected list)

- Attract – Keep – Promote
- FIT Days („Frauen in die Technik“, since 1999)
- Bridging course „Intro to Programming with Processing“
  - for female (and male) students
  - learn and network
- MOOC „Programing with Processing“
- Entry exam without m/f discrimination
- Interface with Schools – Vienna Informatics Living Lab (VILL)  
-> Workshops and permanent exhibition „Abenteuer Informatik“

Attract

# MOOC „Programming with Processing“ – Video production



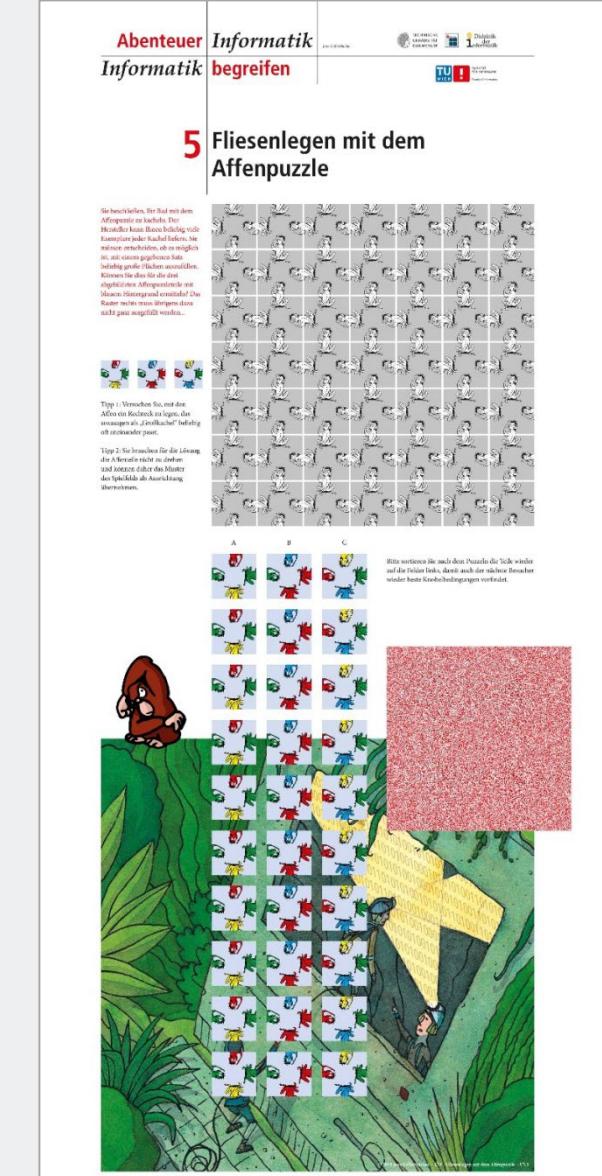
# “Abenteuer Informatik“ Exhibition

## Motivation and Aims

- Create enthusiasm among pupils for Informatics
- Provide incentives for Informatics education at schools
- Strengthen the interface between TU Wien and schools

## Facts

- Imparts ways of thinking in Informatics illustrated with typical problems
- 10 topics consisting of 4-5 panels (80cm x 200cm) per each
- Various interactive experiments with tangible artifacts
- Implemented as a **permanent exhibition**
- Workshops for school classes from 5th to 13th grade



# “Abenteuer Informatik“ Workshops

- **social responsibility**
  - involve socially disadvantaged people
  - involve female students
  - close the gap between school and university
  - involve a large amount of students in informatics activities
- **realistic view on informatics**
  - propagate thinking informatically
  - comprehend informatics as a science that shapes the world
  - show the broadness of informatics
  - propagate a scientific style of informatics education
- **impulses for teachers**
  - develop new learning materials
  - propagate discovery learning
  - propagate group learning
  - involve more teachers in informatics activities
- **impulses for students**
  - arouse interest to study at an university
  - motivate to be deeper interested in informatics
  - provide fun and enjoyment with informatics
  - arouse interest to study informatics

# „Abenteuer Informatik“ Workshops Summer Term 2019

Participants by school type

School type	Classes	Female students	Male students	Students
Volksschule	1	10	8	18
Neue & Wiener Mittelschule	9	81	106	187
Gymnasium Unterstufe	4	41	46	117
Polytechnische Schule	3	16	31	47
Berufsschule	2	9	31	40
Handelsschule	3	36	32	68
Gymnasium Oberstufe	5	27	41	38
HTL	4	12	87	99
HAK	3	31	38	69
Total	34	263	420	
Students				683

# „Abenteuer Informatik“ Workshops Winter Term 2019 (so far)

## Participants by school type

School type	Classes	Female students	Male students	Students
Volksschule	0	0	0	0
Neue & Wiener Mittelschule	1	1	6	7
Gymnasium Unterstufe	9	116	125	241
Polytechnische Schule	0	0	0	0
Berufsschule	0	0	0	0
Handelsschule	0	0	0	0
Gymnasium Oberstufe	7	38	50	88
HTL	0	0	0	0
HAK	0	0	0	0
Total	17	155	181	
Students				336

# Current female support activities (selected list)

- “Studienassistentinnen”
  - financially supported via gender budgeting
  - 6 positions 2016 – 2019
- “Visit a scientific conference” for female Master students
  - 35 scholarships in 2016 – 2019
- Excellence scholarships for BA/MA female students
  - financially supported by SIEMENS AG Austria
  - 10 scholarships per year

Keep

# Current female support activities (selected list)

Promote

- “Talk at scientific conferences” for female PhD students
  - 38 scholarships in 2016 – 2019
- Post-doc positions for female scientists (since 2008)
  - 8 so far
  - 3 out of these 8 are full professors at the faculty right now
- Assistant Professorships (Tenure Track) for female scientists
  - 1 filled (out of 55 highly competitive applications)
  - 2 in preparation

# Current female support activities (selected list)

## Sensitize

- Attend Gender Awareness Workshops at TU Wien  
-> 28 bisher (WS16 + SS 17)
- Support female guest professorships
  - 3 so far (out of more than 30 ☺)
- Gender competence as desired competence for professor positions

# What we have learned...

- Our competitor
  - Conservative society (home, school, culture)
- Mindset
  - Women are not in need of support but worthy of support
- Female students have to learn to accept support activities
  - Opinion poll (summer 2015) among female BI/CS students: only 27% are in favour of female support activities

# What we have learned...

- Learn from best practice examples
  - CMU (Lenore Blum)
  - Harvey Mudd College (Maria Klawe)
  - University of Edinburgh (Jane Hillston)
  - University of Bamberg (Ute Schmid)
- Curricula in universities have to be adapted
- Appropriate curricula in schools are necessary
  - Teach the teacher

# What we have learned...

- Role Models
  - Necessary at all career levels
  - AcademiaNet - <http://www.academia-net.de>
- Worthy of support
  - Dean's List, especially for female students
  - Award for attending Grace Hopper Conference
- Sustainability, sustainability, sustainability, ...
- Resources necessary (money, personnel)

# Instruments @ TU Wien

- Vice Rector for Personell and Gender
- Office for Gender Competence
  - At Vice Rector level
- Working group on equality issues
- Faculties @ TU Wien are (forced) implementing female support activities (gradually)
- Kindergarten @ TU Wien
  - Christiane Nüsslein-Volhard, Nobelpreis 1995 für Physiologie oder Medizin,  
**Stiftung zur Förderung von Wissenschaftlerinnen mit Kind!**