Girl-Friendly ICT Education Design
Czechitas Summer School
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Session 2, WIRE workshop, Oct 28, 2020
Proportion of women among ICT specialists in employment, 2017
THE STORY OF CZECHITAS
We started with popularization of STEM among girls and women and their education towards ICT skills.

*STEM: Science, Technology, Engineering and Mathematics
*ICT: Information and Communication Technologies
Continued with outreach towards children and their ICT/STEM teachers.
Not forgetting alumni programs, career development and consultancy for companies.
THE CONCEPT GREW VERY POPULAR
CZECHITAS is a community connecting people who want to learn IT with those who want to share their IT knowledge. We connect companies, municipalities, universities, IT experts and non-profit organizations under a common goal of making IT skills more accessible to general public.
### FORMAT OF EVENTS
- One-day workshops
- Long-term courses
- Upskilling academies
- Hackathons
- Coding clubs
- Internships

### ... AND FOR YOUTH AND CHILDREN
- Summer schools for high-school girls
- Summer camps for kids
- Programs for schools
- Programs for teachers and headmasters
- EU Code Week, Hour of Code events
- Family days
Summer School for High School Girls
LESSONS ON WOMEN IN TECH
FRUSTRATIONS STEERING WOMEN AWAY FROM TECH

- **Access** (to engaging education, supportive teacher, supportive family environment, guidance)
- **Stereotypes** (by girls about CS engineer/field, by they close environment about CS engineer/field/girls in CS)
- **Confidence** (self-efficacy)
- **Belonging** (boys club, missing networking, mentors)
- **Feeling valued** (defensive culture, the fact that the women feel they need to keep proving their value, flawed meritocracy)
THE BELL CURVE OF GENDER TENDENCIES

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Target |            | Perspective

# of people

♂ |            | ♀

Mid-point

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IMPLICATIONS ON EDUCATION
HOW WE ARE LEAVING THE GIRLS OUT

• Young girls have different way of interaction with technology
  • Boys – playfulness – white box exploration, challenging the limits
  • Girls – purpose – black box utilization for a goal → girls are later technology adopters

• Target vs. perspective
  • They need to build their context map first → they are slower learners at the beginning → but great integrators and multitaskers later → they feel anxiety from their context map never being complete

• Perfection vs. bravery

We need more “perspective” individuals in the field
ELEMENTS OF GENDER-SENSITIVE PEDAGOGY

- Strategies that combat wrong stereotypes
- Strategies that motivate and spark initial interest
- Strategies that provide suitable first contact
- Strategies that make learning environment less hostile
- Strategies that build self-confidence
- Strategies for sustaining long-term interest
Community Education

Safe Environment and Encouragement

Practical and Meaningful Education

Role Models, Career Guidance, Companies Engagement
Thank you for your attention.


Join us at womENcourage 2021 in Prague!

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