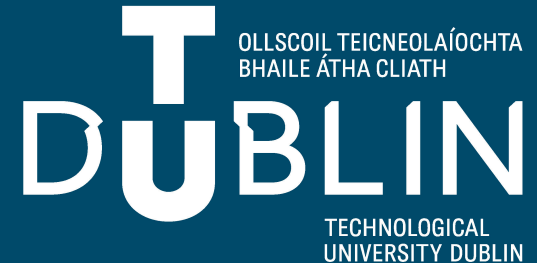


Féidearthachtaí as Cuimse
Infinite Possibilities

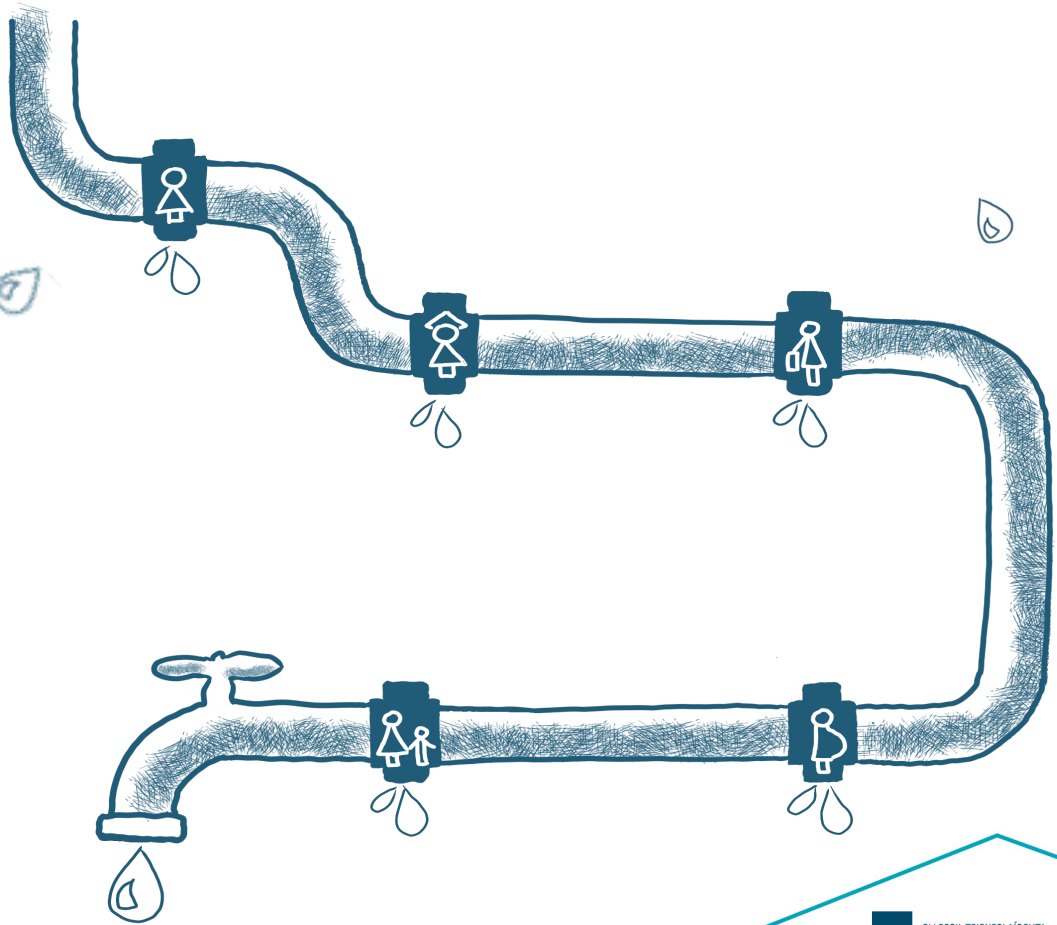
How to Recruit and Retain Women in Computing Education

Presented by Alina Berry
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18th February 2022



Outline

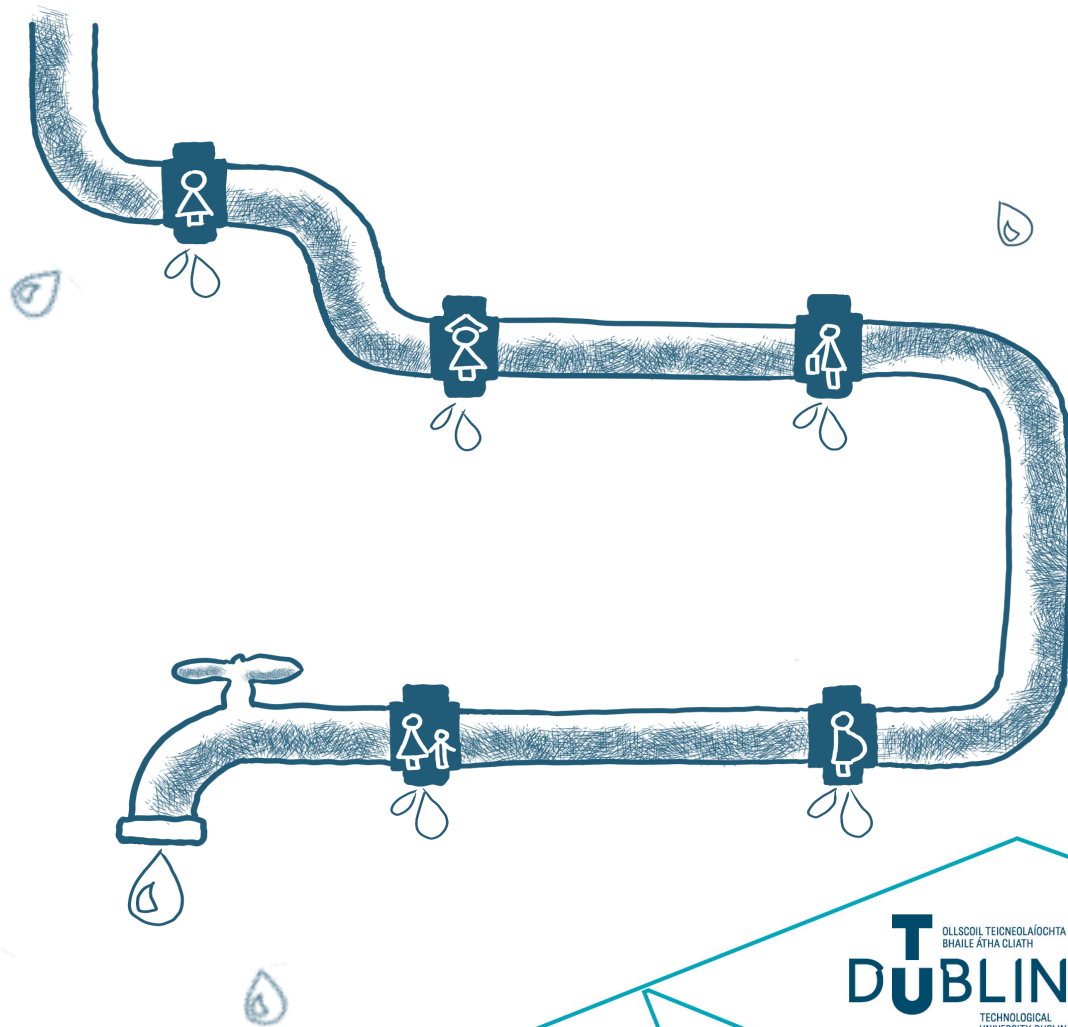
- Why recruit more women into technology disciplines?
- Reasons for the "leaky" pipeline
- Methodology
- Actions
- Discussion



Project Funders



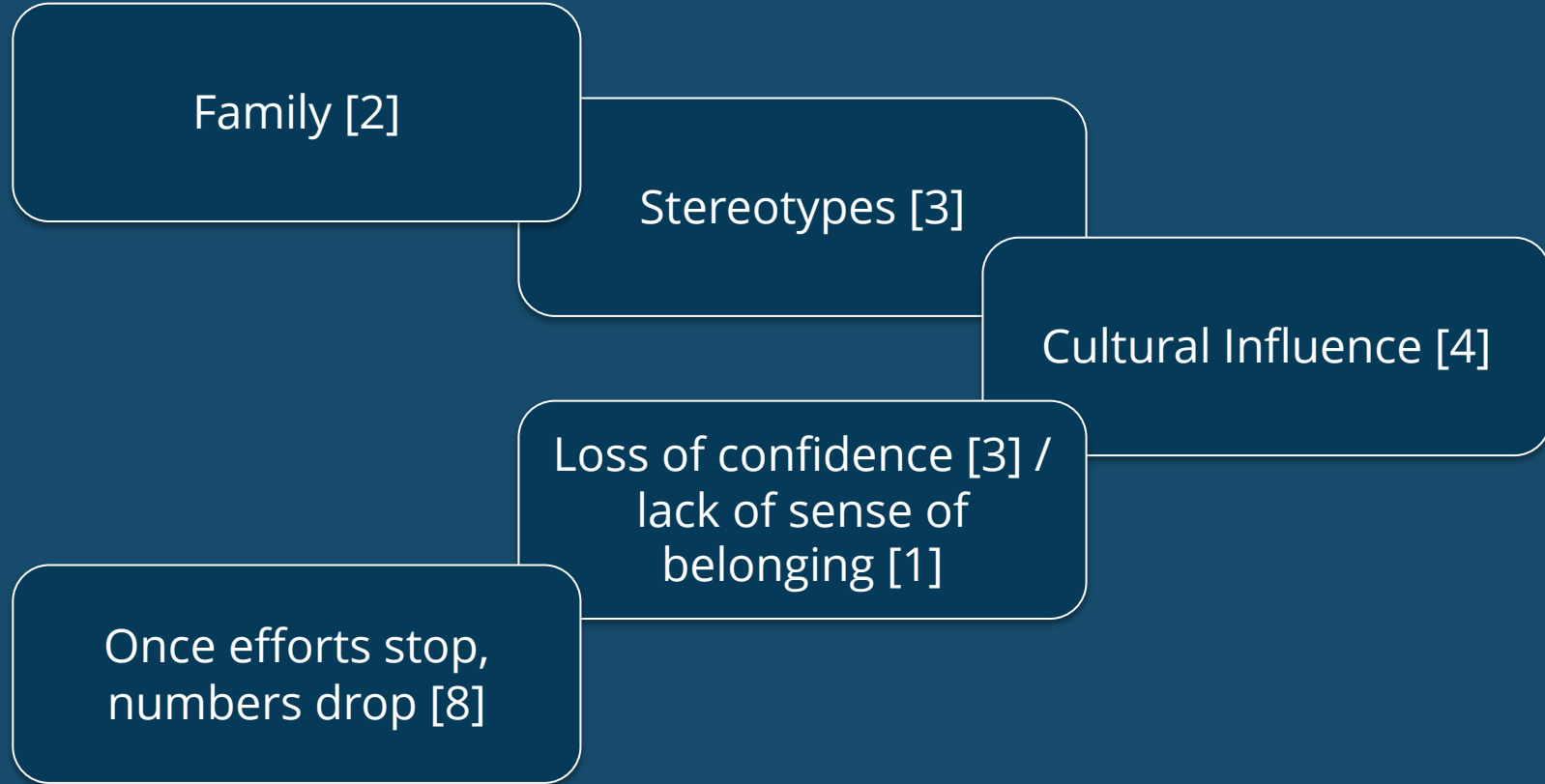
Ireland



Why recruit more women into technology disciplines?

- Market demands relevant skills [11]
- Only 18.5% of ICT labour force in the EU are women [7]
- In Ireland – only 14.8% of students in ICT higher education are women [6]
- Secondary school level: Girls are as capable as boys in STEM [10]
- “Leaky” pipeline: women who leave STEM are unlikely to return [5]

Reasons for the “leaky” pipeline



Methodology

- Review of 350 publications
- Focus on Computer Science
- Strategies that showed impact
- Search wider than common academic locations
- Sources in other languages
- Three main sources of literature: governmental guidance, practical advice and initiatives, research papers
- Identified two types of strategies: frameworks and actions

Frameworks and Actions

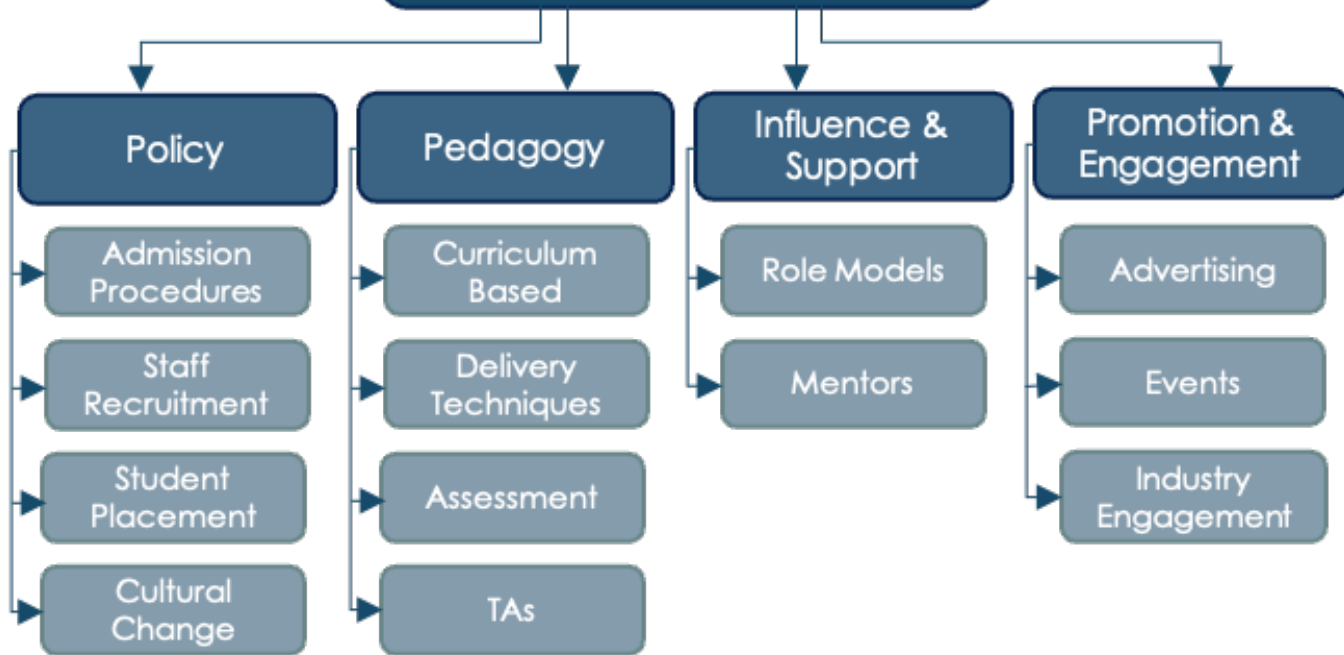
- Frameworks

High level step by step guidelines (workbooks, tools, toolkits). Promoted by international policy organisations (OECD, UNESCO).

- **Actions**

Lower level, practical initiatives and interventions. Evaluated and showed impact.

Actions



Examples of Actions for Each Category

Policy

- Entrants Quota for Women
- Women Only Bachelor Courses
- Family Friendly Study Schedule
- Female Faculty Recruitment

Pedagogy

- Flipped Classroom
- Active Learning
- Agile Methods
- Game Dev
- Novice Students Learning Separately from Experienced
- Diversified TA Team
- Hybrid Course

Influence & Support

- Buddy Systems
- Faculty/Industry Role Models
- Mentoring Programs

Promotion & Engagement

- Gender Neutral Advertisement
- Summer Camps
- Open Days
- Networking Events
- Industry Visits
- Coding Clubs
- Career Events

Discussion

- Difficult to measure success of interventions
- No universal cure
- Local/cultural aspect is important
- Curriculum change beneficial for everyone

Thank you very much for your time.

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